

**Stewardship as an Educational Process of Social  
Learning and Change:  
Two case studies conducted in the Western Cape**

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## ABSTRACT

Stewardship in South Africa, as it is being implemented within the framework of the Biodiversity Stewardship Programme (BSP), is an attempt by conservation agencies to engage landowners in the voluntary securing of parcels of biodiverse land, through signing a contract for a certain time period, not to develop the landscape in ways that will impact negatively on the biodiversity of the area in question.

The focus of this study is the relationship between biodiversity stewardship and social learning, as I hope to ascertain how stewardship practices are helping to resolve the current problems of biodiversity loss in the Western Cape. The overall aim of this research is to gain an understanding of how, in its capacity as a conservation education process, the Cape Nature Stewardship Programme can foster social learning amongst the landowners involved in its implementation, by leading them to a better understanding of their environmental responsibilities.

Data was generated through the use of interviews and informal discussions with participants together with document analysis, such as brochures, pamphlets and presentations. My approach to the analysis of my data was two-phased. In the first phase, I analysed the data generated from the interview process and from reviewing the documents the stewardship officials supplied me with. The second phase involved looking into the results of the two case studies, and formulating analytical statements which were then used to review the case evidence within a social learning perspective, derived from Wals (2007). In constructing an analytical framework for the interpretation of my data, I drew heavily on Wals' (2007) notion of social learning occurring in sequential activities. I used this insight as a lens through which to trace the educational effects of the implementation of the CNSP in the two case study areas. The research highlighted evidence that Stewardship initiatives should be based on the foundation of social learning and invest time and effort in building an environmental knowledge capital amongst the landowners involved. By equipping them with these necessary conservation skills, one creates a 'community of practice' where those individuals adopt a sustainability habitus contributing towards a change and environmental understanding and practises in field.

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## LIST OF ACRONYMS USED

BSP – Biodiversity Stewardship Programme (National)

CNSP – Cape Nature`s Stewardship Programme (Western Cape)

CAPE – Cape Action Plan for People and the Environment

CISP – Conservation Incentives & Stewardship Programmes

CN – Cape Nature

CoP – Community of Practice

CREW – Custodians for Rare and Endangered Wildflowers

DEA – National Department of Environmental Affairs

GCBC – Greater Cederberg Biodiversity Corridor

UBCEG – Upper Breede Collaborative Extension Group

## CHAPTER 1: INTRODUCTION & RESEARCH CONTEXT

We abuse land because we regard it as a commodity belonging to us.  
When we see land as a community to which we belong,  
we may begin to use it with love and respect.”

- Aldo Leopold, from *A Sand County Almanac* (1949)

### 1.1 INTRODUCTION

In this chapter, I shall introduce the aims of my study, and the research context in which it is situated. The focus of my research is environmental education, and – more specifically – social learning processes in biodiversity stewardship. The study was undertaken in the Western Cape province of South Africa, and two case studies of the Western Cape Stewardship Programme<sup>1</sup>, administered and operated by the Western Cape conservation organisation, Cape Nature, as part of the broader CAPE programme (Cape Action for People and the Environment), were examined. CAPE is a partnership of government and civil society aimed at conserving and restoring the biodiversity of the Cape Floristic Region and the adjacent marine environment, while delivering significant benefits to the people of the region.

I shall conclude the chapter by stating the research question and objectives, and by providing a brief adumbration of what it is to follow in the remainder of the thesis.

### 1.2 OVERVIEW OF THE STUDY

Over the last decade in South Africa, stewardship has emerged both as an instrument of conservation education, and as a method to promote community engagement in minimising biodiversity loss. The focus of my study is the relationship between stewardship and social learning, as I hope to ascertain how stewardship practices are helping to resolve the current problems of biodiversity loss in the Western Cape.

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<sup>1</sup> During the rest of the study, when reference is made to Cape Nature’s Stewardship Programme it will be done using the acronym CNSP.

At the moment, stewardship is an exciting, but untested solution to a long-standing environmental concern in South Africa – that is, of how to ensure the long-term conservation of highly biodiverse areas that are privately owned, and so extremely vulnerable to various developmental pressures.

In addressing this concern, the National Department of Environmental Affairs (DEA) has launched an initiative that makes it compulsory for every province in the country to deliver a Protected Areas Expansion Strategy within the next five years. This directive requires that sustainable partnerships are formed with private landowners and stewardship has been identified as the best method of achieving this.

In the Western Cape, the stewardship approach is being implemented by conservation agencies to achieve their biodiversity conservation mandates. These agencies work with other organisations, and attempt to realise their goals on a landscape level – which is similar to how the international community conceives of the stewardship approach. My personal experience of this approach, and the way it has been implemented in South Africa over the last decade, stimulated my curiosity in the topic, and led to me undertaking this research.

My study works from the supposition that stewardship is a worthwhile educational approach. What I hope to achieve through my research, is a deeper understanding of how the conservation education component of stewardship emerges *in practice*. Thus, I employ two case studies to document the learning experiences of landowners who have partaken in stewardship initiatives.

An additional aspect of my research will be to speculate whether this “social learning” leads to the creation of environmental knowledge capital – and, if it does, to what extent this knowledge may influence the owners’ land use and farming practices.

O’Donoghue (2007) provides a useful summary of both the historical development, and the desired effects of the stewardship approach:

Early conservation, environment and sustainability education was implemented through extension<sup>2</sup> campaigns to create awareness and to engage people in change oriented learning around biodiversity problems. These early conservation and

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<sup>2</sup> Extension here refers to the traditional interface of the past decades through which the state communicated and translated its policies and priorities to the farming community, using mostly a “top-down” methodology where farmers were treated as passive learners.

education ideals was all about “getting to people” through communicative and media campaigns and extension. With the advent of a democratic state the approaches changed to “getting people together” to engage diverse environment and sustainability concerns in a participatory turn. These more co-engaged approaches attempted to foster better ways of doing these things in local contexts (collaborative extension and stewardship superseding earlier extension and communicative interventions) ... Over the years, because the steering of education and change was increasingly deferred to participants constructing knowledge in their local context, conservation personnel (“teachers”) became facilitators in learner-led engagements with environment and sustainability concerns. (p. 149)

Stewardship in South Africa – as it is being implemented within the framework of the National Biodiversity Stewardship Programme (BSP), administered by the National Department of Environmental Affairs – is an attempt to engage landowners in the voluntary securing of parcels of biodiverse land, through signing a contract with them in which they agree, for a certain time period, not to develop the landscape in ways that will impact negatively on the biodiversity of the area in question. In effect, the piece of land under contract becomes part of the Protected Areas Network of that province, and receives protection against harmful development through certain conditions and stipulations laid out in the contract.

However, within the environmental management field – where the BSP is currently implemented – there exist two perspectives about the way in which stewardship could be used in practice. These perspectives are not incompatible, but are often seen to be in competition with one another. However, recently the dominant interpretation, which is centred on the conservation authority’s main objective - to secure areas of vulnerable biodiversity before they are lost for good - has been enlarged to include a stronger focus on community engagement and socio-ecological learning, in order to mitigate biodiversity loss in South Africa. This represents more of the second perspective.

Through this study I therefore hope to attain a better understanding of how the practitioners and the landowners experience the implementation and operational procedures of the stewardship programme in the Western Cape, and also to gauge the significance of the educational aspect of stewardship by ascertaining whether it enables

landowners to become more informed and accountable, and so better able to contribute to resolving the current problems of biodiversity loss in our country.

### **1.3 RESEARCH INTERESTS/AIMS**

What I am chiefly interested in – over and above obtaining a deep, formal understanding of how Cape Nature's Stewardship Programme currently operates – is to see how, in its capacity as a conservation education process, stewardship can foster social learning amongst the landowners involved in its implementation, by leading them to a better understanding of their environmental responsibilities.

To achieve this end, I shall investigate not only what practices (and learning situations) are conducive to the landowners acquiring conservational knowledge, but also what they do with this knowledge, once obtained.

I believe that this line of research will enable me to present an informed opinion to my colleagues working within the biodiversity stewardship model, and – perhaps – that they will be encouraged to embrace my recommendations, and integrate them into their practices.

### **1.4 RESEARCH QUESTION & GOALS**

My research employs an interpretive case study approach (see section 3.2.2), and is guided by the following question, and goals:

#### ***Research Question***

How has stewardship emerged over the last 10 years as a conservation education practice of collaborative social learning, to foster changes in land use in two cases in the Western Cape province of South Africa?

#### ***Research Goals***

- To do a literature review of the development of the stewardship approach in South Africa, by looking into its theoretical underpinnings, its practical implementation, and its outcomes in two case studies within the Western Cape Province.

- To undertake two case studies, with the objective of understanding exactly how the stewardship approach has been applied in terms of policies, practices and educative methods.
- To ascertain whether the CNSP has been successful in creating an environmental knowledge capital – and if it has, whether this knowledge promotes sustainable land use management practices amongst the landowners of the case studies.
- To develop a conceptual framework for the basic tenets of social learning, and to identify the characteristics that make it an effective educational approach.
- To make recommendations about the CNSP as an instrument of social learning and to suggest how its insights into conservation and sustainability practices could be transferred to other provinces and other expanded public works programmes (such as Working for Wetlands, Working for Water, etc.).

These goals have been developed to assist my research, by providing a clear focus for the study and allowing me to home in on my great area of interest – that is, the social learning component of the implementation of the CNSP.

## **1.5 THE TWO CASE STUDIES**

### **1.5.1 Case Study 1: Upper Breede River Valley Stewardship Project**

Over the last decade, my career in the field of environmental management in the Western Cape has put me in the privileged position of being exposed to numerous environmental projects, in a diversity of geographical locations throughout the province. The two case study areas selected for this research project were identified from these prior experiences. After deciding on the two areas, I had detailed (and encouraging) discussions with my colleagues about their suitability for such a study – and when I received the consent of the two areas' stewardship coordinators, it was confirmed that they would form part of my research into social learning and the BSP.

A dynamic partnership – called the Upper Breede Collaborative Extension Group (UBCEG) – has been formed between Breedekloof Wine & Tourism, the Biodiversity Wine Initiative

(BWI), the Department of Agriculture’s LandCare division, DEA, Working for Water and Cape Nature’s Stewardship Programme. As there is much overlap between these disparate groups’ interests and initiatives in the area, the UBCEG aims to focus awareness on threats, best practice and the value of accurate data. Moreover, they adopt collaborative strategic planning, so that partners can access their respective budgets in a way that adds value to the group’s initiatives. The group’s main focus is securing biodiversity through the launching of youth camps and awareness campaigns, the clearing of alien vegetation, and the rehabilitation of biodiverse areas.

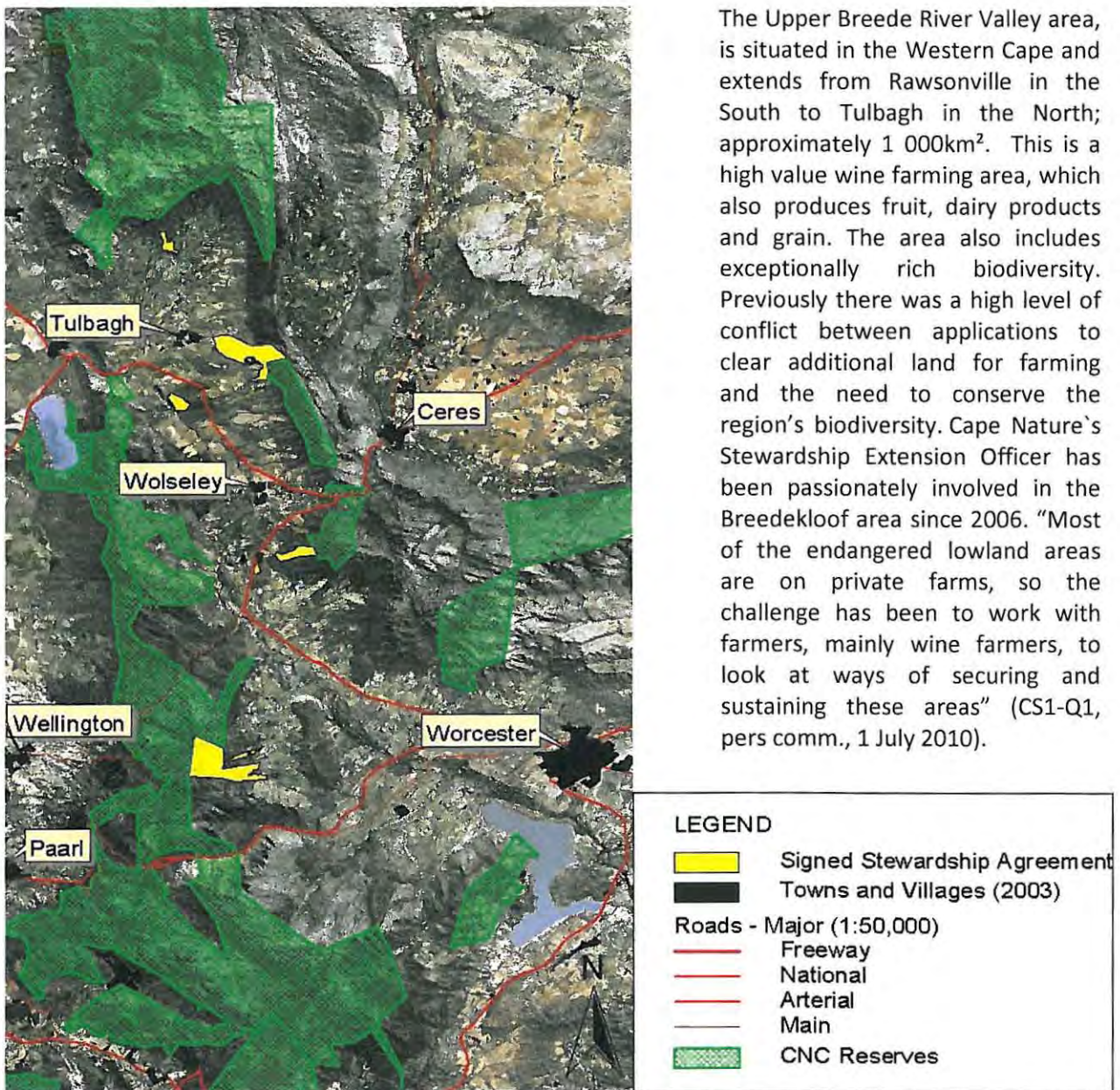


Figure 1: Location of the Upper Breede River Valley Stewardship Project

The primary aim is to create an enabling environment for landowners to take ownership of the projects, so they may be empowered to ensure environmental sustainability in the future.

The broad membership base of the UBCEG has significantly improved communication between organisations operating within the area. This, in turn, has facilitated collaborative planning and the effective allocation of resources. The increased coordination between organisations has allowed for the formulation of a list of priorities for action, which now receive broad regional support.

Notwithstanding the fact that only two of the organisations involved in the UBCEG have extension staff dedicated to the region – and so most of the people attending meetings tend to operate at a strategic planning level – this group has certainly demonstrated the tremendous potential for locally-focused, cooperative governance between different organisations sharing a common goal (CapeNature.co.za homepage, 2010).

The Stewardship Coordinator for Cape Nature, who is part of the UBCEG, says that since the advent of the group, his stewardship work has been improving – and that landowners have been much more enthusiastic to take part in the Stewardship Programme. Furthermore, farmers have seen significant improvements in service delivery – for example, alien vegetation has been cleared in biodiversity priority areas. The UBCEG has also facilitated surveys, undertaken by Custodians of Rare and Endangered Wildflowers (CREW), of endangered plant species in the area, and this has increased the landowners' awareness of the international importance of local biodiversity (CS1-Q1, pers comm., 1 July 2010).

Another success story for the CNSP in this area is the Biodiversity Agreement, which was signed in 2007 between Cape Nature's Stewardship Programme and the black empowerment company; Fynbos Vrugte en Wyn Boerdery. This agreement led to the conservation of 40-hectares of endangered Breede Alluvium Fynbos, as well as the critically endangered geometric tortoise.

The 40-hectare area originally formed part of a provincial nature reserve, proclaimed in 1980 to be home to one of the last remaining geometric tortoise populations in the upper

Breede River valley. At the time, the area was leased from the landowner, but it was deproclaimed during the late 1980s and has been managed by the landowner ever since. Nevertheless, relatively small, but healthy geometric tortoise and common “padloper tortoise” populations continue to exist in the area, and the 2007 Biodiversity Agreement has greatly assisted in protecting these threatened species.

Furthermore, botanists from Cape Nature and CREW, based in Kirstenbosch and involved with monitoring endangered flora species – have revealed that, to date, more than 60% of the near-pristine Breede Alluvium Fynbos has been lost through transformation by agriculture. Enthused by the recent developments in the area, Cape Nature Chairperson Mark Botha said:

We are really delighted to see how much the new co-owners of the Romansrivier estate support this initiative to safeguard our priceless heritage while producing sustainably. Through this partnership the new owners have committed to a voluntary agreement which is legally binding on both parties for the next fifteen years (CapeNature.co.za homepage, 2010).

Three members from the Fynbos Vrugte en Wyn Boerdery company were interviewed during my data collection process. Two of the men, I discovered, were also part of a team of 12 community members involved in a very successful Nature Guardianship Training Course. It was inspirational to hear about their learning experiences, and how the CNSP has contributed to enriching their lives, and their understanding of the environment in which they live.

#### 1.5.2 Case Study 2: The Greater Cederberg Biodiversity Corridor (GCBC)

The Greater Cederberg Biodiversity Corridor is a landscape-scale conservation initiative, launched under the auspices of CAPE. The GCBC was developed in response to the threat of biodiversity loss posed by anticipated climate change, ensuing fragmentation, and associated habitat loss – and the initiative’s main focus is on the promotion of sustainable living practices in the area.

The GCBC covers an area of 1 million ha, and is situated in one of the most ecologically sensitive landscapes in the Western Cape. The area covered by the GCBC stretches from

Nieuwoudtville in the north to Groot Winterhoek in the south, and from Elandsbaai in the west to the Tankwa Karoo in the east.

Traditional site-based conservation tends to focus on conserving sites that support key habitats or species. However, this means that only the best sites are protected. With the impending threat of climate change, a concern arises that these sites may not be the best sites to conserve in the future. Landscape-scale conservation, on the other hand, is a more holistic approach, that considers not only biodiversity issues, but also local economies and agriculture, ecotourism, and the health and social benefits of the environment to its people. (www.cederbergcorridor.org.za, November 2010).

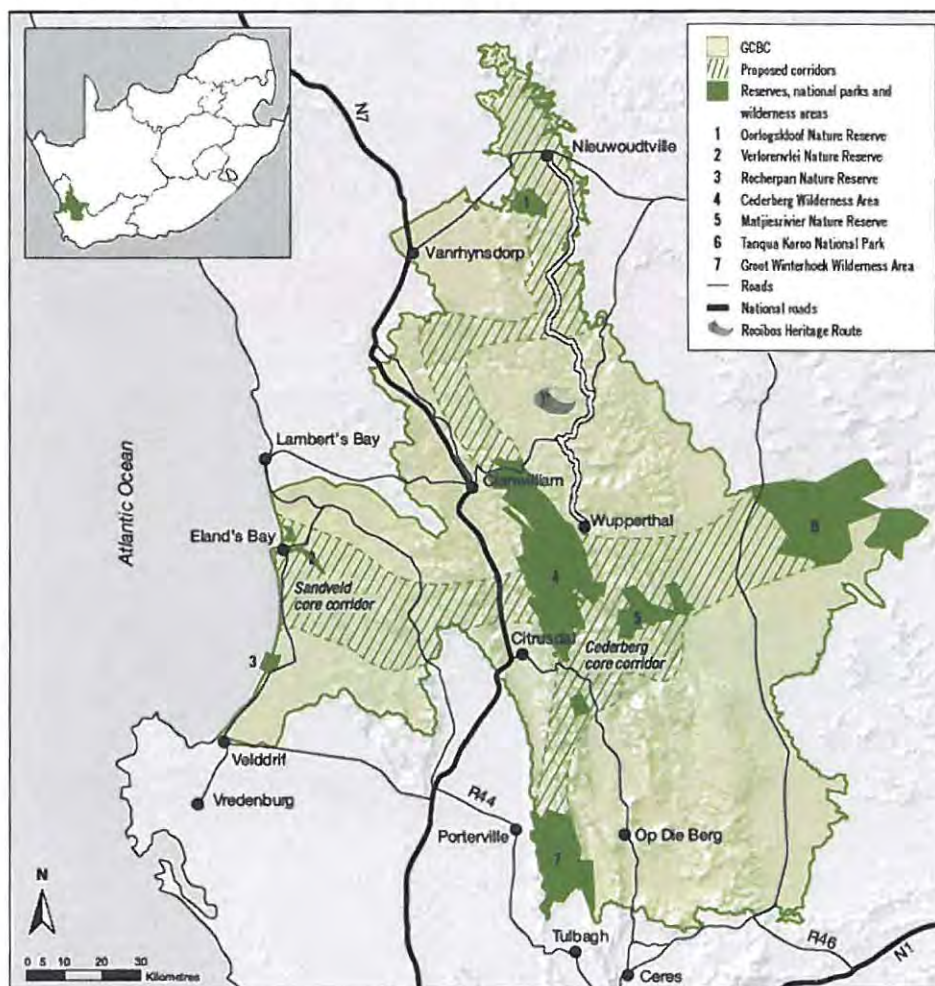


Figure 2: Location of the Greater Cederberg Biodiversity Corridor Landscape Initiative

The GCBC is a future-orientated initiative, which deals fundamentally with people and the way they use their land. It is about their environmental values, their fears and aspirations,

their livelihoods, and what motivates their land-use patterns. The initiative is not about forcing communities (farmers, industries, municipalities and others) to change their land-use patterns, but rather aims to help them share information, introduce incentives and build frameworks within which to better manage the economic, social and ecological resources available to them. The successful implementation of the corridor relies on people working in partnership with each other; to be mobilised around a common goal of conserving biodiversity in their unique landscape ([www.cederbergcorridor.org.za](http://www.cederbergcorridor.org.za), November 2010).

One of the key factors in the success of the GCBC, has been the civil society partnerships that have been forged. Here the concept of an 'Army of Champions' was born, in honour of the invaluable contributions that have been made to the corridor by certain groups and individuals. One such group is the Cederberg Corridor Steering Committee, which acts as a forum for community engagement, and plays a key role in the coordination and support of activities taking place in the corridor. An innovative outreach programme has also been developed, which ensures that all stakeholders in the Cederberg Corridor are capable of meaningful participation in the initiative (Cape Nature Annual Report 2007/2008, pp.17-18).

The main strategic objectives of the GCBC are: (i) Expansion of protected areas; (ii) Industry involvement; (iii) Local economic development (LED) and human well-being; (iv) Awareness, and (v) Coordination. The concept of stewardship is particularly relevant to two of these objectives – (i) and (iv) – as will be discussed briefly below.

With regard to the 'expansion of protected areas', the GCBC advocates the use of stewardship in two ways:

- 1) As a land securing mechanism, in the same way as Cape Nature prescribes it – except that in this area, stewardship is just one of many methods used to secure protected areas during the creation of biodiversity corridors<sup>3</sup>. Other mechanisms include Landcare Area Wide Planning, Biodiversity and Business, Biosphere Reserves, etc.

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<sup>3</sup> An ecological or biodiversity corridor is a mosaic of land uses connecting fragments of natural habitat across a landscape. Its objective is to facilitate the gene flow between populations, enhancing the long-term survival probability of biological

2) As a proactive extension methodology within the broader landscape, where one shares knowledge with different audiences, on different levels, about different aspects of biodiversity conservation. This conception aligns much more closely with the way stewardship is used on an international level (Brochure: GCBC People in partnership, 2009).

One of the key objectives of the GCBC is to establish corridors of continuous natural habitat across the landscape. However, because the initiative spans such a massive area, various sub-regions (known as core corridors) have been identified to facilitate the establishment and management of new corridors. And since large portions of this important natural habitat is privately owned, the willingness of landowners to support conservation in these corridors is crucial. Formal conservation stewardship agreements have been negotiated between landowners and Cape Nature, covering 5 425.4 ha of land in the Sandveld (including 3 682 ha of endangered Leipoldtville Sand Fynbos). A further 17 300.2 ha have been secured through formal agreements in the Cederberg corridor, while 2 000 ha have been secured in the Olifantsberg core corridor – an important link between the Sandveld and Cederberg corridors. (CS2-Q1, pers comm.,)

‘Awareness’ is another of the strategic objectives of the GCBC in which they acknowledge the importance of stewardship.

In the GCBC’s view, by building awareness of the issues at stake, stewards can become partners in sustainable land use in the area, and co-managers of biodiversity. Moreover, thus empowered, stewards become potential educators – capable of teaching communities to manage their natural resources in sustainable ways. (Brochure: GCBC People in partnership, 2009).

## **1.6 OVERVIEW OF REMAINING CHAPTERS**

In Chapter 2, I shall present a literature review of the most important environmental education theories I make use of in this study, as well as an overview of how stewardship is

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communities and their species. It also intends to ensure the maintenance of large-scale ecological and evolutionary processes and ecosystem services. (GCBC Brochure, 2009)

conceived of internationally. A contextual profile of the Cape Nature's Stewardship Program is also given, including references to the Stewardship Operational Procedures Manual (the prescribed methodology used by all stewardship officials in Cape Nature). I shall conclude the chapter with a brief discussion of the concept of Community of Practice, and show how it fits into a broader conceptual framework for thinking about learning in its social dimensions.

In Chapter 3, I shall describe my research methodology, as well the design and structure of the research project. I shall explain the rationale behind my choice of research topic and my choice of approach to this study, and I shall describe the methods I used to generate and analyse my data. The issues of ethics, validity and trustworthiness will be discussed at the end of this chapter.

Chapter 4 presents the data gleaned from the interviews I conducted. This is done in a narrative format, and it is quite comprehensive, as when I was reviewing the data I had collected, the analytical categories I had originally designed became divided into sub-categories. As will be evinced, my presentation makes significant use of raw or 'thick' data – this is because my intention is to allow the reader to draw their own conclusions, with minimal interpretation from my side.

Chapter 5 discusses the inferences my research made use of. These inferences include several analytical statements, which I found helped to align my discussion with the literature review presented in Chapter 2. This line of study is not undertaken to prove my hypotheses right or wrong, nor to give causal explanations for the phenomena under investigation – it is there only to probe a bit deeper into the data collected from the two case studies, and to enable me to make surer recommendations for future users of the stewardship approach in the environmental education contexts.

In Chapter 6, I present my concluding recommendations from the discussion contained in Chapter 5, and make suggestions for future research into the topic. I shall then offer a brief summary of the key findings of my research.

## **CHAPTER 2: LITERATURE REVIEW AND CONTEXTUAL FRAMING OF THE STUDY**

### **2.1 OVERVIEW OF THE CHAPTER**

This chapter presents my literature review, and the theoretical context of my study. I shall begin with a discussion of the concept of stewardship, as it is understood internationally, and then provide a contextual profile of the Stewardship Programme in the Western Cape – describing its practices, processes and methods, as it is being described in Cape Nature's Stewardship Operational Procedures Manual of 2009. I shall then discuss social learning theory, and how this concept is interpreted within the field of environmental education.

I shall conclude the chapter by relating these theoretical considerations to my research question – viz., How has stewardship emerged over the last 10 years as a conservation education practice of collaborative social learning, to foster changes in land use in two cases in the Western Cape province of South Africa?

### **2.2 STEWARDSHIP INTERNATIONALLY**

Through reading various articles, and doing a thorough electronic search (925 000 Google hits between May and August, 2010) on the concept of stewardship in the international arena, I feel that it is fairly safe for me to assert that, outside of South Africa, the concept of stewardship refers to a much broader ideal of sustainable land use practices, and sustainable natural resource management in general. The following examples will serve as evidence of this assertion:

- a) A Stewardship Strategy for Ontario, an initiative of the Ministry of Natural Resources, is a continuing collaborative effort that has evolved through the support and encouragement of a variety of stewardship organizations and government agencies. The diversity of definitions of Stewardship that exist reflects the variety of groups and stakeholders involved in this aspect of conservation. The definition used in this Strategy is closely aligned with the definition in Canada's Stewardship Agenda and the National Round Table on Environment and Economy report. Stewardship is an ethic by which citizens care for our air, land and water as parts of a natural life-support system and collectively act to sustain and enhance it for generations to come. Our Stewardship Community of Practice is a body of people unified by their common interest in ecosystem sustainability. This large sector of the public can be further divided into networks of stewards with a more focused (and perhaps regional) interest, such as

wetland conservation, or even within that grouping, a further division into wetlands for waterfowl and other wildlife, or wetlands for their value in protecting water quality and quantity. The Strategy aims to represent the common interest that all of these organizations have in stewardship and ecological sustainability.

([www.stewardshipcentre.on.ca](http://www.stewardshipcentre.on.ca); last accessed 24 June 2010)

- b) The Maryland Forest Woodland Stewardship Project is an educational program of the University of Maryland Extension and the National Wild Turkey Federation. It teaches sound forest and wildlife management practices to a select group of people each year. In return, participants apply these principles to their own property and actively encourage others to practice good forest stewardship. Since 1990, 405 people owning 69 693 acres have been trained through this program. Maryland Woodland Stewards across the state have reached out to thousands of Marylanders with information and resources to encourage sound forest and wildlife stewardship. Maryland Woodland Stewards agree to: i) Develop and implement forest stewardship plans on their properties; ii) Maintain a set of reference materials provided at the training to answer questions from other landowners or to direct them to appropriate professional resources iii) Work with natural resource professionals, extension personnel, and local groups to encourage other landowners to implement forest stewardship practices and iv) Advocate sound forest and wildlife management in their communities. ([www.nwtf.org](http://www.nwtf.org); last accessed 26 May 2010)
- c) The Stewardship Network based in Michigan was established to fill the gap in natural area conservation. Land managers felt isolated within the boundaries of their park, feeling like they were the only people fighting the good fight. Individuals who wanted to steward their own lands or just learn more about how to care for nature didn't know how to access the information they needed. The Stewardship Network set out with the goal to bring these people together and build the capacity of organizations, individuals, and businesses to care for natural lands and waters. The Network works with private property owners, nonprofits, governmental agencies, and private businesses to achieve that goal. The Network help groups and individuals think differently about stewarding natural lands and waters. We train volunteers and professionals in science-based, field-proven stewardship activities and methods. What remains of our region's native prairies, savannas, oak barrens and other important natural areas is owned by dozens of groups, both public and private, and by hundreds of individuals. These natural areas are fragmented in isolated patches, with little or no oversight. That's where the Stewardship Network comes in. We are the bridge between conservation groups, private businesses, property owners and individual volunteers, bringing people together to preserve our natural heritage. ([www.stewardshipnetwork.org](http://www.stewardshipnetwork.org); last accessed 12 June, 2010)

d) From a Biodiversity Strategy for the Government of New Brunswick, June 2009:

New Brunswick's landscape is a blend of diverse landforms. These include three distinct coastlines, remnants of the northern Appalachian Mountains, steep rivers and sparkling lakes, and the broad valley of the lower St. John River. Associated with this physical diversity is a wealth of biological diversity, the diversity of living things. Biodiversity is the diversity of life and the lands, waters and seascapes that support this life. As New Brunswickers, much of our heritage and sense of belonging comes from our connection with the environments in which we live and work. Repeatedly, public surveys have shown we value biodiversity and place a high level of importance on maintaining a healthy environment for ourselves and future generations. Here in New Brunswick we are fortunate to live in a place and at a time when most of our native plants, animals and ecosystems, both managed and wild, are healthy. As such, now is an opportune time to be conservation minded as we work together to achieve self-sufficiency and tackle the challenges of climate change. Stewardship: There are many variations to the meaning of stewardship, tailored to different sectors and interests. In the context of conservation and sustainable use, stewardship is landowners (including governments), corporations, organizations and individuals caring for land, water, air and biological resources, and sustaining the natural processes upon which life depends. Webster's Dictionary defines stewardship as the individual's responsibility to manage his or her life and property with proper regard to the rights of others.

**On Crown Land: Lead by Example** - The Government of New Brunswick will lead by example. It will ensure that Crown land; water and biological resources are used and managed in a sustainable manner to achieve provincial biodiversity goals.

**On Private Land: Encourage and Facilitate Stewardship** - The stewardship of private lands and their biological resources is principally the responsibility of the owners and users of those lands. However, Government will work to encourage and facilitate stewardship through existing and new collaborative efforts. A variety of methods can be used:

- *Accessible Information*: Educational materials to increase overall awareness; Ecosystem status and trends information to identify priorities; Technical know-how to information, and demonstration sites to show it can be done.
- *Networking*: Providing opportunities for organizations and individuals to share views on issues, successes and lessons learned helps to increase capacity and enthusiasm.
- *Collaboration*: Providing opportunities for organizations, including governments, to connect and collaborate can increase efficiency and the success of specific initiatives, and lead to greater levels of stewardship across the province.
- *Recognition*: Recognizing exceptional stewardship efforts gives credit to those who have worked hard and helps to profile issues and build momentum for action.
- *Incentives*: Through recognition from peers and the community at large is often a sufficient incentive for corporations and individuals to engage in stewardship, providing direct and indirect monetary incentives for significant contributions to achieving provincial biodiversity outcomes, can further help to enhance stewardship in areas of high priority.

([www.gnb.ca/0078/publications/Biodiversity-e.pdf](http://www.gnb.ca/0078/publications/Biodiversity-e.pdf); last accessed 12 June 2010)

e) In her book *Grass Roots and Green Tape*, Anna Carr (2001, pp.215-216) describes the way stewardship has been taken up in Australia's natural resource management field, and discusses the difficulty of pinning the concept down in a clear-cut definition:

The growth in numbers of stewardship groups does not necessarily indicate a concurrent expansion in awareness of environmental degradation by local communities. However it is indicative of the success of public campaigns such as that developed by Landcare Australia Ltd, to raise funding for awareness of land degradation. Landcare groups are typical of other stewardship groups in that they have arisen out of an expressed desire to combat environmental degradation. Stewardship groups' efforts towards sustainable development can be interpreted very differently, depending on whose perspective is being taken into consideration, and along what continuum the groups are being assessed. They may be reflecting community experience and/or mirroring government policy, they can be environmental crusaders and/or advocates of increased productivity. Note however that these dichotomies pairs don't imply that they are polar opposites. Conservation goals are the main province of most stewardship groups. It does not follow that if you increase production, conservation must diminish or vice versa. Nor is it true that if you have more community action, you have less government policy. The central idea here is that there is a plethora of approaches to stewardship. Laying along a continuum suggest that they blend into each other and not that there are any hard and fast lines which separate one group's stewardship approach from another's.

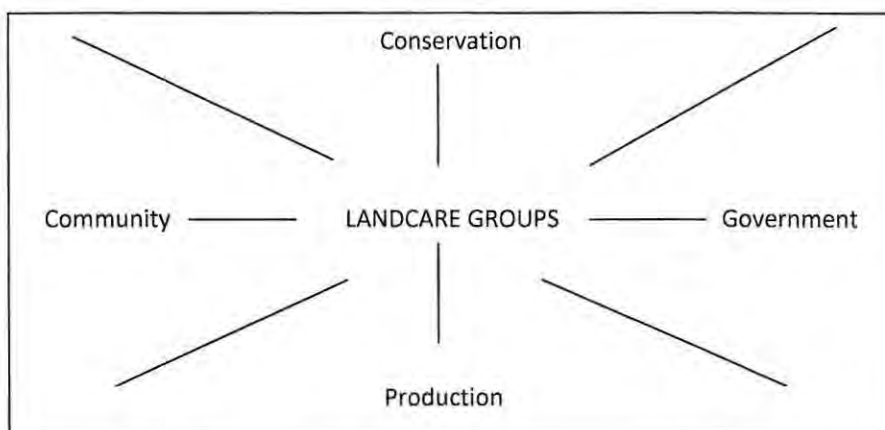


Diagram 1: Stewardship is not simple (from Carr, 2001, p.215)

I believe it is obvious from the above examples that, in the international arena, the concept of stewardship possesses holistic connotations of 'caring' for the land we live on. The concept is understood as a call to every member of society to be more conservation-minded in their daily activities and decision-making processes – with the ultimate goal of ensuring that we all live and develop as part of nature, valuing the diversity of life, not taking from our natural resources more than we can replenish, and leaving future generations with at least as rich an environmental heritage as was bestowed to us.

### **2.3 CONTEXTUAL PROFILE OF THE CAPE NATURE STEWARDSHIP PROGRAMME (CNSP)**

In November 2002, the Western Cape Nature Conservation Agency – mainly through the efforts of one of its employees, Chris Martens – started the Conservation Incentives & Stewardship Programme (CISP), which succeeded the previously-existing Conservation Incentives Pilot Project. The CISP was started as a means to lay the foundations for a larger CAPE joint extension project (Martens, C: pers comm., 2009), and if one looks at the minutes from one of the first Stewardship Action Team workshops (2003, pp.1-4), one observes that this idea quickly became substantiated by the setting out of firm goals and objectives. For example, it was decided that the CISP would operate in the Western Cape across all business units and, where necessary, cross-boundary conservation initiatives as well.

This proved to be a huge challenge, as the idea of biodiversity stewardship was largely unfamiliar to the officials from the various business units, and it was soon realised that they would have to be sensitised accordingly (Martens & Hamman, 2004, p.6). The programme itself also faced capacity challenges, as it boasted only one staff member who was dedicated to the stewardship ideal.

However, these challenges led to the development of a new programme, committed to the ideals of biodiversity conservation, and supported by a firm foundation and dedicated funding. In 2003, work started in earnest on the development of the Western Cape Biodiversity Stewardship Programme – this included using mapped information from CAPE on critical biodiversity hotspots, creating a mechanism that provided incentives for

landowners to participate in the programme, and securing the legal means to provide adequate protection for biodiversity in perpetuity.

A major stumbling block in getting the stewardship programme off the ground was that no one had yet recorded the geographical location of critical biodiversity hotspots outside of formal reserves. Fortunately, however, CAPE came to the rescue – by first conducting a survey, and then providing the Stewardship Programme with the mapped information. Initially, the Stewardship Programme was designed as a series of pilot projects, executed in three areas in the Western Cape. These pilot projects were concluded in October 2004, and the Cape Nature Stewardship Programme is now a fully-fledged, well-established conservation agency programme (Olen, 2005, p.7).

Since the first workshop that led to its inception, the Western Cape Stewardship Programme – administered by the province’s conservation agency – has held regular workshops over the last five years. These workshops have involved all their partners, business unit managers and field officials, and they have dealt with a wide variety of issues – from operational functionality to lessons learnt in-field, to crisis management and problem solving.

From the research done on this programme, it can be assumed that the Stewardship Programme has been methodically managed, maintained and carefully advocated by its Programme leader, Chris Martens and his very dedicated staff (the Stewardship Task Team), to ensure a natural evolution and subtle infiltration of the ethic and moral objectives of the stewardship ideal into the everyday practice of partner government programmes, environmental NGO’s, conservancy movements and most importantly, the private landowners of the Western Cape Province (Purnell, pers comm., 2009).

The Cape Nature Stewardship Programme’s (CNSP) main objectives and operational procedures in the province quickly gained recognition by all (or most) of the environmental lobbyist groups and government agencies in the Western Cape. And after the ideal of stewardship was thoroughly embedded within the nature conservation agency’s policy, and the required buy-in was established by its top management level, the Stewardship Task Team began a more pragmatic implementation of the concept in the field:

A landowner's needs assessment questionnaire was designed and the management team of the CNSP started to liaise and react more frequently with its extension officers in field, reporting on private landowners (some with already existing Private Nature Reserves and other wanting to declare these), and their willingness to become involved in the Stewardship programme (Purnell, pers comm., 2009).

This created its own challenges, as the Stewardship Task Team knew all along that in terms of its capacity, it was only able to deal with limited public interest at any one time. This is why their initial communication campaigns were subtle, and perhaps a little restricted.

After two years of implementing the Stewardship Programme in the Western Cape, the conservation agency realised that if they wanted to capitalise fully on their initial investment, they had to invest yet more human capital into this very promising programme. It was in a paper written by Martens & Hamman (2004, p. 5), that the following announcement was made:

The Western Cape Nature Conservation Board is setting aside substantial resources for the implementation of stewardship initiatives in the landscape. The challenge of keeping people on these living landscapes will be met through extending the reach and quality of biodiversity management, the repositioning of biodiversity in local economic development and the development of human capital and meaningful partnerships.

Moreover, in the same paper, it was announced that the CNSP had begun to receive governmental support:

An added and important bonus is the realisation of conservation responsibilities by all spheres of government with buy-in at local community level with minimum cost to the state. (Martens & Hamman, 2004, p.4)

According to Botha (2004, p.3), in his article *Implementing Laws for conservation action*, it is the National Environmental Management: Biodiversity Act (Act 10 of 2004) and the National Environmental Management: Protected Areas Act (Act 57 of 2003) which provide the

fundamental building-blocks for conservation action, and the platform to ensure long-term security for, and encouragement of biodiversity stewardship.

## **2.4 PROCESSES AND PRACTICES OF THE CAPE NATURE STEWARDSHIP PROGRAM**

In 2005, a Stewardship Operational Procedures Manual was developed by the conservation agency responsible for implementing the Western Cape Stewardship Programme. Revised in 2009, the manual is now available to all staff from the conservation agency partaking in the Stewardship Programme.

It is a thorough document, replete with detail about the history, expectations, practices and procedures of the implementation of the CNSP. An informative, and probably the most valuable section of this manual – Section 4: Lessons Learnt – describes the last 6 years of stewardship experiences in the field, and records the various bits of knowledge gained from these practical encounters. These insights are shared both with new incumbents and current stewardship officials, giving them a taste of the reality of the stewardship approach to biodiversity conservation.

In the following section, I shall provide a quick overview of the most important aspects of the processes and practices of the Cape Nature Stewardship Operational Procedures Manual. The bulk of the information, however, I have simply included in the appendix of this paper – and the reader is encouraged to turn there to further scrutinise the points that I make note of.

The vision of the CNSP is expressed by three objectives, and discussed in the manual under point 1.4:

- To ensure that privately owned areas with high biodiversity value receive secure conservation status and are linked to a network of other conservation areas in the landscape.
- To ensure that landowners who commit their property to a stewardship option, will enjoy tangible benefits for their conservation actions.
- To expand biodiversity conservation by encouraging commitment to and implementation of good biodiversity management practice on privately owned land, in such a way that the private landowner becomes an empowered decision maker.

(Cape Nature's Stewardship Operational Procedures Manual, 2009, p.1-1)

Point 1.5 speaks about the central principles of the stewardship programme:

1. Site security is all-important: without securing the conservation status of land and giving it legal status, the future existence of that site is not guaranteed. I.e. basing conservation of irreplaceable biodiversity on gentleman's agreements alone is very risky!
2. Landowner-focused extension is the key: One of the main reasons why biodiversity is disappearing at an alarming rate on private land is because there has been insufficient "feet on the ground" and capacity within CN to inform, help and support those who make decisions about private land use.
3. Focus on priorities: i.e. make conservation count in the areas that it counts! Resources, time and energy are wasted when conservation effort is expended in areas that are not priorities for conservation (either because that type of vegetation or ecosystem is sufficiently protected, not under threat or has become irreparably disturbed).
4. Biodiversity is the bottom line!: decisions made about which properties should be the focus of conservation investment should be very defensible and based entirely on the biodiversity value of the land, and not who owns the land, their political or economic status etc.
5. People's needs matter!: For a private land extension programme to be effective, the approach must be centred on two things: i) understanding the attitudes and motivations of the residing people; and ii) meeting the needs of these people as far as possible that would enable them to better manage the natural habitats on their properties.

(Cape Nature's Stewardship Operational Procedures Manual, 2009, p.1-1)

Point 1.6 represents Cape Nature's stewardship options. These refer to the alternatives available to private landowners that either wish to set land aside for conservation, or utilise the land sustainably. The options available through Cape Nature are: 2.1 Conservation Areas; 2.2 Biodiversity Agreements; 2.3 Protected Environments; 2.4 Nature Reserves.

The diagram below shows the increasing levels of protection afforded by these options<sup>4</sup>:

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<sup>4</sup> Please note that the benefits and incentives for the Stewardship options mentioned in this Chapter were those available at the time of writing this report, and specific to what CN could provide. Therefore, the list is by no means exhaustive, and could differ according to which provincial agency or organization is implementing their stewardship programme. Please note also that more detail on each of these options is provided in the appendix.

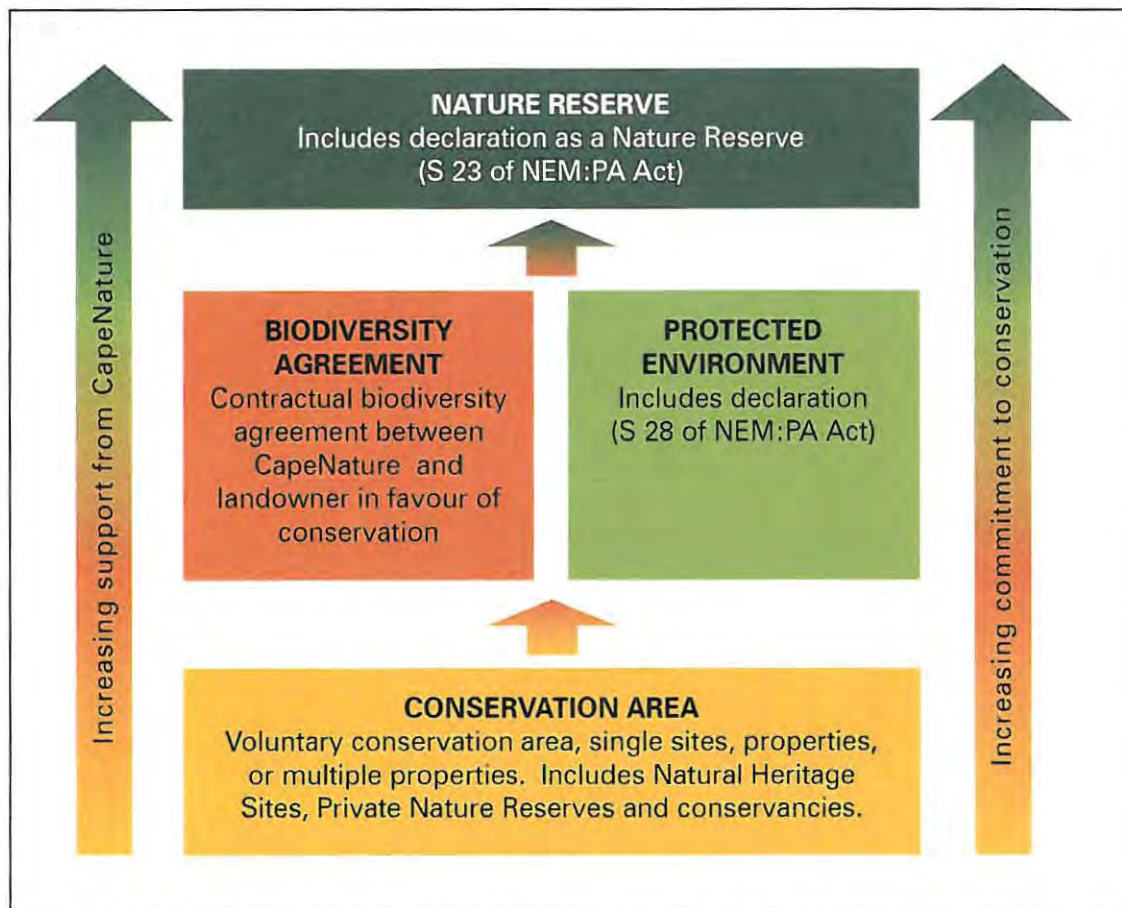


Diagram 2: Stewardship Options (CapeNature’s Stewardship Operational Procedures Manual, 2009, pp.1-2)

Chapter 3, another very important chapter of the manual, outlines the steps of the implementation process, and details how a stewardship official should go about approaching potential stewards, and sharing the conservation message with them. Important to note, is that this process is put forward as a “suggested strategy”, and is not at all prescriptive. This is because each intervention is seen as unique, and requiring a singular approach on the part of stewardship officials. Nevertheless, I have included in the appendix a flow diagram depicting this suggested strategy.

Below, I provide a brief summary of the process that should be followed when implementing stewardship in a certain area (each phase is discussed in detail in the Operational Procedures Manual). It must be noted, once again, that this process is by no means prescriptive. Flexibility is required with every landowner and community, so that

officials can gauge the most effective way to order the phases, and how much time to spend on each phase. For example, introducing a landowner to their stewardship options may take one visit or several, depending on their reaction to the idea. Thus, the information contained in this section of the manual is not intended as a blueprint for action, but rather a broad first brush-stroke outlining the stewardship approach. The intention is to provide a loose framework that will stimulate creative thinking, and help stewardship officials cope with the diversity of circumstances that confront them.

**Phase 1: Initiate Interaction with the landowner:** Identify priority sites from predetermined fine scale products. Prepare for the initial visit. Orientate yourself around landowner needs, and the area's socio-economic situation. Introduce & explain the stewardship options and input all relevant data into landowner database.

**Phase 2: Site assessment conduct an internal cost analysis:** Assess biodiversity of property using site assessment form and a socio-economic/institutional assessment. Present findings to a peer review committee. Give feedback to the landowner. Agree on key management interventions and do a rough cost calculation.

**Phase 3: Begin negotiations & close the deal:** Prepare for negotiations using findings from internal cost analysis. Draft initial contract agreement. Consult legal expertise and finalise all the legal documents.

**Phase 4: Write a management plan & audit:** Draft a management plan (usually done whilst drafting contractual agreements). Conduct audit based on management activities in plan & provide follow-up support.

**Phase 5: MEC submission and final proclamation:** Submit all relevant documentation and information to the MEC for approval (only for Nature Reserve and Protected Environment categories). Advertise proposed proclamation. Finalize proclamation in Government Gazette.

(Stewardship Operational Procedures Manual, 2009, p.3-1)

## 2.5 POSITIONING THE RESEARCH PROBLEM WITHIN THE FIELD OF STUDY

*Biodiversity Stewardship refers to the wise use, management and protection of that which has been entrusted to you. Within the context of conservation, stewardship means wisely using natural resources that you have been entrusted with on your*

*property, protecting important ecosystems, effectively managing alien invasive species and fires, and grazing or harvesting without damaging the veld.*<sup>5</sup>

*(Cape Nature, 2009)*

The Biodiversity Stewardship Programme of South Africa (BSP) functions as an umbrella programme within the array of policies, plans and programmes designed to promote biodiversity conservation in South Africa. Biodiversity Stewardship is a powerful new mechanism, which assists national and provincial environmental departments and government agencies with fulfilling their respective mandates to conserve biodiversity outside of state-owned protected areas. These mandates are laid out by the National Environmental Management: Protected Areas Act (Act 57 of 2003) and Biodiversity Act (Act 10 of 2004). The BSP, through a consistent, national, landscape-scale approach, also assists with the implementation of provincial conservation plans, and aids national government in meeting the targets set out by the National Spatial Biodiversity Assessment (NSBA), and the National Biodiversity Framework (NBF) initiatives.

Since acquiring land to expand the protected area network of the country is just too expensive for any conservation agency, the stewardship concept provides a cost-effective alternative, by getting landowners to commit to conserve and manage biodiversity on their own land. This land includes private farms and communal areas, as well as tracts owned by national/provincial government departments, municipalities, parastatal organizations like Eskom, SANRAL and Spoornet, and private companies (capeaction.org.za homepage, 2009).

Biodiversity Stewardship is an exciting (though perhaps untested) solution to a long-standing environmental concern in South Africa – that is, of how to ensure the long-term conservation of highly biodiverse areas that are privately owned, and so extremely vulnerable to developmental pressures. The BSP is a relatively new environmental initiative in South Africa, and though it has varying operational efficacy around the nine provinces of

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<sup>5</sup> This definition is of great importance to this study, as it lays the foundation and provides the context of the educational programme (CNSP) to be assessed as part of my research project.

the country, it is firmly embedded in the conservation activities of one of the provinces – that is, the Western Cape, where it has been operational for the last 10 years.

Stewardship, as it is typically conceived of in South Africa, is focussed on achieving the reflexive socio-ecological modification of local land management practices within a secure, and agreed-upon, area of privately-owned property. When I was given the opportunity to research a field of interest for this Masters programme, I decided to assess the BSP as a “conservation education response” to an array of socio-ecological issues emanating from the tension between biodiversity conservation and private land use practices. I decided to concentrate on the Western Cape Province, as it is where the BSP is most well-established.

According to Reed & Cundill *et al.* (2010, p. 3), social learning needs to be distinguished as a concept over and above the conditions and outcomes of the social learning process. Thus, these researchers have derived three characteristics that social learning must evince in order for it to qualify as a viable educational method. These are, (a) a change in mindset (or understanding) has to take place amongst the individuals involved; (b) this change must go beyond the individual and their private life, and become situated within their wider social context or communities of practice; and c), this change must be brought about through social interactions.

In this paper, I aim to explore whether the CNSP is able to facilitate a social learning experience amongst the landowners of the Western Cape Province. I shall, therefore, be assessing whether it can lead to a change in mindset amongst the individuals involved in its implementation – and whether this new understanding of their stewardship responsibilities translates into the suitable modification of their land use practices. I will also look at if or how the social learning these landowners experience, get transferred beyond the individual and becomes situated within a wider social unit or community of practice.

## **2.6 UNDERSTANDING LEARNING**

To find out what is meant by the notion of “social learning”, it is first necessary to develop an understanding of the term “learning”.

Learning can be defined either as a process, or as a product. Historically, to define learning as a *product*, has been to conceive of it as a change in the behaviour of individuals. In other words, learning is viewed as an outcome – the observable *result* of some process of change working upon the behaviour of the learner.

This definition of learning has been criticised, and debated extensively over the years by a myriad of scholars. Some have looked to identify permanent changes in behaviour as a result of experience. However, not all changes in behaviour resulting from experience involve learning – and thus, it would seem fair to assert that if learning has taken place, it is because the individual has *experienced the process of learning* in some or other way (Ramsden, 1992, p.2). This is why many theorists have moved away from conceiving of learning as a change in behaviour, and instead see it as a change in the way the individual “understands/experiences/conceptualises the world around them”.

This conception of learning as a *process* leads one into the arena of competing theories of learning, which have emerged over the years to try and explain its origins and its mechanisms. Without indulging in detailed descriptions, suffice it to note that the most common theories of learning are referred to as: (i) the behaviourist orientation to learning; (ii) the cognitivist orientation to learning; (iii) the humanistic orientation to learning; and (iv), the social-situational orientation to learning – which is the orientation upon which this study is based.

## **2.7 THE SOCIAL-SITUATIONAL ORIENTATION TO LEARNING**

According to Lave and Wenger (1991), two researchers who came up with this “new” theory of learning in the early 1990’s, social and situational learning happens through interactions and observations that take place between people and their environment, and comes largely from the individual’s participation in everyday life. This differs from previous theories of learning, which proposed that it was the result of a change in behaviour on the part of the individual, or else something that individuals did on their own. The social-situational orientation to learning also rejects the notion that learning “has a beginning and an end” – that it is an activity undertaken in isolation, and solely the consequence of teaching.

Initially we defined social learning as the learning taking place in groups, communities, networks, and social systems that operate in new, unexpected, uncertain and unpredictable circumstances. Social learning is linked to processes of social action (e.g. developing a policy, plan, organising multi party negotiations, engaging in participatory processes, establishing a task force or a study group etc.). The learning within these systems is basically experiential and can therefore be characterised as learning by doing.

(Wildemeersch, as cited in Wals, 2004, as cited in Downsborough, 2007)

Wals (2007, p.39) attempts to overcome some of the vagueness surrounding ideas about social learning, by interpreting this approach as learning that takes place when divergent interests, norms, values and constructions of reality meet in an environment that is conducive to meaningful interaction. Thus, the point of social learning theory is not so much to stipulate what people *should* know, or be able to do – as this could be an embodiment of authoritative thinking and prescriptive management – but rather, to address the following questions: How do people learn? What do they want to know and learn? How will they be able to recognise, evaluate, and – when necessary – transcend or break with existing social norms, group thinking and personal biases? How can social learning *build upon* people's prior knowledge, skills, and (often) alternative ways of looking at the world?

In this spirit, the question that is most relevant to this particular study is: How do we create spaces or environments that are conducive to social learning amongst private landowners involved with the BSP?

### 2.7.1 Situated Learning

Lave and Wenger (1991, p.35) propose that situated learning involves a process of engagement with a “community of practice”, and that “learning is not just situated in practice as if it were just something that happened to be located somewhere, learning is an integral part of social practice in the lived-in world”. Situated learning, then, tries to shift the focus from the individual as a learner, to the learner as a participant in their social world; and from learning as a strictly cognitive process, to a more all-encompassing view of learning as a social practice. An inevitable result of this approach is that communication

and participation become valued more highly than behavioural changes, skill development, cognitive development and intelligence.

It is becoming increasingly evident that stewardship is a practice that happens in a situated learning context, and as such, I believe that it should be interpreted within this theoretical framework. Furthermore, it is my opinion that the officials charged with implementing the CNSP should begin to steer private landowners in this direction, by letting them see that they are part of a broader community of practice, and that there are social ramifications to learning about conservation. I believe this will result in the landowners becoming more enthusiastic about biodiversity conservation, and more receptive to the responsibilities (in terms of land use practices) that it entails.

Within the field of situated learning, learning interactions have been identified as the key processes that shape and encourage learning. Downsborough (2007, p.15) defines a learning interaction as any formal or informal situation in which learning takes place – these can include meetings, conversations, and interactions with documents. Thus, in situated learning, interactions between people are viewed as opportunities for meaningful learning to take place. Of crucial importance, however, is the individual's motivation to participate in situated learning – a consideration which depends on the collective goals shared by those involved in the process. (Wals & Haymann, 2004, p.18).

This research project seeks to understand how landowners perceive and respond to the stewardship initiatives that are being undertaken in the Western Cape. Do they see the Stewardship Programme as an opportunity for collaborative social learning about biodiversity issues, their everyday farming practices, and the management of natural resources on their properties? Or do they merely experience it as a dictatorial effort on the part of conservation agencies, to blame, and punish them for biodiversity loss?

#### **2.7.1.1 Participation and Learning**

As I have previously mentioned, the issue of *participation* is one of the key contributing elements to the success of situated learning. Thus, I feel it important that this study investigates not only the role that participation plays in the situated learning context of the

CNSP, but also how this participation is experienced by the landowners involved in the process.

Greeno outlines a different view of situated learning (cited in Reid and Nickel, 2008, p.39), when he argues that learning requires the active participation of students, achieved via extrinsic motivation, intrinsic motivation and engaged participation. Each of these three pedagogical strategies, however, requires a deliberate linking of the learning outcomes to the internal - and not the external - situation of the learner. Thus, in Greeno's participatory model, the focus of learning is not on the learner's environment and their observable behaviour, but on the core challenge of fostering sustained and deeper levels of motivation and engagement on their part (*ibid.*).

Other situative perspectives on learning, cited in Reid and Nickel (2008), relocate the focus on the individual, by emphasising the communal and relational aspects of the individual's participation in learning. This active involvement or "participation in a community" of learning – which is typically named a "community of practice", is widely regarded as necessary for learning processes and outcomes.

Hence, it seems that – if its interventions are to be successful – the CNSP needs to ensure that those who are chosen to be part of the initiative are active participants in the learning process. Stewardship officials need to involve landowners in a "community of practice", so that they are able to identify not only their roles within this social structure, but also the responsibilities (in terms of land use practices) that this involvement entails.

### **2.7.1.2 Transformative Learning**

The concept of transformative learning is also apposite to my study – in fact, I believe that the explanation of what constitutes transformative learning is supplementary to the term "social learning".

To contextualise this within the Modernist era<sup>6</sup>, O'Donoghue gives a good explanation of the trajectory environmental education has followed over the last two decades, and the impact it has had on communities and individuals exposed to it. According to him, most

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<sup>6</sup> Modernism is an expression of the progressive age of the 20<sup>th</sup> century, a functionalist outlook that champions western models of intellectual, political and social advance through rational scientific and technological breakthroughs for the development of both the developed and developing world. (Stout, 1991, p.4 cited in O'Donoghue, 1993, p.29)

conservation education activities have involved extension programmes, campaigns of targeted messages, and nature-centred awareness programmes in schools. These approaches were focussed on getting a message across, creating awareness, and clarifying values – but with the ultimate goal of changing the *behaviour* of learners. I believe this approach is ultimately misguided, and may account for much of the conceptual confusion, and apparent lack of success, surrounding environmental education programmes of the past decade.

This ill-conceived orientation to environmental education is also observable internationally, and is characterised by:

- Technician and structural functionalist orientations which have led to environmental education being seen as rational processes of intervention to modify behaviour
- The communication of conservation messages to defined target groups to get new meanings across to change awareness and
- Experiential encounters where nature presents a reality that fosters heightened awareness, values, clarifications and behaviour changes. (O`Donoghue, 1993, p.29)

Early behavioural theories of learning assumed that it would take place through simple processes of “knowledge transfer”, and through rewarding appropriate modifications in students’ behaviour. New research into learning theory, however, has increasingly indicated that cognitive, social and cultural dimensions are important aspects of the learning process; that learning is *embedded* in culture and language, and that it involves interpersonal engagement with a wide variety of knowledge resources (such as educators, professors, texts, community members, industrial experts, films, etc.). These resources, when coupled with support and nurturing, can encourage the student to *participate in the creation of new knowledge*, thus ensuring effective learning (UNEP article, 2006, pp.26 - 27).

In the Postmodern<sup>7</sup> era, society has been bombarded with messages of resource depletion, challenges to sustainable development, potentially catastrophic environmental dangers,

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<sup>7</sup> **Postmodernism** is a movement away from the viewpoint of modernism. More specifically it is a tendency in contemporary culture characterized by the problem of objective truth and inherent suspicion towards global cultural narrative or meta-narrative. Whereas modernism was primarily concerned with principles such as identity, unity, authority, and certainty, postmodernism is often associated with difference, plurality, textuality, and skepticism.

and even uncertainty about our future as a species. Environmental learning processes have been characterised over the decades by controversy, disharmony and a lot of conflict between roleplayers, who are often environmental purists that are too quick to blame society as a whole for everything that goes wrong with everyday life. They have focussed on (punitively) altering the *behaviour* of citizens, instead of (supportively) encouraging new and positive modes of thinking about conservation and the environment.

Therefore, I believe that in the ambit of environmental education, a paradigm shift needs to occur – wherein learning is conceived of as a reflexive, culturally situated and socially mediated activity. Moreover, I believe that transformative learning offers an ideal opportunity for resolving this issue, by providing educators with the apparatus to engage learners on an interpersonal level, so that the best possible approach can be found for the given educational context (Imel, 1998, p.1).

### **2.7.1.3 Reflexivity and learning**

Essential to the concept of “learning from experience” – and a key aspect of transformative learning – is reflexivity. Boud, Cohen and Walker (as cited in Downsborough, 2007, p.12) propose that reflection plays a vital role in learning, as it allows one to extract meaning from new experiences. The linking of new experiences with those of the past, through reflection and re-evaluation, provides new meaning – and consequently, a learning system has to be reflexive, and willing and able to question (even depart from) existing routines, norms, values and interests.

Furthermore, a reflexive society requires reflexive citizens, who are able to participate in and contribute to processes of change (Wals, 2007, p. 38). Reflexivity is thus an important consideration for environmental educators, whose work is expressly concerned with social transformation and change. Through reflexivity, educators are able to consciously consider the structural factors that serve either to promote or inhibit their pedagogical practices, and they can adjust their approaches accordingly.

In terms of the CNSP, it is important for stewardship officials to be cognizant of reflexivity, and to use it in assisting their potential stewards to respond positively to the ideas of biodiversity stewardship. The officials should present their message, of the creation of protected area networks through stewardship contracts, by pointing out to the landowners that the role they play within these systems will make or break their success. By being encouraged to reflect on a scenario that is more sustainable than the one currently in play, the landowners might become conscious of the potential benefits of their active participation in the CNSP – which, as I have argued, is a crucial step on the way toward achieving the conservation goals laid out by the programme.

### 2.7.2 Communities of practice

I shall now delve a little deeper into the concept of communities of practice (CoP), and show how it fits both into the social-situational theory of learning that I have been discussing, and my overall research aims.

According to Wenger (Wenger homepage; last accessed 2 September, 2010),

Communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavour: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. In a nutshell: Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.

Social scientists have used versions of the concept of communities of practice for a variety of analytical purposes, but the origin and primary use of the concept has been in the arena of learning theory.

The concept of CoP does not exist in isolation, but is part of a broader conceptual framework for thinking about learning in its social dimensions. It is a perspective which locates learning, neither in the individual's mind nor outside it, but rather in the *relationship* between the individual and the world – which, for human beings, is tantamount to saying

between a citizen and their social environment. Thus, a CoP can rightly be viewed as a social learning system.

People usually think of apprenticeship as a relationship between a student and a master, but studies reveal a far more complex set of social relationships that condition the apprentice's learning. The term "community of practice" was coined to refer to the community that acts as a *living curriculum* for the apprentice. Interestingly, however, once the concept of a CoP was articulated, these communities were detected everywhere – even in places where no formal apprenticeship system existed – and it was soon observed that learning in a CoP is not limited to novices. The practice of a community is dynamic, and involves learning on the part of everyone (Wenger homepage, last accessed 2 September, 2010).

While there are three elements common to all CoPs – a domain, a community, and a practice – they come in a wide variety of forms. Some are quite small, while others are very large – and consist of a core group and many peripheral members. Some CoPs are local, and some span the entire globe. Some meet mainly face-to-face, and others meet mostly online. Some exist within a particular organisation, while others include members from various organisations. Some are formally recognised (often supported with a budget), and others are completely informal, perhaps even invisible to society at large (Lave and Wenger, 1991, p.34).

Sue Winter, a researcher who conducted a similar survey to this one during 2003, on the attitudes of private landowners towards conservation, concluded that commercial farmers form a very important CoP – perhaps even holding the future of biodiversity conservation in their hands:

Commercial farmers were chosen for investigation because they own the largest proportion of rural land in South Africa. Furthermore, approximately 80% of the country's most scarce and threatened natural habitats are privately owned by the agricultural community. There is therefore a growing national realization that the future conservation or destruction of threatened ecosystems, such as renosterveld, lies predominantly in the hands of farmers and private landowners.

(Winter cited in Botha, 2001b, p.4)

In the context of the CNSP, private landowners (commercial farmers) are grouped together because of their geographical location, and also because they fall within particular “business units” of Cape Nature’s prescribed structure. Because of this grouping, these farmers have created their own spaces in which they feel comfortable to share ideas about their farming practices with each other. Hence, these physical communal structures automatically place them within a CoP, in which they share common goals, ideals, practices and a common future.

However, beneath this first, macro layer of a commercial farming CoP, there might exist more layers, where landowners have formed themselves into smaller groups in order to follow more specific goals, interests and practices. It is in one of these sub-structures where there might be an already-existing CoP of farmers who partake in sustainable land use and farming practices, and share common ideals and goals in support of this type of lifestyle. I believe it is in this kind of CoP where the CNSP should focus its energies, and create opportunities for these landowners to become actively involved in biodiversity stewardship.

#### **2.7.2.1 A ‘conservation attitude’**

According to Glasser, cited in Wals (2007, p.41),

A broad array of survey data from citizens throughout the world, rich and poor countries alike, demonstrates the existence of sincere, well-intentioned positive environmental attitudes, anxiety about environmental degradation, rudimentary awareness of the environment’s role in supporting quality of life and a stated willingness to trade-off economic development for environmental protection.

Unfortunately, however, on the international level – apart for the widely-touted Montreal Protocol – these concerns and attitudes have not led to effective responses to contemporary, global-scale environmental challenges (Speth, as cited in Glasser, 2007, p.42). Glasser’s article deals explicitly with this seeming disjuncture – or “gap” – between awareness of the problem, and effective action taken to alleviate it.

Applying Petty’s broad definition of “attitude” to the context of conservation,

Conservation attitude could be seen as the general evaluations that people hold of themselves either as careful custodians or rightful owners of their natural resources,

other people or officials involved in conservation, and issues such as resource use, conservation projects and environmental problems.

(Petty cited in Winter, 2003, p.5)

Meanwhile, McDowell (cited in Winter 2003, p.6) defines conservation attitude as “the expressed positive attitude towards the principle of conservation of natural ecosystems”. The guidelines he provides for assessing conservation attitude cohere around two considerations: (i) the extent of a person’s understanding of general nature conservation principles, and (ii) their receptiveness to ideas and suggestions regarding their natural land.

Glasser believes that it is only through learning that we acquire our values, attitudes and concerns, and form our conceptions of reality. By acquiring new information, we have the opportunity to test new values and concerns against our prior understanding of reality, and – if warranted – we can rethink our values, and begin to change our way of being in the world (Glasser, 2007, p.47). When corrective responses such as this result from anticipatory learning (as opposed to simple adaptation), they are referred to as planned change.

### ***2.7.2.2 Habitus of sustainability and environmental capital***

To further elucidate this idea of a change in ‘conservation attitude’ being brought about by the attainment of new values, I shall refer to Bourdieu’s social theory, and the concept of “environmental capital.”<sup>8</sup> Bourdieu’s theory enables us to name that which, in advanced capitalist societies, makes sustainability difficult to realise – and concomitantly, enables us to theorise how the reproductive tendencies of education can be used to achieve a “habitus of sustainability.”

Western societies, in general, and their citizens, in particular, are short on environmental capital. However, it is argued that the field of education – by emphasising the intrinsic value of the natural world – can function as an important site for the accumulation of such capital, and so serve to create a habitus of sustainability in future students.

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<sup>8</sup> Environmental capital is theorised as a particular way of understanding and relating to the world’s natural environment, and contains within it the potential to inform a habitus of sustainability (Karol & Gale, 2004, p.1).

In Karol and Gale's interpretation of Bourdieu's theory, it is within the environment that individuals live, work and relax that they negotiate their progress through other "cultural fields". Moreover, an individual's trajectory through any given cultural field will be governed by their particular habitus – a psychic structure constituted by the sensibilities and dispositions they have developed through early familial, educational and social interactions (2004, p.4).

Therefore, the habitus is informed by various forms of cultural capital, and embodies the dialectical relationship between the individual and society, and between personal agency and socialisation. In Bourdieu's theory, an unsustainable habitus is effectively the product of modern human history - a history in which, since Cartesian dualism, the environment has been subordinated, and viewed merely as something from which to extract human utility. An unsustainable habitus, then, is the result of humankind's historical failure to view the natural world as a living organism, whose balance must be maintained to ensure the continued survival of all plant and animal life (Karol & Gale, 2004, p.4). Consequently, Bourdieu argues that for environmental sustainability to become an accepted part of family life, many changes are required in education, cultural practice and the capitalist *doxa* of Western society.

This idea can be linked to Wenger's theory of Communities of Practice, as – I believe – it would be easier to achieve a state of sustainable habitus within a community of members who develop a shared repertoire of ideals over time – and thus who, through their practices (which are dynamic and involve all members of the community), may begin to re-educate people about the importance of valuing the natural world. In this way, new knowledge (an environmental capital) may be created, shared, organised, revised and passed on within a community, through meaningful learning interactions.

Social learning, the creation of an environmental capital and the creation of a sustainable habitus amongst all levels on a farming unit, are all essential aspects of the CNSP. My research endeavours to gain insight into the role which they play, both within the programme itself, and within the perceptions of the landowners who are involved in it.

## 2.8 SOCIAL LEARNING AND THIS STUDY

Social learning is, increasingly, becoming a normative goal in natural resource management policy. However, the predicament of social learning is that there is no real consensus over its meaning and theoretical basis (Reed & Cundill *et al.*, 2010, p. 1) Therefore, the concept has suffered somewhat, by being used incorrectly or within the wrong context. This lack of clarity and definition limits the use of this refreshing approach to wide-scale learning, and it is for this reason that new research and further study into the concept is vital.

Wals (2007, p.41) states that although social learning is difficult to capture as a neat process or cycle, there are some sequential moments/activities that can prove helpful when trying to design and monitor its implementation. The following activities give some guidance for interpreting social learning – that is, for understanding the different steps which an individual goes through during such an intervention, and how learning takes place within it. These activities have been adapted to describe a possible scenario of learning taking place amongst landowners participating in the CNSP:

- Farmers learn to **re-orientate** to the biodiversity conservation approach, and realise that they are involved in **learning together** with stewardship officials and other members of their community.
- The farmers **take up an identity** associated with conserving biodiversity, and **develop self-awareness**.
- **Current practices become de-framed** and **conventional wisdom becomes deconstructed** as the ideals of the stewardship approach are assimilated.
- Farmers **work together** and **co-create new techniques** and land use practices that further the interests of conservation.
- Farmers collaboratively **apply and experiment with emergent ideas** about new land use practices and conservancy techniques.
- The farmers **review and revise the patterns** of sustainable land management they have learned through their involvement with the Stewardship Programme.

In this study, I am attempting to develop a conceptual framework for understanding the relationship between social learning and the CNSP, by exploring whether these basic activities of social learning (outlined above) are present in the interventions of the CNSP in the two case study areas. I shall use the raw data I obtained from the interviewees to investigate (a) the educational approaches that are being adopted by stewardship officials

in the area, and (b) the kind of learning that is taking place amongst the landowners involved in the programme. I shall then make use of the theoretical perspectives described above to test whether it can properly be said that social learning takes place during the implementation of the Stewardship Programme in the Western Cape.

## **2.9 SYNTHESIS**

Downsborough (2007, p.15), on the basis of her work for the Biodiversity and Wine Initiative, suggests that stewardship can be an educative process – where people learn through engaging with stewardship officials, and the documents and agreements which they bring to the programme with them. By working and interacting with one another in this way, landowners have been able to formulate new ideas, and reflect on how their land use practices affect their natural environment. A similar notion is picked up by Hart, Jickling and Kool (1999, p.104), who suggest that instead of developing defined criteria for educational programmes, it may be more fruitful to find ways to engage learners (in this case, the landowners) in critical reflection on their practices and prior conceptions of the world.

Thus, as social learning is often referred to as a way of mobilising individuals, organisations, communities and networks towards the creation of a more reflexive, resilient, flexible, adaptive and sustainable world (Keen cited in Wals, 2007, p.36), it would seem like an ideal and essential approach for any stewardship program to employ.

My literature review has presented an overview of the ways in which the theoretical framework of social learning can be brought into line with the practical goals of the CNSP. I have outlined, through a sustained discussion of educational theory, how concepts such as participatory learning, communities of practice, sustainable habitus and environmental capital can be understood in terms of biodiversity conservation in South Africa.

In the next chapter of this thesis, I shall discuss my research methodology.

## CHAPTER 3: RESEARCH METHODOLOGY

*“Research is best conceived as the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of data. It is a most important tool for advancing knowledge, for promoting progress, and for enabling man to relate more effectively to his environment, to accomplish his purposes, and to resolve his conflicts”*

(Mouly, 1978 in Cohen and Manion, 1994, p. 40)

### 3.1 INTRODUCTION

In this chapter, I shall present a discussion of my research methodology.

I shall begin with a brief explanation of the orientation and theoretical framework of the research, showing how these considerations lead me to employ a case study format. I shall then discuss my data collection and analysis techniques – with a focus on the methods I used to explore, describe and interpret the learning interactions which took place amongst the landowners within the two case study areas. Considerations pertaining to ethics, validity and trustworthiness will be addressed later in the chapter.

The overall purpose of my research was to understand if the private landowners involved in the CNSP do indeed experience stewardship as a programme of social learning, capable of enhancing their knowledge of biodiversity conservation – and perhaps, leading to the creation of an environmental knowledge capital.

### 3.2 METHODOLOGICAL FRAMEWORK

In Kaplan’s conception (1973, in Cohen and Manion, 1994, p.39), research methodologies are there to help us understand – in the broadest possible terms – not the products of scientific enquiry, but the process itself. I found this notion to be useful when constructing my methodological framework.

#### 3.2.1 Research orientation

Looking at the research goals laid out in Chapter 1 (see section 1.5), it is obvious that this study is not aimed at developing causal explanations for particular events, or even at

validating or criticising the theory or practice of the CNSP. The research question and goals clearly stipulate that this study is undertaken in order to achieve a deeper understanding of how learning amongst landowners takes place during the CNSP – specifically, in the two case study areas under investigation. The choice of an interpretive orientation to this research will be explained, and justified, below.

While reviewing the literature that has been published on research methodology, I found myself drawn to the ideas of George Hegel, the 18<sup>th</sup> century European philosopher. He theorised that while there is an actual, existing material world ‘out there’, its ultimate truth is to some extent inaccessible to the human mind. Furthermore, this truth is not eternal or fixed – the basis for human cognition changes from generation to generation, and what is regarded as the ‘truth’ at a particular time is ultimately determined by historical processes (Hegel, 1831 as cited in TerreBlanche & Durrheim, 1999, p.1).

The method Hegel proposes for advancing knowledge is that of the dialectic – and, I argue, it is a very clear, early description of reflexivity (i.e. social learning). Reflections on an idea (a thesis) are followed by an opposing idea (its antithesis), and finally – through further reflection – one derives a synthesis; a better, fuller understanding of the first two ideas and how they relate to each other conceptually. Hegel was sceptical of the notion of transcendent individual consciousness – he saw the individual as an organic part of their community and argued that reason and understanding are furthered through interpersonal interactions. His views form the theoretical basis for the interpretivist and social constructionist traditions; where interpretive research aims to explain the subjective reasons that lie behind social action, and constructionist research aims to show how the social world is produced by discourses that make certain actions possible and others unthinkable (TerreBlanche & Durrheim, 1999, p.1).

As I shall be working within an interpretivist research paradigm, the data I generate will be qualitatively analysed. This is because using ‘thick’, descriptive data will provide rich contextual detail – allowing me to focus my study on the *life experiences* of the participants, and the meaning which *they* attach to the learning interactions under investigation.

### 3.2.2 Further theoretical considerations

In addition to the insights of Hegel, my research methodology is influenced by the theories of interpretivism, social cognitivism, and situated learning (including the concept of communities of practice). In this section, I shall briefly outline what I find valuable about these theories, and how they have influenced my research methodology.

The interpretivist approaches focusses on action – that is, practices that carry meaning and are future-oriented. And since actions are only meaningful to us insofar as we are able to identify the intentions of the agents who perform them, research conducted in this framework begins with individuals – and sets out to understand *their* experience of the world around them (Cohen & Manion, 1994, pp.36-37).

As Janse van Rensburg (2001, p.16) says, “An interpretive approach reflects an interest in contextual meaning-making rather than generalised rules” – and this is precisely what I wanted to achieve through conducting my case studies, an insight into how the *landowners* experienced the implementation of the Stewardship Programme.

Social cognitivism stresses the idea that much human learning occurs in a social environment. Furthermore, it assigns a central role to the self-regulatory characteristic of learning. People do not behave just to suit the preferences of others. Much of their behaviour is motivated and regulated by internal standards and self-evaluation (Cohen and Manion, 1994, p.37).

As I have previously discussed – in light of Boud, Cohen and Walker’s theorisations (see section 2.7) – one of the key elements of successful learning is ‘learning from experience’. This requires that people engage in personal reflection, so that they may link new experiences with those of the past, and in this way acquire new conceptions of the world.

Thus, I believe it is clear to see how (a) the tenets of social cognitivism can be said to further the ends of ‘learning from experience’, and – consequently – (b) how this theory fits neatly into the conceptual framework of my study into the learning interactions being brought about by the implementation of the CNSP in the two case study areas.

I have discussed the concepts of situated learning and communities of practice in great detail in the previous chapter. Suffice it to say for now, that my ideological affinity for them stems from the fact that they shift the focus from the individual as a learner, to the learner as a participant in their social world; and from learning as a strictly cognitive process, to a more all-encompassing view of learning as social practice (Lave and Wenger, 1991, p.35).

As Benzie, Mavers, Somekh and Cisneros-Cohernour (2005, p.185) note,

The strength of working with an analytical framework that has the concept of Community of Practice at the centre is that it emphasises the situated nature of knowledge and brings matters of context to the fore. It highlights relationships both between individuals and between individual and community. In this way it is well suited to supporting accounts that capture social complexity.

Since the setting of my research is the landowners within their community's of practice, and since my research is designed in a way to allow for a holistic analysis of the social structures and relationships within this CoP – I believe it is apparent to note how the concepts of situated learning and communities of practice have influenced my research methodology.

### **3.3 RESEARCH METHODS**

Research methods are defined in this study as the range of approaches used in educational research to gather data to be used as the basis for inference and interpretation, explanation and prediction. In the interpretivist paradigm, these methods include participant observation, role-playing, and non-directive interviewing, episodes and accounts (Cohen and Manion, 1994, p.38).

#### **3.3.1 The choice of a case study approach**

Before I discuss my methods of data collection, I shall briefly motivate my choice of a case study approach to this research.

Cohen and Manion note that;

The case study method compliments the interpretive approach, in that case studies normally probe deeply and analyse intensively the multifarious phenomena that constitutes the life cycle of an individual unit, with a view to establish generalizations about the wider population to which that unit belongs. The case study researcher typically observes the characteristics of an individual unit; a child, a clique, a class, a community or a school (Cohen and Manion, 1994, p. 106).

My research focussed on two separate communities involved in the CNSP. Within each of these communities, suitable individuals were identified as potential participants in the study. I specifically decided to represent both sides of the CNSP in each case -- namely, the implementers of the programme as well as the landowners (the programme's participants). This was done to provide more depth to the research, and a fuller understanding of the issues at hand.

According to Bassey (1999, p.65), a case study is an empirical enquiry, in which sufficient data is collected for the researcher to delve into significant information, create plausible interpretations, and construct a worthwhile argument based on these findings. Furthermore, the researcher should be able to convey this argument to an audience, and to provide an audit trail by which other researchers may validate their findings, or else construct alternative arguments (*ibid.*). Bassey asserts that case study research is a systematic activity, which means that it has to follow certain steps to ensure its trustworthiness (*ibid.*, p. 67).

Thus, by adopting a case study approach, not only was I able to investigate the "life cycles" – the *lived experiences* of the participants, which is my great interest – but I was able to do so in a clear, systematic and truthful manner.

### 3.3.2 Research process

The research process that I followed was designed at the end of 2009. Appendix 1 describes the different phases in detail, but I shall discuss them now to display the thought processes that informed the trajectory of my research.<sup>9</sup>

***Phase 1: Literature review of the concept of stewardship, including its international status, its applications and its outcomes.***

During Phase 1, an in-depth literature review of the emergence of the stewardship concept in an international context was done. The results of this review have been presented in the previous chapter of this thesis.

My literature review initially entailed a survey of the printed resources available at various university libraries in South Africa. However, it emerged that there was a limited amount of research material on the concept of stewardship available in published form.

Eventually, what emerged as my most fertile source of research material were electronic searches for the phrase “biodiversity stewardship”. A protracted, sustained online enquiry yielded a total of almost 950 000 hits on the Google search engine for this phrase. It soon became apparent that (a) there is quite a difference of opinion amongst practitioners within the environmental management and conservancy fields regarding the interpretation of the concept of stewardship, and (b) that the concept exists in a variety of different forms, e.g. Biodiversity Stewardship, Sustainability Stewardship, Land Stewardship, Conservation Stewardship, etc.

The gathering of this data provided me with rich textual information, which was later used to derive the definitions of the key terms and concepts used in this study.

***Phase 2: Development of (i) a contextual profile for the Biodiversity Stewardship Programme in the Western Cape, and (ii) a conceptual framework for the research project***

In the 2<sup>nd</sup> phase of my research, I developed a contextual profile for the CNSP based on the two cases I examined in the Western Cape, and for the research project, based on various theories of learning that I familiarised myself with.

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<sup>9</sup> The chronology of these phases did not always follow the order that I originally intended, and I was forced to make minor adjustments to my workplan during the course of 2010.

There is a lot of available documentation (legislation, policies, annual reports and articles) concerning the CNSP's operations in the Western Cape, as it was embraced by the DEA a full ten years ago, and how it has become a well-established, officially-sanctioned conservation initiative today. This information was easy to access, again through a literature review and electronic searches.

However, to add to the quality and depth of this data, I conducted telephonic interviews, and had face-to-face meetings with individuals who were involved in the inception phases of the stewardship approach in this country. (This part of the research actually began in 2004, when I was working – on behalf of the DEAT – as the National Coordinator for Biodiversity Stewardship, in the offices of the Endangered Wildlife Trust (EWT) in Johannesburg.)

The second section of this phase – the development of a conceptual framework for the research project – was a bit more challenging.

As this is a new field of study for me, it took quite some time to read and absorb all the relevant literature I found concerning theories of education, and social learning approaches and practices. Nevertheless, I was able to identify those texts which resonated with my research interests, and – as my understanding of the terrain expanded – I believe I was able to construct a cogent conceptual framework for this study (the components of which have been detailed in Chapter 2).

***Phase 3: Investigation of two Stewardship Programme case studies in the Western Cape, with the goal of ascertaining how the concept of stewardship has been applied in policy and practice.***

The final phase of my research involved undertaking case studies of two areas in the Western Cape that have been included in the operations of the CNSP. The studies were designed to investigate the way in which the various parties involved in the stewardship programme experience the learning initiatives that have been implemented, and to ascertain whether they feel that these initiatives have led to the creation of an environmental knowledge capital in the area.

The format of my particular case study approach – in terms of its participants, and the methods I employed during my data collection and analysis – will be presented in the following sections of this chapter.

### ***3.3.2.1 Research participants***

Previous encounters, and professional ties between myself and the stewardship coordinators from both these case study areas, made it easier for me to ask their opinion about incorporating the landowners into this research study. They insisted that without the landowners and their opinions and perceptions of the CNSP, this research would not be complete.

The coordinators then assisted with identifying potential interviewees. At first, they were both a bit hesitant about identifying any landowners, as sometimes these relationships can be a bit precarious, and they did not want to jeopardise the trust of these landowners, by recommending them for this study without their prior consent. As a result, I waited for email confirmations from the stewardship coordinators before I started phoning the individuals they identified as suitable research participants.

During my telephonic conversations with the potential interviewees, I explained both my reasons for conducting the study, and the intention of the interviews. From a list of four landowners involved in the BSP per case study area, I managed to secure the services of three from the first case study area, and one from the second.

All my interviews with the landowners were conducted in Afrikaans, as this was their preferred language. The interviews with the stewardship coordinators and the other participants in the study were done in English.

Even though the participants did not request this, I decided for reasons of anonymity to substitute their real names and titles with codes. The table below provides a key for better understanding references to these interviewees, and also makes for easier reading of Chapter 4, in which the data gleaned from these interviews is presented:

Case Study	Interviewees (Authority)	Interviewees (Landowner)	Interviewees (Other)
1 – Upper Breede Stewardship Project	Stewardship Coordinator (CS1Q1)	CS1Q2  CS1 Q3  CS1 Q4	NQ1 SANBI  NQ2 BWI
2 – Greater Cederberg Biodiversity Corridor.	Stewardship Coordinator (CS2Q5)	CS2 Q6	NQ1 SANBI  NQ2 BWI

Table 1: Codified interview schedule.

My general feeling after the completion of the interviews was that each one of the interviewees was genuinely excited about the CNSP – excited about its ideals, and what (they felt) its implementation would bring to their lives. Even though I had a semi-structured interview schedule, which I followed for each interview, I found that after the introductions were done, the interviewees were very forthcoming, and eager to talk about their experiences of the CNSP.

### 3.3.2.2 *Semi-structured interviews*

Interpretive research, according to Janse van Rensburg (2001, p.8), requires rich, detailed information of a qualitative nature to be captured from the research process. I used semi-structured interviews and secondary document analysis to aid me in this pursuit. The semi-structured interview format was chosen because, although there were specific set questions (i.e. participant`s beliefs in the CNSP; methods of introduction to the CNSP, their visions of the programme) I wanted to find out from the participants, I also wanted – as far as possible – to let them ‘speak for themselves’, without unnecessary prompting, so as to gain an insight into their actual, *lived* experiences of the CNSP.

I conducted eight semi-structured interviews: four from the first case study, two from the second, and two additional interviews with officials from different programmes involved with stewardship work in South Africa. The interviews were all done over a period of three weeks, according to the interviewees’ schedules. As stated above, the interviewees were

given a code name to make referencing easier, and also to alleviate complications arising from ethical considerations.

I developed my interview schedules in response to my research objectives (see section 1.3), and the broad concepts relevant to this study (stewardship practices & processes, social learning approaches, the practical implementation of conservancy ideals). I used three different interview schedules: one each for the stewardship coordinators and the landowners from the two case study areas, and a separate one for the two officials from the other conservation programmes. Because of slight differences in the practical application of the CNSP in the two areas, I had to adapt the schedules a little, though the gist of the questions remained the same.

It was not difficult to get any of the interviewees interested in the discussion topic, and I felt an immediate rapport with all of them. In some cases, our discussions got well underway before the interview had 'officially begun' – in these instances, I would just leave the conversation to follow its natural course, and then later, during the transcription phase, I would match what the participant had to say with relevant questions from the schedule. As I previously mentioned, I tried my best to allow the interviewees to speak as 'naturally' as possible – although sometimes, it was sometimes necessary to probe their responses a little, in order to determine why (for example) they had chosen to phrase something in a particular way.

With the participants' permission, all the interviews were video-taped, allowing me the freedom to focus on the interview and its dynamics, rather than on recording their responses by hand. All eight interviews were faithfully transcribed and then duly coded.

### ***3.3.2.3 Document analysis***

During my discussion with the two stewardship officials, I asked them if they were in possession of any resource material that supported their message. My aim was to use these documents to supplement the data gathered from the interviews, and for triangulation purposes.

From the Greater Cederberg Biodiversity Corridor (GCBC) initiative, I received a pack of reading material, from Best Practice Manuals to glossy brochures about the CNSP; and from

the Upper Breede Collaborative Extension Group (UBCEG), I received a compact disc of information about the CNSP in general (such as an updated Operational Procedures Manual), as well as some case-specific information. This material has been included in the appendix of this thesis.

These documents, along with the interview data and the observations I made at the participants' offices and farms, were all used to derive interpretive insights into the research topic. This was done through careful scrutiny of the data, and the use of an analytical framework to investigate any evidence of social learning taking place under the auspices of the CNSP.

### 3.3.3 Data analysis

My approach to the analysis of my data was two-phased. In the first phase, I analysed the data generated from the interview process and from reviewing the documents the stewardship officials supplied me with (as outlined above, and presented in Chapter 4). The second phase involved looking into the results of the two case studies, and formulating analytical statements which were then used to review the case evidence within a social learning perspective derived from Wals (2007). The results of this endeavour are discussed in Chapter 5.

#### ***Phase 1: Data analysis***

I used semi-structured interviews as a primary means of collecting data, and since this interview format involves the implementation of predetermined questions and/or special topics, I found it necessary to code the information I obtained. Coding has been defined by Kerlinger (1970, in Cohen and Manion, 1994, p.286) as the "translation of question responses and respondent information to specific categories for the purpose of analysis." In my research, the following codes and categorisations were used to organise the data gleaned from the interview process:

Categories	Sub Categories	Coding
Stewardship	<ul style="list-style-type: none"> <li>• Application of the concept</li> <li>• Practices and Methods (relationships/partnerships/approaches)</li> <li>• Objectives &amp; Outcomes</li> <li>• Capacity</li> </ul>	Red
Environmental /Conservation Understanding	<ul style="list-style-type: none"> <li>• Historical Environmental Understanding</li> <li>• Current Environmental Understanding</li> <li>• Impact of the Stewardship Programme on this understanding</li> </ul>	Yellow
Knowledge building / Learning processes	<ul style="list-style-type: none"> <li>• Institutional structures &amp; strategies</li> <li>• Type of info / Level of info</li> <li>• Educational method(s) leading to agency</li> </ul>	Teal
Reflexivity	<ul style="list-style-type: none"> <li>• Structural factors</li> <li>• Reflexive Deliberations (Internal conversations)</li> <li>• Reflexive Competence</li> </ul>	Purple
Community of Practice	<ul style="list-style-type: none"> <li>• Participatory Methods</li> <li>• Other farmers</li> <li>• Other Stewards</li> <li>• Other Government Departments &amp; Conservation Agency</li> </ul>	Green

Table 2: Codification of conceptual categories and sub-categories used during data analysis

In Chapter 4, I shall present transcriptions of the interview data under the broad analytical categories and sub-categories listed above. These categories were determined by my research objectives, and reflected by the questions included in the interview schedules. The sub-categories, which were devised to add further substance to my interpretation of the data, were influenced by the literature review I conducted.

### ***Phase 2: Analytical framework***

In constructing an analytical framework for the interpretation of my data, I drew heavily on Wals' (2007) notion of social learning occurring in sequential activities (see section 2.8). I used this insight as a lens through which to trace the educational effects of the implementation of the CNSP in the two case study areas.

According to Danermark, Ekstrom, Jakobsen & Karlsson (2002), an abductive mode of inference – which is what I used during this phase of interpretation – provides new insights by explaining existing phenomena within a new conceptual framework. According to the authors, this process is often referred to as recontextualisation – as the researcher

observes, describes, interprets and then explains something within a new theoretical context.

The result of this interpretive effort was the formulation of several analytical statements – which I use, in Chapter 5, to discuss the findings of my research.

### **3.4 ETHICAL CONSIDERATIONS**

According to Cohen and Manion (1994, p.359), social scientists have a responsibility not only to their profession and its search for knowledge and quest for truth, but also to the subjects they depend on for their research. Social science researchers must always take into account the effects of the research on the participants, and act in such a way so as to preserve their dignity as human beings. This is what is considered ‘ethical behaviour’ in research contexts, and it pertains not only to research planning, but the entire research process.

Ethical issues may stem from the kinds of problems investigated by social scientists and the methods they use to obtain valid and reliable data. In theory at least, this means that each stage in the research sequence may be a potential source of ethical problems. Thus they may arise from the nature of the research project itself (ethnic differences in intelligence for example); the context for the research (a remand home); the procedures to be adopted (producing high level of anxiety); methods of data collection (covert observation); the nature of the participants (emotionally disturbed adolescents); the type of data collected (highly personal information of a sensitive kind); and what is to be done with the data (publishing in a manner that causes the participants embarrassment). (Cohen and Manion, 1994, p.368)

As the above quote demonstrates, there is a very comprehensive list of ethical considerations that must be taken note of before, during and after social research is conducted. What seems clear though is that all these considerations are case-specific, and will be prescribed by the research context and the nature of the particular study. The issues described above should, therefore, be used as guidelines to sensitise the researcher against conducting their research unethically.

Before I commenced my in-field research, I wrote very comprehensive emails to the two stewardship coordinators, clearly explaining my intentions for this study, and the roles I wished them to play in it. This was followed by telephonic conversations with them, to set dates for their interviews.

During these sessions, my idea of talking to the landowners in the coordinators' stewardship areas was discussed. In the interests of propriety, the coordinators offered to contact the landowners on my behalf, to see whether they'd be interested in taking part in the study. After I got the go-ahead from the coordinators, I made contact with the suggested landowners, and – once again – I made sure to explain the intentions of the research very clearly to them.

Even though most of the participants in the two case studies did not object to their real identities being used, I decided to make use of code names, correlating to the chronological order in which the participants were interviewed. This was done to safeguard their anonymity, as well as for ease of writing and referencing.

All the interviews were conducted in the preferred language of the participants. The farmers opted to be interviewed in Afrikaans, while the coordinators and the other two officials preferred English.

Finally, I expressly sought the permission of all the participants before video recording the interview sessions. The use of video recording allowed me to be more attentive during our conversations – to be *present* and to really listen to what they had to say – and later, it also facilitated the accurate, and sensitive, transcription of the interview proceedings.

These measures were all undertaken to ensure that my research project was conducted in an ethical manner.

### **3.5 TRUSTWORTHINESS & VALIDITY**

I am indebted to Downsborough's 2007 study (p.39) for the guidelines concerning trustworthiness and validity that my research project has attempted to follow. She, usefully, makes a distinction between (i) descriptive validity – which refers to the non-

distorted, factual way in which information should be presented by the researcher – and (ii) interpretive validity, which refers to the way in which the researcher must ensure that the meaning the *participants* give to an event or situation, is faithfully recorded, and preserved throughout the interpretive process.

By making video recordings of each of the interviews, I was later able to produce verbatim transcriptions of the conversations that took place. This aided in ensuring that my study achieved interpretive validity.

Moreover, in my presentation of the data in Chapter 4, I make extensive use of direct quotations ('thick description') to record what the participants *actually said* – thus allowing for the complexity of their situations to be reflected in my findings. Since thick description is a research technique that uses extensive evidence (data) to support its conclusions – and one which pays attention to the *context* of the research, as well as its aims (Downsborough, 2007, p.40) – I believe that adopting this approach helped to give both descriptive and interpretive validity to my study.

I also conducted a thorough document analysis, the details of which have been discussed above (section 3.3.2.3), in order to verify the data I collected during the interview process. In the interests of research validity, I used the data garnered from this mode of analysis to triangulate<sup>10</sup> my findings.

Thus, insofar as my research has fulfilled Downsborough's conditions of (i) descriptive and (ii) interpretive validity, I believe that it can be accepted as an accurate, objective and trustworthy representation of the participants' experiences of the CNSP, in terms of the learning they feel it has facilitated, and how (if at all) this learning has affected their attitudes toward biodiversity conservancy.

### 3.6 SUMMARY

In this chapter, I have provided a detailed description of my research methodology. I have discussed the design and structure of the research project, as well as the rationale informing

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<sup>10</sup>"Triangulation is the use of two or more methods or sources of data collection in a study, to explain more fully the richness and complexity of human behaviour" (Cohen and Manion, 1994, p.233).

my choice of research topic and my choice of approach to this study. I have also provided an account of the methods I used to generate and analyse my data, and I have discussed issues pertaining to ethics, validity and trustworthiness.

In Chapter 4, I shall present the data gleaned from my research process.

## CHAPTER 4: PRESENTING THE CASE EVIDENCE OF STEWARDSHIP PRACTICES IN THE UPPER BREEDE VALLEY AND GREATER CEDERBERG BIODIVERSITY CORRIDOR

### 4.1 INTRODUCTION

In this chapter, I shall present the data I collected regarding the implementation of biodiversity stewardship practices in the two case study areas examined.

The structure of this chapter is as follows: I present the first case study, and give the interviewees the opportunity to express their opinions under the analytical categories and sub-categories I have previously described (Table 2, p.57), after which I present the second study in the same format.

The large number of categories and sub-categories under which the data is presented in this inductive mode of inference, may be difficult to follow in narrative form, and therefore I have provided a simplified table of the layout of this chapter in Appendix 2, to further assist the reader with comprehending the data presentation that follows.

The five analytical categories I use to organise my data presentation were based on my *a priori* research interests, and then further defined by the research question and the objectives of this study. Each of the five categories was later divided into sub-categories, in order to make its denotation more explicit. The two case studies are discussed in relation to the five categories (with a further breakdown of the sub-categories), in the order of the three groups that were interviewed (stewardship coordinators, landowners, other roleplayers).

The five main analytical categories are:

- Stewardship
- Environmental capital
- Knowledge creation/Learning processes
- Reflexivity

- Community of practice

## 4.2 CASE STUDY 1: UPPER BREEDE VALLEY

### 4.2.1 Stewardship

It is evident that the concept of stewardship has more than one interpretation. The data from the interviews generated five (intermeshed) sub-categories, which influence how the concept is expressed in practice:

- Institutional definition and application of the concept
- Processes, practices and methods associated with this concept (relationships/partnerships/approaches)
- Objectives and outcomes of the processes
- Capacity constraints of the conservation agency
- Challenges that emerge for the BSP

#### 4.2.1.1 *Application of the concept*

##### ***Stewardship Coordinator***

The stewardship coordinator responsible for implementing the CNSP in the Upper Breede Valley outlined how the conservation agency has a very specific institutional aim for the programme, that fits into the organisation's conservancy mandate:

... we realised that 80% of the endangered habitats and important habitats fall outside of our areas and we needed a new approach to engage with private landowners to secure the conservation of that habitat. (CS1-Q1:11-13)

He was not confident that the stewardship approach on its own qualifies as a Postmodern environmental education solution, whereby emphasis is placed on frameworks and structures that can foster problem-solving amongst participants at a local level:

I think stewardship has to be part of a bigger picture, like our Upper Breede Collaborative Extension Group (UBCEG) which is a Postmodern-era, bottoms-up approach, where we have emphasis on feeding into frameworks and structures to address local problem-solving. The stewardship approach feeds into this suite as one of the tools which we use to achieve this bigger goal. (CS1-Q1:333-335)

### ***Landowners***

One of the landowners (CS1-Q3) demonstrated a good understanding of the application and objectives of the CNSP. This particular farmer is well-informed, and – because of prior interactions with some government departments regarding development and environmental legislation – has built up a knowledge capital of the environmental planning tools available to him. Hence his ability to refer to the efficacy of the CNSP, and how it is perceived on ground level:

Stewardship gaan nie die ding alleen omdop nie ...dit gaan `n rol speel maar nie alleen nie. Daar moet baie meer projekte en ander inisiatiewe en maniere wees om `n verskil te maak. Met Stewardship word daar te min mense bereik en verander om `n verskil te maak.

<translated from Afrikaans> Stewardship will not be able to turn things around on its own...it will play a role, but not on its own. There must be many more projects and other initiatives and ways to really make a difference. With stewardship, too few people are touched and changed to really make a difference. (CS1-Q3:218-220)

We still haven't had a corridor created here, and I believe there is a great need for this amongst the landowners. I am actually an island at the moment, on my own. I know of other farmers who are also positive about this stewardship business higher up in the mountain, but they don't get approached. But I say again, I don't want to be an island ...we need to start conserving wider and further. (CS1-Q3:221-225)

### ***Other Roleplayers***

The interviewee from SANBI, employed in the Biodiversity Policy Department, was asked about her interpretation of the definition and application of the CNSP. She made it very clear that there is a definite distinction between stewardship, as it is implemented by conservation agencies, and the way other institutions/initiatives use it in South Africa.

According to her, the conservation agencies have got a specific focus, and what they define as biodiversity stewardship is located within an institutional agenda:

The actual goal of the Biodiversity Stewardship is still to secure a Nature Reserve, so even though environmental education is critical and the tool to get to that stage, the ultimate goal is still to secure the land. (NQ1:80-81)

Other NGO's for instance, also make use of stewardship but that is in the broader sense of the word, and that is purely education. (NQ1:18)

The interviewee from the Biodiversity and Wine Initiative (BWI) was of the opinion that the broader, more informative and more holistic approach to stewardship which the BWI has been following over the last couple of years, is much more useful in getting landowners to understand what the concept is all about, than the more focussed approach adopted by the conservation agencies (NQ2:88-94).

Another official from the WWF, an individual who joined the interview for a while - and who has played a crucial role in getting biodiversity stewardship off the ground in South Africa over the last decade - demonstrated a very strong opinion about the application of the CNSP, and the focus it currently holds:

To me it fundamentally depends on what your objective is, and if your objective is the former, stewardship with a capital "S", to secure critical areas because that's what drives you and that's what measures your performance, I think you are OK. If you have social learning as an outcome that happens as part of the same process, it is still OK, but the problem is the way in which the environmental education fraternity wants to pursue stewardship with a small "s", so the objective becomes the social learning process and then what happens is that you don't achieve the specific objective of securing of land, cause you get wrapped up in all of these things about how wonderful the social process is and all the learning that is happening, but you don't ever achieve your primary outcome on the ground. (NQ2:194-200)

#### ***4.2.1.2 Practices and Methods (relationships/partnerships/approaches)***

##### ***Stewardship Coordinator***

The stewardship coordinator mentioned that it was not always that simple to apply the stewardship concept merely in the way that it is institutionally prescribed - and that the officials on the ground sometimes have to be guided by the differences in their contexts, and use alternative practices and methods to get their messages across to the landowners. He reported:

There is more to stewardship than just chasing after the priority biodiversity hotspots, but this is where you have to separate our stewardship programme (CNSP) from the broader landscape scale approach. So proactively in terms of securing our targets we have our focus areas which guides us where we should go proactively into the landscape. But then there is the broader awareness creation, best practice, partnering with initiatives like the BWI in this area, and the GCBC partnering with the Buchu industry and the Potato industry and in the Gourits partnering with the Ostrich industry. Those are called Biodiversity and Business Initiatives. (CS1-Q1:43-49)

The stewardship official then explained some of the prescribed practices, approaches and methods of the CNSP, which they got to know through the agencies' operational manual,

We developed a range of categories that we could apply to different parcels of land on the landscape which is based purely on the biodiversity value of the land so not on who owns the land. So the proactive programme was based on science, the best available science at the time using the South African vegetation map of 2004. So proactively to secure our targets we have our focus areas (priority map) and now more recently we have our fine scale mapping tools, which we could use, critical biodiversity area maps, conservation action priority map which guides us now where we go proactively in the landscape to securing the biodiversity targets for the national targets. (CS1-Q1:38 -46)

We have proactive stewardship where we identify the site and go after it, but then we also get reactive stewardship sites, where the landowner approach the conservation agency where they want conservation on their land or through a development application, this could be a condition of the Record of Decision (ROD) written into it by Department of Environmental Affairs and Development Planning (DEADP), that the rest of the natural land should go into Stewardship agreements with the conservation agency, and then there is a whole decision making framework within that reactive suite where we would need to assess the site and give it a stewardship status. (CS1-Q1:57-62)

He admits that the implementation of stewardship does not always follow these prescribed practices and methods. Sometimes, officials have to make use of other practices, which give better returns on the time spent on them, and demonstrate quicker progress. These include cooperative governance structures, a broader landscape-scale approach, more awareness-raising than is expected, working with different generations and audiences, etc.:

Stewardship as a landscape initiative that is how I'm working here too. Not only on the stewardship priority sites but on the broader landscape together with the partnership of Landcare and the BWI in our valley. (CS1-Q1: 3-4)

We have prioritised where we work in the landscape according to where the different initiatives overlap and also using the stewardship priority sites (higher biodiversity sites) as a catalyst for raising funds which will serve the greater area, cause when we think of maintaining the stewardship sites we don't only think of them in isolation, you got to look at buffer areas and corridor areas as well. (CS1-Q1: 5-7)

### ***Landowners***

The landowners had their own interpretation of how to achieve mutual understanding through the stewardship approach. Interviewee CS1-Q3 commented on the establishment of a relationship between himself and the stewardship coordinator over time:

<translated from Afrikaans> Initially the stewardship coordinator and I were at loggerheads about his stewardship idea. But I am very open to change, and the more we met and he explained his side as to why they are so serious about certain areas on my farm, the more I started to see where they were coming from. Only then I started to realise that it is not only about the turtles and the birds, but there are loads of plants which are also very sensitive...and only then after all of this information was made available to me, was I satisfied. (CS1-Q3:298-302)

Even though they highlighted the whole farm as a conservation zone, and there were certain areas which they felt very strong about and declared it a no-go area, I had to include those into my productive unit. So our relationship was a mutual action from both sides and we grew and learnt together. Stewardship certainly brought me closer to the conservation agency, and the fact that they said no to my development intentions, forced me to open up to them. (CS1-Q3:123-126)

The other landowner I interviewed confirmed the importance of building a relationship with the stewardship coordinator:

<translated from Afrikaans> The conservation agency can't manage all these properties on their own and take ownership of them all. They need us and they should acknowledge us in this process. (CS1-Q4:201-202)

If they wanted to make this a reserve on their own, then they would have had to do everything else on their own, put everything up by themselves without any help from the landowners. But now I am still here on the farm and I can help with all those things. If I spot any problems, I immediately phone the stewardship official and we can talk about things. (CS1-Q4:276-277)

### ***Other Roleplayer***

Meanwhile, the BWI interviewee was of the opinion that this complex relationship between the landowners and the conservation agency, might lead to technical hitches in the implementation of the CNSP:

And the other component of this is somehow that our [the BWI's] extension came much easier through industry channels than through conservation channels, because there is a perceived history of landowner antagonism towards conservation because we use to enforce, you see. I still believe that is the one difficulty within the CNSP model, you've got the conservation agency trying to hold the hand and also the conservation agency trying to slap the hand, and you can't do both. You must either slap or hold! (NQ2: 90-94)

### ***4.2.1.3 Objectives and outcomes***

#### ***Stewardship Coordinator***

When asked about the outcomes of the CNSP, and if (in their opinion) it will continue to form the backbone of the conservation agency's policies, practices and educative methods in the area, the stewardship official answered that it is definitely here to stay, as it fits into the newly-initiated National Protected Areas Expansion Strategy (NPAES) of the Department of Environmental Affairs (DEA). The Western Cape is busy developing their Provincial Expansion Strategy through this agency, and stewardship is seen as the main tool for securing land and expanding protected areas in the province (CS1-Q1:73-77):

[The CNSP] started in 2003 as a pilot programme funded by CAPE but the concept of stewardship has been around in our organisation longer than that. Private Nature Reserves declared under our ordinance, where private landowners set aside their properties but it did not have the same level of security built into it, but if the land were sold or change hands that status then fell away... with the new stewardship

programme, top level gets rezoned from Agriculture to Open Space 3 which is a conservation zoning and then restrictions are placed on the title deed and any successive landowner who buys that, then buys that status of the land and have to manage it as a Nature Reserve. (CS1-Q1:15-20)

### ***Landowners***

Landowner CS1-Q3 said one of the more positive outcomes that all participants in the CNSP benefit from, is the professional management plan which gets drafted by a group of experts from the conservation agency. In this stakeholder's view, the long-term benefit of conserving biodiversity on your property is that the potential for eco-tourism is increased. Biodiversity conservation has a history of positive marketing spinoffs, and so the CNSP should provide economic benefits for the landowners involved in it (CS1-Q3:181-184):

Maar ek se weer, as daar nie ekonomiese spin offs is nie, dan weet ek nie hoekom jy sal inteken nie. Tensy jy geld het om te mors. (CS1-Q3:185-186)

<Translated from Afrikaans> But I'll say it again, if there are no positive economic spinoffs, there is no point in getting involved in this programme. Otherwise, one is simply wasting one's money.

Landowner CS1-Q3 felt that the most important objective for the CNSP should be to achieve "attitude changes" amongst the landowners involved. He also said that isolated victories will not necessarily result in the overall objectives of the stewardship programme being reached: "To get too excited about a signature on paper, might be defeating the purpose, because a signature on paper will not save our biodiversity. If you can't achieve an attitude change, then you are not going to win the battle" (CS1Q3:225-231).

When asked how he thought such attitude changes might be achieved, he said that (i) the educational aspects of the programme must be directed at the children of the community, and (ii) that the CNSP should provide more economic incentives to the farmers. In his opinion, if you can't convince them on a financial level that they should partake in the programme, then you won't get the older generation involved in it at all (CS1-Q3:237-240).

#### **4.2.1.4 Capacity constraints on the conservation agency**

##### **Stewardship Coordinator**

The stewardship official (CS1-Q1) referred a couple of times to his agencies' capacity problems, which (he feels) currently prevent the CNSP from being more efficient in achieving long-term sustainability objectives:

The landowners are always the designated authority for the conservation area and the conservation agency provides support and advice and we undertake to lobby on their behalf for funding...The reality is the conservation agency just does not have the capacity to take all of this on and that is why for the reactive stuff the emphasis is on the landowner to take that responsibility on. (CS1-Q1:66-67)

To assist with the capacity problem here in the Western Cape we have recently signed a MoU in Eden to Addo district between the conservation agency and Eden to Addo, and they are currently negotiating a protected environment on behalf of the conservation agency. In the West Coast Biosphere reserve there is an extension officer negotiating the core areas of the Biosphere reserve into Stewardship contracts on behalf of the conservation agency. That kind of partnership is happening in the landscape. (CS1-Q1:63-71)

<In response to a direct question> We just don't have the capacity to come up with a specific stewardship newsletter. We need a coordinator that can just do that. It is a lot of work. (CS1-Q1:225-226)

##### **Landowners**

When landowner CS1-Q3 was asked if he is satisfied with the amount of information he has received being part of the CNSP, he responded that the conservation agency did what was humanly possible, and what their infrastructure allowed them to do, but that there is definitely still a huge shortage of competent botanists in the area. "I would have liked more detail and knowledge about this aspect of my farm" (152-154), he said.

#### **4.2.2 Environmental capital**

Three sub-categories emerged from the data relating to this category, which is the building of an environmental capital (understanding) amongst landowners, before, during and after their exposure to the CNSP:

- Historical environmental understanding
- Current environmental understanding
- Impact of the stewardship programme on environmental understanding

#### ***4.2.2.1 Historical environmental understanding***

##### ***Landowners***

The interviewees were very sincere about their historical comprehension of environmental/conservation issues, and how the CNSP and their interactions with the stewardship coordinators have impacted on it:

<Translated from Afrikaans> We can in all honesty say that we only became aware of nature conservation after they spoke to us. D and A say that they feel much closer to their work environment now after they have become involved in conservation, and they are also more aware of environmental aspects, where previously they have never really worried or were involved in conservation initiatives. (CS1-Q2:40-44)

One of the community interviewees, who also serve on the board of trustees of this farm, admitted that she has become so keen on conservation issues lately, that she keeps articles about this subject in a file to share with her fellow community members:

Ek was nooit regtig so nie, maar nou is dit anders, en as ek nou iets lees oor omgewings bewaring in tydskrifte en koerante dan hou ek dit in `n lêer waarin ek die goed bêre. (CS1-Q2:47-48)

<Translated from Afrikaans> I was never like this, but now things have changed. If I read something about environmental conservation in magazines or newspapers then I keep it on file.

Another landowner said that, throughout his life, he has been exposed to nature conservation, and that those formative experiences of it have guided him in his adult farming practices:

Ons het grootgeraak baie naby aan die natuur en is nog so ons lewe lank.... Ek was nog maar altyd positief oor omgewingsbewing. Ek doen alle boerdery praktyke so omgewingsvriendelik as moontlik...Meeste boerdery praktyke het 'n impak op die omgewing en ons probeer net die sagtste metodes vind wat dit (die land) die minste gaan beïnvloed. Ons is baie pro-omgewing nog ons hele lewe maar nooit aktief betrokke by enige bewarings projekte nie. (CS1-Q3:33-41)

<Translated from Afrikaans> We grew up very close to nature and have been our whole life. I have always been positive about Nature Conservation. We do all our farming practices on the most environmentally friendly manner...most farming activities have an impact on the environment, but we try to find the softest methods which causes the least damage on the land. We are very pro-environment our whole life, but we have never been part of any formal conservation project.

The third interviewee in this area said that it is natural that as a farmer, you are always looking to properly conserve your soil, as it is the medium in which you plant your crops – in other words, as a farmer, to neglect such considerations is to jeopardise your livelihood (CS1-Q4:96–99).

#### **4.2.2.2 Current environmental understanding**

##### **Stewardship Coordinator**

The stewardship coordinator's opinion of the landowner's understanding of environmental/conservation issues, was made clear during his interview, when he said:

Landowners understand conservation to be something that happens in the Kgalagadi or Kruger National Park and not something to happen here on their productive landscapes. We have even used the ecosystem services argument with them to their farming industry that water is the main factor when conserving your natural veld and keeping it clear from aliens will increase your water and all of that – but that doesn't seem to sink in with a lot of them. (CS1-Q1:177-180)

### **Landowners**

The question posed to the landowners was whether all the trustees in the area are experiencing new-found understanding about conservation issues, in the same way as the three people present during the interview claimed to be. Their response was as follows:

Van die ander trustees, veral een man, Mnr. G, se lewe het heeltemaal verander. Hy vat sommer beheer oor die problem, en ek dink dit het vir van die ander hulle heeltemaal verander. Hulle uitkyke is vernuwe, waar vantevore het hulle nooit regtig dinge so beleef nie want hulle was ook maar net werkers. (CS1-Q2:146-149)

<Translated from Afrikaans> Of all the trustees, more than any other, Mr. G's life has completely changed. He takes control of the problem, and I think it has revolutionised the way others view [conservation issues] as well. Their outlooks have been refreshed, as before they didn't believe in such things, they were 'just workers'.

However, when the same question was asked about the rest of the community members, the answer was unfortunately not so positive:

Ja ons perspektief en opinies het heeltemaal verander, maar nog nie al onse kollegas /mede-werkers nie. Dis dalk wat ons moet voor vra by die volgende vergadering, dat hulle almal ook by die grond uitkom en dit dan self ervaar. Die voorstel was dat hulle sommer 'n vleisbraai hou op die plaas sodat mense self daar kan gaan stap en dan sien waaroor dit gaan, want nie al die gemeenskap mense was al op die grond nie (CS1-Q2:152-155)

<Translated from Afrikaans> Yes, our perspectives and opinions have completely changed, but those of our community members and co-workers haven't yet. This is what we must address during our next meeting, so they can come round to this way of seeing things and experience it for themselves. The proposal is that we hold a big *braai* on the farm so people can come and see for themselves what we're involved with, because at the moment, not everyone is on board.

A significant conservancy success story was offered by landowner CS1-Q3, who bought an additional piece of land for farming purposes, but decided against ploughing it when he discovered that there was an endangered tortoise species (the suurpotjie) living there, as well as a very scarce type of vegetation (alluviale fynbos) growing on the land. Furthermore, this farmer initiated a school project within the local community, where children go to this

area annually to count the turtles, and in this way gain exposure to environmental and conservancy issues in an educational context (CS1-Q3:41–49).

#### ***4.2.2.3 Impact of the stewardship programme on environmental understanding***

##### ***Stewardship Coordinator***

When asked about the impact of the CNSP on the landowners' burgeoning understanding of environmental/conservational issues, the stewardship coordinator replied,

It is not just about awareness days, it is about projects that we want our farmers to buy into, like what we had on the Waaihoek mountains where we had an opportunity created by two big fires, and through the Department of Agriculture we moved in there with Landcare methodology and cleared alien vegetation and the land owners bought into that and there was about 19 farmers involved. I was also involved but it was over and above my responsibility, but it was because of my involvement in this that I reached a landowner and he saw me and we started talking about stewardship and now he is one of the partakers in this. (CS1-Q1:182-187)

Stewardship, the educational process, underlines the whole thing. If you go and talk to a landowner about his property and securing that, a certain level of education & awareness raising has to take place.....So first it will be awareness creation, but education underlies the whole process and we as stewardship officials, extension officers or facilitators, play the role of agents of change. We are implementing how people see their environment and we facilitate change in their attitude and how they perceive their natural veld. (CS1-Q1:214 -220)

And in response to the question of how the landowners have perceived the implementation of the stewardship programme in the area, he said:

In many cases [the response has been] very positive. A lot of landowners buy into conservation and we come with the attitude that farmers are all for conservation from where they come from, working on the land and in the environment. It is not that anyone is against conservation as such, and we approach it from that point of view and we have a fairly open relationship with farmers. It is only those few examples I have given where there are development aspirations and hence a lack of willingness to complying with national legislation. And then our approach is to, before we use the big stick, we try and approach them and raise the awareness and through peer pressure, those landowners that are on board with us, to use them to put pressure on the neighbours. So there is still the big stick but that is the last resort. (CS1-Q1:227 -233)

According to the stewardship coordinator, it is the initial awareness-raising, which occurs during the first interactions between coordinators and landowners, which is crucial to producing the kind of changes in perceptions and attitudes that – in turn – result in positive changes in farming practices in the area:

If that landowner buys into your vision and concept of taking ownership and looking after this resources that has been entrusted in their care, that is where your initial conceptual change is taking place, and then through the process of working through the legal documents just build onto that original change and strengthens their feelings about the initiative. We also say you don't have to sign the stewardship agreement to do stewardship. You may have an interaction with a landowner who might not sign the stewardship agreement but has certainly grasped the behavioural change. (CS1-Q1:303-308)

When asked if he thought there was anything different about the stewardship approach, when compared to other educational approaches – both in the past and currently – used by his conservation agency to raise awareness and instigate value changes amongst landowners, his response was that the main change in focus of the CNSP is acknowledging the fact that people need to stay in the landscape; that one can't separate biodiversity conservation from the people whose land this conservation must take place on. The CNSP is thus an integrated approach, aimed at keeping people in productive landscapes (CS1-Q1:336-340).

I also asked him about some of the typical successes achieved by the CNSP in his project area, to which he responded:

Through those learning interactions, through those farmer field days, through the one on ones, the landowners definitely became more informed. There is definitely a broader awareness around biodiversity and the landowner's responsibility towards all of that (CS1-Q1:369-371)

### ***Landowners***

The community group confirmed that they entered into a 15-year Biodiversity Agreement with the conservation agency in November 2007, after a stewardship coordinator had suggested that course of action to them earlier in the year.

<Translated from Afrikaans> They helped us so much because we did not know anything about conservation before. They also helped us a lot with the clearing and eradication of alien species on our farm. (CS1-Q2:13-16)

I asked them about their initial impressions of the stewardship initiative, and one of the interviewees replied:

I cannot speak for the others, but for me it just felt right from the beginning, to know you can't do anything else, not even farm on that piece of property, so what else was there to do then which would have made sense, therefore conservation was a very good alternative. (CS1-Q2:101-102)

Landowner CS1-Q2 admitted that it was his exposure to the CNSP that stimulated his curiosity in the environment. It was only after getting involved in the project, that his interest in conservancy issues began to develop (CS1-Q2:50-52).

Similarly, landowner CS1-Q4 said that he only started to realise what conservation was all about after the stewardship coordinator had explained things very clearly to him. Before such time, it seemed "useless" to him, and not at all like a valuable consideration to incorporate into his farming practices (CS1-Q4:125–127).

#### 4.2.3 Knowledge creation/Learning processes

Even though social learning and the creation of an environmental capital is discussed in Chapter 5 through an abductive mode of inference, the data I collected indicated that this category also needed to appear in this section of the thesis – so that the reader may see what the *participants* had to say about the learning processes that have been facilitated by the implementation of the CNSP.

I identified four sub-categories, under which the data will be presented:

- Institutional strategies
- Type of information/Level of information
- Educational methods leading to reflexivity in the program
- Contextual dynamics

#### ***4.2.3.1 Institutional strategies***

##### ***Stewardship Coordinator***

I asked the stewardship coordinator if his colleagues in the conservation agency realise that – over and above its protected areas mandate – the CNSP has a responsibility, as an educational process, to foster learning about the environment and sustainable land use practices in the areas in which it is implemented. He replied that it is definitely a responsibility that he himself is conscious of, and that he has recently begun to forge links with the Community Conservation Unit to assist him in furthering the ends of social learning in the area (CS1-Q1:106-107).

The following response of his relates to the ‘farmer field days’ this coordinator has been hosting since 2006, and shows his level of commitment to the cause of educating people in the area about biodiversity conservation:

Again this is over and above my stewardship responsibility; this is the broader landscape-scale stewardship initiatives we also have to service. One sees and realises that out of these the benefit you get for the stewardship program, you become known in your area, you earn the trust and respect of the community. This type of initiative has been happening throughout from 2006, for the last four years, so this I did when I started to become known, so now when I make a phone call, I don’t seem like a stranger. (CS1-Q1:147-151)

Finally, the coordinator also admitted that different methods of communication spread different messages, and that there is a place for each of these, depending on the context and the community:

One-on-one’s vs. farmer days? One-on-one is more of an intimate discussion where the landowner feels more comfortable to ask questions and show ignorance, where at farmer’s days they might be pulled along by the other personalities present. But I

must say at our field days we have had very good participation and interaction from all of them that was there. But it is two different methods of communication and you spread the message along differently... (CS1-Q1:321–324)

But I think it should be a combination of these tools: workshops, getting people out in the field, informal discussions. It is all about building a relationship and the trust of the individuals (CS1-Q1:327–328)

### ***Landowners***

It emerged during the interview process that two members of the farming community had previously been sent on a nature guardianship course. This was done to enable them to become environmental advocates, and to develop skills such as the ability to lead field tours of the area. Of their experiences of this course, one of the individuals told me:

<Translated from Afrikaans> The most important thing was that the course did not just consist of book-work, but we went out into the field and we experienced things out there. As we went out we developed more knowledge and skills. (CS1-Q2:65-66)

Landowner CS1-Q3 was asked about how the stewardship coordinator in his area went about spreading the message of the CNSP, and whether (in his opinion) the coordinator's methods were effective or not:

<translated from Afrikaans> No, they sometimes come to the farmer association meetings and do a presentation there. But normally it is only a third of the farmers that attend these functions, the other two-thirds then miss out on that information. He thinks the initiative should be coming from the government's side, but they must be assisted with more capacity, people, and infrastructure. How else will they ever get their message out to all the landowners, and then we will never win this battle. (CS1-Q3:140–145)

A recommendation from the same landowner was that the stewardship coordinator should rather work on a one-on-one basis when dealing with the landowners. Farmer association meetings are where "farmers talk farming", and thus, they can often be unreceptive to messages pertaining to conservation that are delivered to them in this particular context (CS1-Q3:285-290). The landowner concluded this train of thought by saying,

[The problem with the CNSP]...is that their information sharing does not go any further than the management plan. My recommendation to the CNSP is that all the role-players on a farm should be involved in this initiative and they should all be informed about the knowledge on the farm and the areas of importance. Especially the workers and the communities. (CS1-Q3:288-289)

#### ***4.2.3.2 Types of information /Levels of information***

##### ***Stewardship Coordinator***

It became evident during our conversation that the stewardship coordinator has got a very clear idea of how to approach the prioritised landowners, being cautious not to overwhelm them with too much information too soon. He was also very clear about the type of information they look to share with the landowners concerning the implementation of the CNSP:

We are careful not to scare landowners off by giving them too much information too soon. Firstly we make contact with the landowner by using a one on one approach when we go to negotiate for stewardship, when we start off. Then we provide them with an overview on a very nice brochure to explain stewardship and the different categories and what it is all about. There is a frequently asked question section as well, and after that we ask if we can do a site assessment to evaluate where this property fit into the different categories and because it is a voluntary program, there is no pressure on them to do or take on anything. (CS1-Q1:246-250)

When the interviewee was asked if stewardship could be seen as a typical conservation education practice of social learning, he replied in the affirmative, saying that there are numerous examples of 'second-phase learning' happening amongst the landowners he engages with – where they want to learn or know more about stewardship practices, even without being officially involved in the CNSP themselves (CS1-Q1:238-239)

##### ***Landowners***

The nature guardianship course (discussed above) that the conservation agency sent the two community members on, seems to have had a remarkable impact on both their lives:

Ek het so baie wêreld kennis daar opgedoen. Vir my was dit hoeka so deur uit te gaan in die veld en dinge self te ervaar. `n Stukkie boekewerk is lekker maar mens raak gou verveeld, baie keer is dit genoeg om net bietjie te lees maar dan voel ek as dit aangevul kan word deur `n filmpie of so wat my ook dan meer bewus kan maak sodat ek die ervaring dubbel kan inneem. Lees en sien is vir my die beste. Ek het `n klomp wêreld kennis daar opgedoen. As ek net van myself kan vat sal dit wonderlik wees as ek nog sulke kursusse kan bywoon, om meer van hierdie tipe kennis te kan leer...en daar is sulke kursusse wat ek van gehoor het wat gratis was. En dit sal nou baie goed wees. (CS1-Q2:210–216)

<Translated from Afrikaans> I did so much learning about the world there. For me, it was so wonderful to go out into the veld and experience things for myself. Book-work is good, but one can get bored quite easily, and I often feel that it is enough to just read a little, and then watch a film or something to really allow the lesson to sink in. Reading and observing is for me the best. I learned so much about the world during the course, and it would be wonderful if I could keep doing similar courses, so I could keep learning this kind of information... I've heard of some free courses one can do. Now *that'd* be a wonderful thing.

It seems that once the thirst for knowledge has been stimulated, it is unquenchable, and the two community members (who have now qualified as novice field guides) could not stop asking me for more information, which they wanted to share with their community members and potential tourists to their nature reserve. They referred specifically to a desire for more knowledge about plant species (CS1-Q2:233–235).

It was also suggested that more awareness about conservancy issues should be raised in previously disadvantaged communities, since these people are often the ones who live in threatened areas, and – if they were to be empowered by environmental knowledge – could become active and informed nature conservationists. Furthermore, it was suggested that these awareness campaigns should be aimed at all generations living in the community, not just the school children (CS1-Q2:237-241).

#### **4.2.3.3 Educational method(s) leading to reflexivity**

##### ***Stewardship Coordinator***

The stewardship coordinator, referring again to the farmer field days which he has hosted as part of an awareness campaign aimed at providing more information about the CNSP to the local community, said:

As a matter of fact, we were just facilitators of the learning process but it was the farmers themselves interacting and talking and disagreeing with each other so we as officials were standing on the side whilst they were discussing the detail and creating their own understanding. This was not done only as part of the stewardship initiative but I did it as part of the greater landscape programme, the broader stewardship concept. (CS1-Q1:123-127)

What is important about the above statement is that it shows that the landowners involved in the CNSP are reflecting on its processes, and then actively sharing their knowledge about it with each other. This point also confirms the second aspect of Cundill's classification of what constitutes social learning, i.e. ...that this change goes beyond the individual and becomes situated within wider social units or CoP. The coordinator also offered two more very important insights into the farmer field days, and the reflexive effect they have on the landowners:

Surprisingly it has not been the farmers we engaged with through the CNSP who showed an interest in our farmer days; it is the other ones, the more reactive ones. (CS1-Q1:136-137)

Yes we have had positive responses from farmers after the days because the learning doesn't stop after they leave here because they will discuss it with their family or friends. So I actually have had people phoning me who have not been to the day but want more info about a certain theme. (CS1-Q1:142 -144)

### ***Landowners***

The following extracts from the interview process show how the group have begun to engage – on a self-conscious and purposive level – with the practical experience of “nature conservation” offered to them by the CNSP:

<Translated from Afrikaans> What is so nice about this nature story, is the returns that you get on it, like tourism, education. You can educate a person in maths and science, but that will all just be based on theory, but if you get into nature, then you see all of that in practice. I mean, just think about photosynthesis and reproduction. (CS1-Q4:156-158)

<Translated from Afrikaans> When I asked the landowners about the most effective way in which they learnt, they both agreed that knowledge by books has got a certain place, but it is more going out into the field and experiencing things first

hand, which works the best for them. "I just want more of that. More courses, but now on a bit of a higher level". (CS1-Q2:224–225)

<Translated from Afrikaans> The experience in the field and the knowledge which the stewardship official offered me and the explanations around it all, really made it for me. I also benefited the most from that. We went through a process and there were a lot of things I had to think about and clarify for my own understanding. As a matter of fact, stewardship at the start and stewardship as I see it now is not at all the same thing! (CS1-Q4:260–262)

#### **4.2.3.4 Contextual dynamics**

##### ***Stewardship Coordinator***

The following quote will serve as an example of the importance of contextual factors in the implementation of the CNSP:

I also have to be very sensitive and aware of when to engage with farmers. July is hunting and holiday time and then harvest time is also out. I find farmers to be more responsive to a day like that in the week than over the weekends as this is more family time. Mostly it is just the farmers on their own, sometimes they do bring the farm manager or the wives with, but mostly it is them on their own. (CS1-Q1:137 - 140)

##### ***Landowners***

In terms of contextual considerations, landowner CS1-Q3 feels it is crucial that the farmers which the CNSP wants to engage with, are informed earlier on in the process about the programmes' intentions, and the knowledge the stewardship officials already have about the properties in question:

What they know, I should have been aware of before I even bought the land, and then there would not have been any misunderstandings about the future intentions. I think these Spatial Development Plans and Global Development Plans and all their smart plans should be made available to the farmers and they should give their input into this, because then everyone will be informed enough to know what is expected, by whom, where and when. (CS1-Q3:130-133)

#### 4.2.4 Reflexivity

Reflexivity – the ability of an agent to recognise the social forces acting upon them and to adjust their actions accordingly – is an important dimension of social change. I identified three sub-categories in the CNSP that might have an effect on the landowners involved, in terms of enhancing their ability to examine themselves *as* members of a broader social context, and then to act in response to this knowledge.

- Structural factors
- Reflexive deliberations (internal conversation)
- Reflexive competency (agency)

##### **4.2.4.1 Structural factors**

###### ***Stewardship Coordinator***

It is my belief that for the CNSP to be successful in its implementation, stewardship officials should understand the various, context-specific social forces that are in play, and then respond to them in such a way, so as to create a supportive environment for all parties concerned. This notion seems to have been expressed by the steward coordinator that I interviewed, who said:

What I also found, is that it is all about creating an enabling environment for us to interact with them, like with this alien clearing project, the work is just so overwhelming for them and they can't even think about it financially to take it on themselves, and we then go in and do the initial clearing and get that cost of the clearing down and then they take on the maintenance, so it is to create that enabling environment which is so valuable. (CS1-Q1:189 -192)

However, it is important to remember that there are a lot of social factors influencing the implementation of the CNSP, and in some instances, they can determine its success or failure:

All my farms that have been identified as priority and all these farmers know of me, but it depends a lot on the landowner of those farms and where they are in terms of different levels of negotiations, and times in their lives, if they will come back to me,

and if we can pursue the message. A lot of external factors influence the decision and actual signing of an agreement. (CS1-Q1:269- 273)

### ***Landowners***

Landowner CS1-Q3 told me a story about the start of his relationship with the stewardship coordinator, which begun when the framer wanted to develop a certain piece of land on his farm. He thought he had the necessary approvals, but unbeknownst to him, the legislation had changed, and the conservation agency stopped him in his tracks because they required the new approvals. In the end, this misunderstanding led to a big disagreement, which saw the stewardship coordinator and the landowner being at loggerheads for quite some time (CS1-Q3: 104-110). However, and I believe this is good evidence of an individual responding to adverse social forces in a positive way, the landowner concluded his story by saying:

Maar ek is oop vir verandering en hoe meer ons ontmoet het en hy sy kant van die saak verduidelik het, hoekom hulle ernstig is oor sekere gedeeltes op die plaas, hoe meer het ek dit begin insien...Hy het dit toe vir my begin uitwys en gewys waar is die areas waaroor hulle benoud is en wat vir hulle van waarde is. Toe begin ek besef dis nie net die skilpad en voëls nie, maar daar is baie plante wat van ongelooflike belang is. Eers toe ek al die inligting tot my beskikking gehad het was ek tevrede.(CS1-Q3: 111-115)

<Tranlated from Afrikaans> But I'm open to change, and the more we met and his side of the story was explained to me, about why they are serious about certain areas of the farm, the more I understood... He showed me the areas that they are concerned about, and what it valuable about them. That's when I realised it's not just about tortoises and birds, there are also many plant species in the area that are unbelievably valuable. When I received all this information, I was content.

#### ***4.2.4.2 Reflexive deliberations (internal conversations)***

People engage in reflexive deliberation (or internal conversation) when deciding how they should act in response to structural constraints and other social influences.

### ***Stewardship Coordinator***

When the coordinator was asked if, according to his experience, the stewardship approach has contributed to a better understanding of biodiversity and conservation issues on the

part of landowners, and if this knowledge has enabled them to make better choices about sustainable land use practices /farming activities on their properties, he was very positive:

Definitely, if you speak to those landowners, first they did not know that there is value to the veld, now they know there is importance and they know that there are species there that are not found anywhere else in the world. They know these areas need to be managed, and they also know the threats of alien invasive species, and they have a far better understanding of fire. They can prepare themselves better for fire before the season starts, and they have a strategy to follow and the breaks in place as an example. Certain things like that, for us it might seem like general knowledge, but for them it is now something that they have been enlightened about. (CS1-Q1:279-284)

It has been a learning process for the coordinator himself, and he admitted to undergoing a process of reflexive deliberation, when he realised that it is not personal if the landowners decide against involving themselves in the CNSP:

The commitment we are asking these landowners to make is huge and it is scary because it is with the state and they see the "state" to be against them all the time. We are asking them to take productive land and conserve it with any or little tangible benefit for them. (CS1-Q1:172-175)

### *Landowners*

The following quote indicates that, for one farmer, reflexive deliberation about his stewardship status was not difficult on an ideological level, but that it led him to reassess the day-to-day management of his farm:

<Translated from Afrikaans> I never had to make that mind-shift, as I have always been environmentally inclined, but I just had to decide where and when it will fit into my future and my farming practices. I was lucky because I had an incredibly big farm. (CS1-Q3:189–195)

Some ideas from the community interviewees demonstrate how they have deliberated on the knowledge of conservancy they have gained since the advent of the CNSP in their area, in terms of how it could provide both personal and social upliftment:

Dit is nodig vir die mense om op kaarte aan te dui wat ons beoog met die stuk grond, en ons het gesê ons wil 'n staproete begin waar mense kan inkom en ons kan hulle

wys wat is daar alles. En dit is ook onder die mense se aandag gebring en dit is nodig vir die gemeenskap om dit te sien sodat hulle nie moed verloor nie, maar dat hulle weet bewaring kan vir hulle ook iets beteken vir die toekoms. (CS1-Q2:247–250)

<Translated from Afrikaans> It is necessary to show people on a map what we intend with the plot, and we said we wanted to establish a hiking trail where people could come and we could show them all the [threatened species]. This would raise people's awareness, and make sure the community doesn't lose hope, because they know that conservation can mean something in their future.

Finally, the following quote serves as a good example of reflexive deliberation happening on the part of a landowner, for whom conservancy used to be a foreign concept:

<Translated from Afrikaans> After the stewardship official showed me some examples of plant species and bulbs, and then did various follow-up visits to my farm, he came up with the suggestion of engaging in a stewardship contract. Until such time the word stewardship did not exist in my vocabulary, and I was not sure how things would fit together, how things would work. But then I decided to go and sit and think about it, and then it started to make sense. (CS1-Q4:111-116)

#### **4.2.4.3 Reflexive competency (agency)**

Reflexive competency (or agency) refers to the ability to connect what is known with what is done, so that practitioners can learn from their actions and adapt to new and/or unexpected situations.

#### ***Stewardship Coordinator***

Here, the stewardship coordinator underscored the importance of the educational aspect of the CNSP, as he feels that – once empowered with environmental knowledge – the landowners in the area will be able to adapt their practices to reflect conservancy ideals:

Stewardship, the education process underlines the whole thing. If you go and talk to a landowner about his property and securing that, a certain level of education & awareness-raising has to take place.....So first it will be awareness creation, but education underlies the whole process and we as stewardship officials /extensions officers or facilitators, play the role of agents of change. We are implementing how people see their environment and we facilitate change in their attitude and how they perceive their natural veld. (CS1-Q1:214 -220)

### ***Landowners***

Landowner CS1-Q3 admits that he is foremost a farmer, and that he is in the “game of farming”, where one usually seeks to get every possible square meter under production. He says that what counted in his favour, when approached by the conservation agency to partake in stewardship, was the fact that he had “enough land”, and therefore, he could farm commercially while at the same time paying attention to biodiversity conservation. He says that if your farming unit is too small, and you don’t have “extra land” to dedicate to conservation, your ability to involve yourself in stewardship practices will be severely compromised.

A very interesting comment made by one of the interviewees, suggests another method for them to ensure that they are reflexively competent – that is, by keeping up-to-date with innovations in technology and market-places:

<Translated from Afrikaans> We try and stay on the forefront and stay informed about new technology and the changing environment in which we have to produce and market our goods. We are not scared of change! (CS1-Q1:22-23)

Lastly, landowner CS1-Q4 had the following to say about the CNSP, highlighting the importance of being able to adapt to the changes which its implementation will effect in the area:

<Translated from Afrikaans> If you have been experiencing something which is new to you, and you share that with others, then you get exposed to new and other perspectives again about that subject, and those people also have their own interpretations and new perspectives about that, and in such a way you get progression and education happening all the time. This is where the CNSP, however, will have to be a bit more flexible. The contract which we agreed to must be amendable, because there is going to be change and progress happening in the environment we live in, so the CNSP will never ever be static and perfect. (CS1-Q4: 280-283)

#### 4.2.5 Community of practice

The concept of a 'community of practice' (CoP) has been discussed at length in section 2.7.2 of this thesis. Suffice it to say for now, that the concept refers to learning that is facilitated by the social interactions that occur between individuals, and the community of which they form part.

##### **4.2.5.1 Participatory methods**

###### ***Stewardship Coordinator***

If I do community work or work with the children, it is out of my mandate but it still helps me a lot to get involved. (CS1-Q1:208)

Although the stewardship coordinator was of the opinion that social learning has been key to the successes of the CNSP in the Upper Breede Valley (CS1-Q1:316), he also admits that – unfortunately – the level of community engagement with the programme is still insufficient. Although the stewardship officials have made significant progress in the last four years in terms of getting community members to buy in into their projects, they are still “not at the stage” where the community can take full ownership of the programme just yet (CS1-Q1:320).

###### ***Landowners***

Landowner CS1-Q3 described the relationship between himself and the conservation agency as a “joint action from both sides”, and declared that the implementation of the CNSP has certainly enhanced his engagement with both his natural and social environments (CS1-Q3:125-126).

##### **4.2.5.2 Other farmers<sup>11</sup>**

###### ***Landowners***

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<sup>11</sup> Farmers who are not interested or currently part of the CNSP – and this section depicts the relationship of the “Stewardship Farmers” with those farmers and how they perceive this relationship within their community of practice.

Interviewee CS1-Q3, despite being sensitive to conservancy issues, admitted that he is first and foremost a farmer, and that he will always support his fellow-farmers in any dispute with conservation authorities. He admitted that there still exists, between farmers and conservationists, “a divide between ‘us’ and ‘them’”. The stewardship officials in his area, however, requested that he spoke to other landowners about conservation, at a workshop which they organised. He found this very difficult and did not know how to react, although in the end, he decided to support conservation because he realised he could afford to (CS1-Q3:212–217).

According to this landowner, there is no real passion for conservation amongst farmers in their valley. He claimed that although they do have fantastic, important species in their area, there is no real coherence amongst landowners, in terms of a community feeling to drive the conservation of their environment for their children’s sake (CS1-Q3:265–266).

#### **4.2.5.3 Other stewards<sup>12</sup>**

##### ***Landowners***

The interviewees from the community project (CS1-Q2) say that their status in their community has definitely changed in the wake of their involvement with the CNSP. Now, when someone talks about shooting something (such as a fowl) for the pot, the other community members joke that they should not do it in front of D or A, otherwise they be taken to task about it:

Somtyds praat ons in `n grap met hulle, en iewers luister hulle byvoorbeeld as ons grappe maak oor die tarentale vir die pot, en dan sal een sommer sê maar oppas vir D, hy sal jou sommer aanvat of verklik! (CS1-Q2; 61-62)

<Translated from Afrikaans> Sometimes we talk jokingly with them, but I do believe they listen when we talk about the tarentale (fowl) for the pot, and then one of our friends will say, beware of D, he will split on you if you do that again.

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<sup>12</sup> ...the same relationship as explained above, at footnote 11, except here it reflects on the relationship between the Stewardship Farmers and their fellow farmers and other stewardship role players who also engage in the CNSP.

The community interviewees admitted that there has been interaction with other stewards in their immediate area, and they referred to the farmer field days which were organised by the stewardship coordinator:

<Translated from Afrikaans> The day when Water Affairs was there was good – we enjoyed the conversations and we learnt from the others, especially the people from the community who left school early and were in a position to talk about other opportunities in this field, like Working for Water and Working on Fire. (CS1-Q2:196-202).

The above quote illustrates, once again, the importance of speaking to people who have been in the conservation business for some time, and so who are in a position to share more information about the environment and alternative “social options”.

When interviewee CS1-Q3 was asked what his fellow farmers and members of his community thought about his new status as a Cape Nature Stewardship Programme member, he answered in a firm tone:

<Translated from Afrikaans> ..there might be some farmers who feel negative about my decision, but then there are others who think I am brave to embark on such a completely new challenge. . (CS1-Q3:197–203)

This remark reflects a historical trend that one gets used to in the conservation fraternity — that is, the unwritten rule that when farmers think and talk about conservation, it is only about its negative aspects (CS1-Q3:209-211). When I asked this landowner if there are others around him with whom he can share his passion for conservation, he was very clear: “Nee wat, ek het maar net die gevoel in my en dit is maar al!” <“No, I just have the feeling in me, and that’s all!”> (CS1-Q3:275)

However, contrary to this, landowner CS1-Q4 said that what he is most excited about in this new venture of their’s, is the involvement it promises from the greater public sphere:

What makes it even more exciting is that there are going to be individuals coming in who have the same understanding and interest in bulbs and other plants species. You can say *we’re* almost from the same species, and it is going to be a pleasure to communicate with these people and talk to them on my own farm. (CS1-Q4:128-131)

#### **4.2.5.4 Other government departments and conservation agencies**

##### **Stewardship Coordinator**

The stewardship coordinator was very proud to inform me about the cooperative governance structure they have installed in the valley, and the positive impact this has had on their environmental aims and objectives:

The Upper Breede River Collaborative Extension Group is a cooperative governance body. We function in a nicely defined area. It is a high farming area with exceptional biodiversity. The challenges we were facing include no coordination between the departments, no youth or schools involved in environmental projects, no face behind the voice on the phone, we were losing species at the speed of light, alien infestation were taking over and no community buy-ins were happening to these projects, and nobody was listening to the extension staff on the ground. But we decided to get together and make a difference, and accountability is what this group is all about. We are making an impact in these areas, and it is much broader than our stewardship sites and we are providing job opportunities in these communities. Each one of the role players are not expected to do more than what they have planned for in a year. It is really about coordinating these between the role players and not duplicating any work. It is very much about coming over as a united front to the community, sharing of knowledge and expertise and improving service delivery and coordination. (CS1-Q1:196-206)

##### **Landowners**

An interesting insight into the relationship that exists between the farmers, the various government departments and the conservation agency, was offered by landowner CS1-Q3:

<Translated from Afrikaans> When the legislation changed, it was not only the Department of Agriculture that decided about the clearing of land. Even though it is an agricultural issue, suddenly they only became one of the role-players. Now it is a matter for [the departments of] Environmental Affairs and Conservation, and *they* decide if it is in the broader interest to clear the land. This brought about a dramatic change in our relationship with these departments. Agriculture is still effective but they don't get to decide on our future anymore, and the farmers experience that as a positive thing. They just perceive Agriculture as part of that 'one-stop-shop' that keeps on saying no to everything we want to do, and that has been a major problem in our valley. (CS1-Q3: 75 – 81)

Meanwhile, landowner CS1-Q4 reported that he really enjoys his new-found relationship with the CNSP, and says that what he appreciates most, is the negotiated contract between the landowner and the conservation agency:

This is what I have always thought conservation should be about. It doesn't help that you conserve, but nobody else is allowed to share in that. Then it is a senseless exercise, and I don't think that is what stewardship is all about. (CS1-Q4: 60-67)

He went on to say that he and his stewardship official have got a very good understanding with each other, and an easy relationship in which they share information and resources on a continual basis. Annually, they take pictures and gather other information on the wild flowers of the area, in an effort to build a case history and manage that natural asset together. They have also started to plan future initiatives together, such as the eradication of aliens and the establishment of hiking trails.

This landowner summed up his relationship with the conservation agency by saying, "I really feel part of the team" (CS1-Q4:188–193).

### **4.3 CASE STUDY 2: GREATER CEDERBERG BIODIVERSITY CORRIDOR**

I shall now present the data from the second case study area, viz. The Greater Cederberg Biodiversity Corridor (GCBC). Please note that, to avoid repeating myself unnecessarily, I shall not provide descriptions of the headings under which the data is presented this time around – unless of course, it is to provide the reader with important contextual information they would not otherwise be able to infer for themselves.

#### **4.3.1 Stewardship**

##### ***4.3.1.1 Application of the concept***

###### ***Stewardship Coordinator***

The stewardship coordinator of the GCBC made the following distinction concerning the ways in which the stewardship concept gets applied in the area:

Here in the Cederberg area, we have the Corridor concept and here we use the stewardship methodology in the broader sense. When you talk about stewardship in

the broader sense it means the same thing, but when you talk stewardship as the conservation agency applies it, it does have a slightly different meaning. (CS2-Q5:5-9)

In the Corridor concept, stewardship is just one of the mechanisms you use, you can also use EMP's with industry engagement, how do you deal with [the Department of] Agriculture to get their involvement, how do you involve your children to get the next generation to think differently, how do you create that ownership, how do you deal with farm workers with a lower literacy level, so you can see the challenge where you have different audiences and because you work on scale. You have to adapt to that. (CS2-Q5:15-19)

The coordinator explained further that in their area, they found using “a three- or four-pronged approach” was the most effective way to really have an impact on the community. If you only make use of biodiversity stewardship, you end up with an ‘island effect’, where the focus lies only on those areas which are deemed important to you.

To prevent this from happening, stewardship officials in the area started to look at the productive landscape. They brought in Environmental Management Plans (EMP) and Best Practice policies for the different industries. Then they set about to improve the conditions of the farming community as a whole, e.g. by introducing integrated pest and water resource management schemes, and by improving the farm labourers’ living conditions. The main success of this approach, they found, was that if the landowners were unsure about signing “their land away” to the CNSP, the officials could offer them an EMP – assuring them of the conservation agency’s assistance in improving the environmental practices of the farm – as a way to start building a mutually-beneficial relationship between the two parties concerned. In the coordinator’s words,

Translated from Afrikaans> When we talk about stewardship in terms of the landscape, we talk about its wider objective and function, where you engage with landowners to work on their behaviour change, wise use and all of that. Actually we do apply stewardship in both these ways in our area: the methodology as the conservation agency uses it, and then there is also the wider landscape-scale approach, where stewardship is just one of the tools in the toolbox. (CS2-Q5:258-260)

### ***Landowner***

When I asked landowner CS2-Q6 about how he sees the CNSP being applied in the area, he confirmed that the officials adopt a landscape-scale approach to conservation issues, and he agreed that this method went a long way toward explaining the success of its implementation in the GCBC.

He also told me that this approach made it easy for the landowners to incorporate the concept of conservation into their broader understanding of social development occurring in the area, as they already had their heads around this greater concept, and only had to be shown exactly how biodiversity conservation fits into the bigger picture.

#### ***4.3.1.2 Practices and methods (relationships/partnerships/approaches)***

##### ***Stewardship Coordinator***

Stewardship basically took the place of extension, but extension always had an agricultural focus, but now the conservation agency just gave it a biodiversity focus (CS2-Q5:25-26). Previously extension was much looser and more about talking, where now we want to secure something with a contract. From a biodiversity point, we are losing it so fast, so to fix it in an agreement is now our only mechanism to try and conserve that biodiversity. In other words, we are doing biodiversity extension. (CS2-Q5:258-260)

I also asked the coordinator about the links between corridor creation and stewardship practices, and she said that the idea of the corridors is to create a space where plant and animal species can live, roam and migrate freely, without the threat of human interference. She pointed out that because they are working within an agricultural landscape where so much of the land has already been ploughed, biodiversity stewardship serves as a means to secure those pieces of land which are still salvageable; a vitally important first step on the way towards the creation of biodiversity corridors (CS1-Q5:49 – 51).

### ***Landowner***

The landowner had his own interpretation of the stewardship process, and how it got introduced into his farming practices:

<Translated from Afrikaans> Yes, but it was unknowing, the process as it happened to us. I'm 100% sure it was not planned in [the way that it happened]. In other areas, they target this individual and that individual very knowingly, and that is the difference. With us the constant dialogue, communication, and the relationship which had been there all the time, basically just carried on into an extension of our already-existing situation. That for me is the most important aspect of them all, there has to be a clear process through which this thing grows, and there have to be relationships built. These things can't just happen overnight. You can't walk onto a landowner's farm and after talking to him for an hour and throwing some pamphlets at him, think that is it accomplished. (CS2-Q6:120–127)

#### **4.3.1.3 Objectives and outcomes**

##### ***Stewardship Coordinator***

According to the stewardship coordinator, there are very definite goals which the CNSP wants to achieve in terms of its conservational practices, and then there are also additional objectives resulting from their "landscape-scale stewardship approach". She explained these as follows:

<Translated from Afrikaans> I think what the fine-scale planning showed us is that the critically endangered and endangered ecosystems lies far outside of our formally protected areas, so there was even more of an impetus to bring these areas under conservation, because we were losing them like nothing else! There is a definite need for stewardship in the area, [both the broader methodology and the CNSP as we know it]. (CS2-Q5- 245 – 249)

The additional objectives point more towards the social interpretation of the stewardship programme. Stewardship equals guardianship, and even if all that a farmer does is recycling, that is still stewardship, and a step in the right direction. (CS2-Q5:136-136)

And a very important point to always remember: when working with stewardship, landowners desperately need "the others" to understand where they come from, and they need credit when and where they deserve it. (CS2-Q5:141-142)

The stewardship coordinator also told me about the the Biodiversity and Business Initiative that were piloted in the Sandveld and Cederberg areas, which she believes was an enormous outcome of the BSP:

Our expectation was to only get 20 landowners to be part of the Best Practice programme, but now there are already 35 landowners for each Industry, and they have taken it further, saying that they want to look at sustainability...

To me, the biggest achievement is the way they responded to the document which was developed for them. They don't see it as a static document, they know it has to evolve. This means they have got a real understanding of the issues...

I think you should rather refer to outcomes than outputs, and then better resource management on the part of landowners over time, and changes in their attitudes and behaviour, would qualify as your outcomes. (CS2-Q5:476-480)

#### **4.3.1.4 Capacity constraints on the conservation agency**

##### ***Stewardship Coordinator***

The stewardship coordinator had a strong suggestion of how to overcome the initiative's capacity problems, saying that conservation is everyone's responsibility, not just the conservation agency's:

The only time when we can say [the job is done], is when everybody in the world out there has been informed about [conservation], and all share in that common goal...

[But, in terms of the specific capacity problems we face,] we definitely have not got enough capacity to get to all the landowners. The way I see it, to keep myself positive, is to think that we are only busy planting a seed, which will grow the conservation message further over time... Conservation thinking must become everybody's thinking. (CS2-Q5:131-135)

Another method the coordinator said they used to secure the involvement of the "reactive" landowners, i.e. those who were not listed as priority cases,

...was to use the Area Wide Planning mechanism, as we realised that you will never be able to build whole corridors only with the stewardship approach. There is a substantial cost linked to that approach as well, as you need the capacity to maintain those stewardship sites, and we definitely don't even have enough capacity to get to all of the already-existing stewardship sites. (CS2-Q5: 273-276)

#### **4.3.2 Environmental Capital**

#### **4.3.2.1 Historical environmental understanding**

##### ***Stewardship Coordinator***

There is also a whole history behind where farmers come from. In the past they were always told to farm big, and now we promote the exact opposite, and we want them to stop halfway through their farming practices and suddenly farm more sustainably. If they could only see this request in context. Then we had more resources, where today we are depleting the few resources which are left. And if we want to leave something behind for the next generation, we have to start farming differently. But they have to understand the principles behind this. They also need to understand that we don't say these things just to irritate them, but we are looking out for their sons and daughters – the message of succession. (CS2-Q5: 143 – 149)

The stewardship coordinator explained this phenomenon – of a community's environmental practices being born of their history of interaction with their natural surroundings – by telling me about two small farming communities in the Cederberg mountains, Algeria and Wuppertal.

Half of Algeria's community have worked for conservation all their lives – and when it came time to implement the CNSP in their area, they immediately put half of their land under conservation agreements reached with the conservation agency. Whereas Wuppertal's community, who have had no history of environmentalism, at first were non-committal about the CNSP, saying that they wanted to think about it.

##### ***Landowner***

The landowner had the following to say about how his particular environmental history had influenced his experiences of the CNSP:

<Translated from Afrikaans> Actually it was very easy for me, as I grew up in these mountains, and everybody was always telling us how lucky we are to have had that opportunity to grow up there. My child will be the 8<sup>th</sup> generation on this farm. This farm has been in our family from 1820, and all the [N.'s] in the Cederberge have grown together and walked a road with the conservation agency. So the people and the environmental organisations had their share of clashes about some of these issues, like leopard conservation, but to a certain extent it was actually easy for us to grow into this thing called Biodiversity Conservation, over time. (CS2-Q6:5-11)

#### **4.3.2.2 Current environmental understanding**

##### **Stewardship Coordinator**

<Translated from Afrikaans> That is the challenge within the social sciences – how to quantify the change in attitude of a farmer who initially says to you, “Stay away from my farm or I’ll shoot you,” to where he phones you up and requests that you come and see him on Friday... If only we could determine this, but there is no clear answer, it is very difficult. (CS2-Q5:11-12)

When a landowner starts to see other economically viable options and show an interest in these, then you know you have made a difference with your energy and the message you spread. (CS2-Q5: 230 231)

##### **Landowner**

When asked about his current environmental knowledge, the farmer reiterated the fact that he has had a long and keen history of working with conservation agencies, and that his knowledge of the inner workings of programmes such as the CNSP is good.

#### **4.3.2.3 Impact of the stewardship programme on this understanding**

##### **Stewardship Coordinator**

<Translated from Afrikaans> What you need to understand is when you talk about stewardship’s global definition, you can pull it apart and say, “Inside stewardship, one of these tools which could be used is education and awareness.” You can follow the compliance route, and you can follow the legislation to the tee, but that won’t change people’s attitudes and their behaviour. And the whole idea behind the corridor concept (and ultimately also with the CNSP) is to change people’s minds, because at the end of the day what we are trying to do is to establish that focus – that paradigm shift. We try and give these landowners as much information, opportunities and incentives, to get them to change their attitudes...

The other mechanism we also make use of, is peer pressure. Get the one landowner who has already made this mind-shift, and use him as a tool to get the other landowners to understand what it is all about. (CS2-Q5:23-24)

##### **Landowner**

I am not a bunny-hugger, and I believe that balance is the most important factor, when we talk sustainable development...But [the conservancy agency responsible for the implementation of the CNSP] are a very dynamic bunch of individuals, and we constantly keep each other on our toes by asking: “What’s next?” We really like to expand our efforts all the time. If it wasn’t for the CNSP exposing us to new

things, we might have only gotten to that point in five years' time. Exposure is a wonderful thing. (CS2-Q6:14-16)

#### 4.3.3 Knowledge creation/Learning processes

##### **4.3.3.1 Institutional strategies**

###### **Stewardship Coordinator**

When asked how they go about achieving the participation of as many role players and institutions in a specific project area during the implementation of the CNSP as possible, the coordinator answered as follows:

<Translated from Afrikaans> You use various structures. For example, for the corridor, you have to have a steering committee that you put together, consisting of all the Government Departments, community representatives, and landowners. But again, to ensure participation and collaboration in the local context, like for example the Sandveld, there you don't necessarily want to create a new structure, so you see what is already existing, where do all the people go to – is it the water user associations, is it the farmers association – and then you get in there and get your message across to them.

In the Cederberg you have the Cederberg Conservancy, and half of the mountain's families belong to that already, so you utilise that structure which is already created and working. In Wuppertal, the church is the structure to use. That would be where you target those landowners. Thus, the main message is use the structures which has already been set up and working well in that context. It is very difficult to create a new structure and then your timing must also be a 100%. Rather approach people during the week than over weekends. (CS1-Q5:436 443)

The approach proven to work the best, in creating a knowledge capital that might possibly lead to an understanding and a behavioural change include,

...the one-on-one's where you have a direct intervention with the landowners. You have to have a very good understanding of the context, the area in which that farmer lives. You have to do your homework to understand what the threats to that community are, what their social issues are. (CS2-Q5:363-367)

Because remember, if you talk about stewardship, you talk about negotiators, and if you talk about negotiators then you have to understand people and you have to be able to read them, and to respond to their situations. (CS2-Q5:222– 223)

### ***Landowners***

The landowner replied that the main educational strategy he uses is to host open days – where he invites the supporters of the conservancy and their friends, and businessmen of the local area as well as all their farm workers to his property. With the help of the agency, he organises speakers to talk about interesting subjects, and runs a practical session, where everyone gets involved in activities aimed at providing people with the chance to mingle in a different context – e.g. “We put the local bank manager together with the tractor driver in one team, and they have to walk and talk and exchange ideas” (CS2-Q6:159-162). Speaking about (what he perceives to be) the successful nature of these open days, the landowner said

En dis so waar as jy nie daai regte ruimte skep vir die ding om te gebeur nie – dan gaan hy net vou.

<Translated from Afrikaans> And it’s so true, that if you don’t create the right atmosphere for [the learning process] to occur, it just folds. (CS2-Q6:130)

The landowner also told me how, through his family’s own conservation efforts and with help from the CNSP, they have enabled their farm workers to become active in the gathering of field data, by involving them in weekly hikes taken with the local conservation field guide. The landowner commented on the noticeable difference this has made to these individuals’ understanding of environmental issues:

<Translated from Afrikaans> See how beautifully the [the conservancy ideal and the local community members] now hold hands – now interest is coming from my people, because they have been empowered to do such work and make certain managerial decisions on my farm. And it gives me great pleasure to go and tell one of my men “Thank you” for seeing this or that, because that knowledge leads me to make an important decision about some or other aspect of my farming practices. Now he feels great and is boosted again, and tells his friends about what he has learnt, and in this way you reach more than just one individual. (CS2-Q6:140 -142)

#### ***4.3.3.2 Types of information/Levels of information***

##### ***Stewardship Coordinator***

A prime feature of the way the conservation agents in the GCBC area try to convey the conservation message to local farmers, is to explain to them the interdependence between their land and their productivity; that the environment underpins their economic activities. They focus on 'ecosystem services', and remind farmers that they can't farm productively if their soil isn't fertile, if they have no water, or if their pollinators disappear.

In the words of the coordinator, "To try and reach them straight from a conservation angle is like suicide. You can't talk birds and bees unless you can connect it to something that they are invested in" (CS2-Q5:65).

### ***Landowner***

According to the landowner, the most important aspect of the "knowledge creation" being undertaken by the CNSP, is the development of Environmental Management Plans (EMPs), and the implementation thereof.

To be successful, farmers need to maximise the utility of their properties, and in order to achieve this, they have to work *with* their environment, and not against it. However, since farmers do not necessarily have the requisite environmental knowledge, they need the conservation agency to assist them with the drafting of EMPs (CS2-Q6:33-32).

### ***4.3.3.3 Educational method(s) leading to reflexivity***

#### ***Stewardship Coordinator***

<Translated from Afrikaans> I still think that the multi-pronged approach is the best, because not everyone learns in the same way. You get the individual which reads faster, then there is the man that is visually stronger and wants to go outside more, and then you get the farmer who wants to do his own research about a subject before he makes a choice. So I don't think you must stop raising awareness in your community, but you have to do some background work to determine what will be the most successful method for you to get the message across.

I still believe pamphlets are a good way to get your foot in the door, and we have had very good feedback about the ones we use. But what we always say, if you are going to use a pamphlet, you'd better make sure that people are going to read it. You can also become subtle about the type of info you want to include, the colours, the photos, and never give too much info as that will lead to overload.

But in essence we all have a core function written into our KPA's, that every day we have the responsibility to educate and raise awareness amongst the public of South Africa. (CS2-Q5: 281-294)

The multi-pronged approach used in the Cederberg views stewardship as a good starting-point, to get the "conservation conversation going with the landowners." After this, follows a discussion of best practice. Thus, even if the landowners don't want to enter into a formal stewardship agreement and sign up to the methodology it entails, they might become interested in using the best practice methodology on their farms. In this way, the conservation officials are provided with more than one method of communicating their message to the landowners (CS2-Q5:341–344).

### ***Landowner***

<Partly translated from Afrikaans> The chairperson of the Cederberg Conservancy went to the Northern Cape as an advocate on behalf of the Western Cape Stewardship Programme, to talk to some of the landowners who were not so comfortable with this stewardship concept yet. According to him, the conservation agency did not use the right approach when they initially targeted the landowners of this area. They stormed in and bombarded them with this very daunting stewardship monster, and the farmers just closed up.

Then the conservation agency asked the Cederberg Conservancy representatives to go and talk to them. After only 10 minutes, they started asking more questions about their conservancy movement, and not one question about stewardship. The stewardship officials were disappointed with the evening as they thought it was a huge failure as no landowner wants to sign up to their program, whilst the chairperson thought it was a major success.

The fact of the matter is that landowners will not respond to something if they don't feel comfortable about it. And this new group of landowners needed something which they could feel comfortable with, like the idea of a conservancy. After this, one can start to set goals of a different kind and introduce new concepts. The chairperson from the conservancy admitted that they also did not believe in each other immediately, and it took a lot of time before they got their conservancy up and running smoothly. (CS2-Q6:81-91)

#### ***4.3.3.4 Contextual dynamics***

##### ***Stewardship Coordinator***

The stewardship coordinator could not stress enough the importance of context to the operations of environmental conservation initiatives:

<Translated from Afrikaans> Again, if you take the example of the Cederberg, where conservation and agriculture go hand-in-hand, it would not be funny or strange to stand up in front of everybody and talk about conservation.

But in a different context and a different community, you would ostracise yourself if you stood up and spoke about conservation to your fellow farmers. If there is no communal practice, then social learning won't take place.

We have to be aware of the hierarchy in the community, because a lot of times, once you have convinced one farmer, the rest will follow. If you can get that influential farmer to champion your case, it is just so much easier to go to the next landowner and state your case.

These are all the little things you have to be aware of when you approach a community. (CS2-Q5: 373-380)

### ***Landowner***

An example of a very dynamic and proactive community was given to me during my interview with the chairperson of the Cederberg Conservancy.

He said it took quite some time to come up with a clever plan to ensure that their members remained active conservationists. What they ended up doing was to lump everything together, a kind of "one-stop-shop for the farming community", providing them with information on farm safety, forklift training for workers, clinics and fire associations, as well as information on conservation issues.

They even wrote their own waste management strategy, which was so successful that it has been adopted by the Clanwilliam and Ceres Municipalities. Speaking about this development, the chairperson said

Ons het een aand lekker saam gebraai en toe se ons vir mekaar ons moet eienaarskap vat van hierdie grond, dit is nie iemand anders se grond nie dit is ons sin, ons moet eienaarskap vat, dis ons situasie, ons pyne, ons erfenis ons kinders sin, dit word geleen vir ons, kom ons staan saam en doen dit - neem leiding. (CS2-Q6:98-110)

<Translated from Afrikaans> We had a nice evening together, and *braai*ed together, and told each other we must take ownership of the land – that is not someone else's

land, it is ours – it is our situation, our responsibility, our heritage and our children’s, and we must stand together and take charge of it.

#### 4.3.4 Reflexivity

##### **4.3.4.1 Structural Factors**

###### ***Stewardship Coordinator***

The Best Practice initiative was conceptualised as a pilot project, aimed at testing whether EMPs could be successfully implemented on farms, and whether or not the different industries in the area would embrace them (CS2-Q5:87-88). The ultimate goal of this initiative is to achieve sustainability in the most far-reaching sense of the word – that is, including measures taken to improve the social conditions of farm labourers, such as their level of qualification, employment prospects, etc. In this broad conception, biodiversity conservation is just one of many initiatives undertaken in the interests of social change.

An example of this more holistic approach to sustainability is the Rooibos industry, which is in the process of changing its name to Right Rooibos, and adopting the slogan “People, Planet, Profit”.

The stewardship official said

So much of the work we did laid the foundation which brought those changes about...If you want to measure changes in attitude, then just look at how things have changed, from an idea 4 years ago, to now, where industry is embracing biodiversity with their production and their marketing. (CS2-Q5:99-105)

##### **4.3.4.2 Reflexive deliberations (internal conversations)**

###### ***Stewardship Coordinator***

A very important aspect of reflexivity, which needs to be taken cognisance of during the implementation of the CNSP, is that it is not only the landowners who should undergo a mind-shift on certain issues. The conservation officials and their agency members must

make a similar effort, in order to understand the landowners, where they come from, their contexts, and what makes them act in the way they do.

As the stewardship coordinator reported,

<Translated from Afrikaans> A lot of the time the conservationists think that they are only in this game to teach and not to learn, and this is a very dangerous mindset. [Sometimes] we as conservationists think that we are so important, and that the others can be so lucky that we appeared on their doorsteps to come and speak to them.

But then it strikes you that there is so much indigenous knowledge in those communities, and how much of that knowledge we actually use later again, and how in this way we learn from each other, together.

There is nothing more disempowering to be told what to do! And just think about it, if we appear on a farmer's doorstep and start telling him what to do, that is the wrong approach altogether. Conservationists are sometimes very arrogant, but sometimes you talk to a landowner and you'd shriek if you realise how much knowledge he has, and he doesn't even realise it. I think it is all about shared learning and sometimes we totally underestimate the value of it. It comes with experience. (CS2-Q5:385 -395)

### ***Landowner***

The landowner confirmed the importance of reflexive deliberation to the processes of social change, by identifying it as a key element of the successful conservation initiatives that he has been involved with in his past.

Ja maar dit was onwetend – die proses soos wat dit met ons gebeur het ne, ek is 100% seker hulle het dit nie so beplan nie- dat Bewareas oorgaan into Stewardship – in ander areas target hulle hierdie en hierdie ou heel eerste en hulle doen dit wetend – en dit is die verskil – onwetend by ons het die dialoog wat heeltyd daar is, die kommunikasie wat heeltyd daar is, die verhouding wat heeltyd daar is, het gemaak en gegroei asof dit `n normale storie was, maar nou gaan hulle en hulle gaan target die ou onmiddelik nou om hulle targets by te hou. Dit werk nie so nie – jy kan nie net instap op sy plaas en se ek raak nou saam met jou baas op jou plaas en ons gaan dit saam bestuur nie – en so `n arme nuwe siel gaan mos totaal overwelmed voel – Dus moet jou tydaspek en die groei saam is absoluut integraal vir die sukses daarvan. Staan `n tree terug en doen die ding eerder stadig as wat jy in dit in jaag en almal afskrik. (CS2-Q6:120-127).

#### **4.3.4.3 Reflexive competency (agency)**

##### ***Stewardship Coordinator***

The stewardship coordinator provided some very valuable insights concerning reflexive competency in the stewardship process. She was very clear that there are different levels of change, and one should not be disheartened if you don't see any change happening overnight. Time and patience are two important virtues which stewardship officials need to adopt. Moreover, she demonstrated remarkable self-awareness, by informing me that her practical experience has taught her that her efforts and energies are directed towards laying *the foundations* of a community's knowledge base, and that she might not be part of the completed product one day. She used the example of the Sandveld initiative, viewing her role in the raising of environmental awareness there as the planting of the "seed" from which, one day, meaningful social change will spring. In her words, "Now all you have to do is wait for the water to make the trees grow" (CS2-Q5:403-409).

The stewardship coordinator also described a new term, "adaptive management", to me during our interview. To my mind, her description of it could just as easily be applied to the term "reflexive competency":

When you get to a wall, and you're supposed to do something or change your way of thinking to enable you to go around the wall, well, sometimes we walk straight into the wall, because we just don't have it in us to change and move around this obstacle. Sometimes it is just too difficult to acknowledge that someone else has an opinion which differs from yours. This comes back to emotional intelligence: when you hear something which shakes your foundations, or is so totally different to your own beliefs, then you have to do some self-evaluation, go back and learn, and then go back to the farmer and tell him that you have taken his way of thinking to heart. I don't think we do enough of that self-evaluation, which forces us to go forward, make some progress and learn from each other. (CS2-Q5:403-409)

The following was another enlightening comment made by the coordinator, concerning the CNSP's approach to social learning in the GCBC, and how – since they are impacting on people's lives – it should be seen as a very serious task:

Dis die ander baie belangrike sy van learning wat ons binne die sector moet beginne aanpas, want net soos ons verwag van daai boer om 'n mindshift te moet maak,

moet ons in die conservation business dieselfde shift maak, want dis nie net meer bytjies en blommetjies nie maar dit is mense se lewens waarvan ons praat en ons moet dit respekteer! (CS2-Q5:153-156)

<Translated from Afrikaans> This is the other very important side of learning which we need to consider in our sector. Just as we expect those farmers to make a mind-shift, we also have to make a similar mind-shift.

We need to realise that we are not only talking about birds and bees, we are talking about people's lives, and we need to respect that.

### ***Landowner***

The landowner also shared some wise words about how deliberation and self-examination have influenced both his perceptions and his actions over the years:

Maar weet jy ek dink dit kom met ondervinding, dit is vir my hoe ouer `n ou word hoe meer sien jy ander goed raak, dit het vir my baie met sosiale blootstelling te doene. My fokus het so geskuif van waar ek was tot waar ek nou is. In die ou dae sou ek my nie gesteur het aan iemand wat vir my kom vertel het hoe en waar ek my goed moet oprig op my plaas nie, nou dink ek twee keer oor elke dinge en wonder tog waar sal die beste wees vir my grond en my plaas om dinge te sit. Jy sosialiseer en jy groei na goed toe en dit is wat die verhouding maak werk. Jy gaan kry blootstelling en leer by die ander ouens hoe doen hulle dinge. (CS2-Q6:241-245)

<Translated from Afrikaans> I think it comes with experience, the older one gets the more you see the value in other things, and I think it has a lot to do with social exposure. My focus has shifted from where I was to where I am now. In the old days, I would not even have considered any advice from anybody who tells me where and how I am supposed to do things on my farm. Now, I actually think about these suggestions, and wonder what would be best for my land and my farm. As you socialise, you grow, and that is what makes relationships successful. You get exposure and learn things from other people.

## 4.3.5 Community of practice

### ***4.3.5.1 Participatory methods***

#### ***Stewardship Coordinator***

The coordinator said that it needs to be clarified that, with the implementation of the CNSP, the conservation agency is not looking to manage the landowner's farm on their behalf. The

stewardship contracts are based on an agreement of co-management of certain tracts of land, for a certain period of time.

Instead, what the conservation agency *really* wants to achieve, is to educate landowners to the point that *they themselves* can assume the responsibility of biodiversity conservation on their properties. As the steward coordinator said, every time she has concluded a meeting with one of the landowners involved in the CNSP, “ when I walk away, I want to know that I don’t have to be worried about the choice that he makes if I’m not there. I want to know that he will make the right choices.” (CS2-Q5: 413-419)

Therefore, the conservation agency advocates a strong ‘partnership approach’ in their implementation of the CNSP. According to the coordinator, if there is an understanding between numerous parties that each are responsible for, perhaps, 20% of the work that must be done, it makes it much easier to achieve the ultimate goal of sustainable land use management in the area. Apparently, this is especially true of the Best Practice approach – “That if someone comes to you and says ‘Let’s do this together’, it makes it so much more attractive to participate in managing productive landscapes.” (CS2-Q5:476 – 488)

#### **4.3.5.2 Other farmers (refer to footnote 11)**

##### ***Stewardship Coordinator***

The coordinator spoke about the reality of “peer pressure” within a community, and she admitted that there are definitely negative connotations attached to farmers who are seen as ‘environmentally aware’, and who practice these beliefs on their farms. For any farmer to stand up in a farmers’ association meeting and admit that he is pro-conservation, takes a lot of bravery and commitment. She also said that people are social creatures who don’t like to be the “odd one out”, and that she has learned to be aware of this fact before entering an area and expecting too much of the landowners when interacting with them as a group. (CS2-Q5:178 -182)

The stewardship coordinator also emphasised the influence that broader community feeling has on individuals, both in terms of their attitude towards environmental issues, and their ability to learn from one another:

The Sandveld is a very difficult place to 'get into'. Each farmer really just keeps to himself, with no broader community feeling of sharing and learning together. Then you get the Cederberg which is the direct opposite, where everyone knows everyone and they *braai* together on Saturdays and they have a very active conservancy movement going on. [In the Cederberg], there is definitely the sense of a community with a shared vision of conservation.

I think it is those things that you should consider when you want to weigh up the success of a project. (CS2-Q5:183-185)

As an example, she said you can take an idea and apply it in the Cederberg context, and it will be a huge success. And then you can take that same idea, and try and implement it in the Sandveld, and it will be a total disaster. Thus, the implementation strategies of conservation officials must be determined by the specific social context of the communities involved. (CS2-Q5:189-191)

#### **4.3.5.3 Other stewards**

##### **Stewardship Coordinator**

<Translated from Afrikaans> In the Cederberg there is a definitely a community participation feeling. Conservationists work together to show the landowners that our approach is coherent and directed. (CS2-Q5:355 356)

##### **Landowners**

The chairperson of the Cederberg Conservancy told me about the establishment of his organisation:

The outside role-players looked at the start of this community structure and they did not give it half a chance to survive in the province – no, I mean in the whole country... But, I must say, that it was the first time in 300 years that all the people from this area sat around one table. This in itself was already such a huge success, and everyone just wanted to know how we got it right, in this area -- which has been known for a lot of fighting and disagreeing over the years. (CS2-Q6:19-24)

He carried on, telling me how conservation agents are now enamoured with the community structure that they developed. He told me that, on average, the land owned by farmers who attend their conservancy meetings represents 97% of the property area of the Cederberg, and that these farmers seem to be genuinely committed to the cause:

We have 19 landowners and they are so positive about this, that if one of them would miss the quarterly meetings, they will phone that same afternoon to find out what happened and when the minutes will be distributed.

#### **4.3.5.4 Other Government Departments & Conservation Agency**

##### ***Stewardship Coordinator***

The stewardship coordinator referred to the way in which the GCBC stewardship program has purposively used the cooperative governance structures that have been established in their area, to help them practice conservation in a collaborative, effective way. Previously, each one of the government departments (the DEA, DWA and DoA) had to go out on their own and attempt to communicate their conservation message to the local communities, where now it all gets done as a joint venture. This community of practice certainly enhances the profile of the conservancy message in the area, to the point that even the landowners can't believe the unity and cooperation that exists between the various role-players:

Nou met die shift in extension en bewaring gaan al drie Departemente, Landbou, Natuurbewaring en Waterwese op dieselfde tyd na die boer toe en so word hy nie meer gebombardeer deur elkeen individueel nie. Nou ook is die verskil dat wanneer Natuurbewaring bewaring praat, word dit ondersteun deur Landbou en wanneer die ou praat van volhoubare landbou word dit ondersteun deur Waterwese en Natuurbewaring, en wanneer Waterwese praat oor efficiency van water word dit ondersteun deur Landbou en Natuurbewaring. Dus wanneer jy kom as 'n eenheid na die landowner, dan bring julle 'n gesamentlike boodskap en praat dieselfde taal. (CS2-Q5:150-156)

<Translated from Afrikaans> Now, with the shift in extension and conservation, all three Departments, Agriculture, Conservation and Water Affairs go to a farmer together which means he does not get bombarded by every single one of the officials separately. And a new change in spreading this message is also that when Conservation talks, Agriculture as well as Water Affairs support this message, and when Agriculture talks about sustainable agriculture, Conservation and Water Affairs in return support this. And when Water Affairs talks about efficient water use it will

be supported by Agriculture and Conservation. Thus it means that a landowner will now get approached by a uniform message, talking the same language.

The stewardship coordinator further said that, in her opinion, collaborative extension is the only way to go for the CNSP and other government-sanctioned environmental initiatives – all the interested parties need to work together to make sustainable environmental management a reality. (CS2-Q5:159-160)

### ***Landowner***

According to the landowner, the conservation agency played the leading role in the establishment of the Cederberg Conservancy – after which, they promptly disappeared from the scene, and no longer attended the committee meetings. This caused the Conservancy to start making decisions without their input.

In the landowner's view, this strange course of action can be explained by capacity problems within the agency. The landowner referred to the situation as "problematic," and interpreted the agency's absence from the meetings as a sign of non-interest on their part. However, reflecting on this state of affairs, he said

Maybe this is what the conservation agency are looking for, to let the Conservancy take responsibility of our own future, and just have the agency as another member on the committee, who can advise us when we need their expertise." (CS2-Q6: 172-180)

## **4.4 Summary**

In this chapter, I presented the data collected from the interviews I conducted in my two case study areas. I made extensive use of quotations, and offered very little interpretation or analysis. This was done to let the participants 'speak for themselves', and to allow the reader to get a rich insight into the contextual complexities of the areas under investigation.

In chapter 5, I shall offer an interpretive analysis of my research data.

## **CHAPTER 5: ANALYSIS OF CASE EVIDENCE**

### **5.1 INTRODUCTION**

The reader is reminded that the purpose of this study is to generate findings that will provide a clear sense of stewardship as an emergent conservation education practice in the Western Cape.

In Chapter 4, I presented the data gathered from the interviews conducted in the two case study areas. In this chapter, I review this evidence, using the open-ended tenets of social learning to derive inferences (analytical statements) about the stewardship practice, collaborative learning interactions, the creation of an environmental capital through reflexive processes, and agency. I shall discuss each of these seven analytical statements individually, and I shall justify their conceptual relevance by referring to the evidence from the two case studies, as well as from the literature review presented in Chapter 2:

Case study work normally generates a great deal of raw data and a useful way of handling and trying to make sense of the data is analysis which seeks to condense them into meaningful statements. These analytical statements need to be firmly based on the raw data and give concise answers to the research questions. (Bassey, 1999, p.70)

My research question has directed my analysis of the evidence, in that I have attempted to comprehend the status of the CNSP as (i) a change-oriented practice with the main objective of securing areas in which vulnerable biodiversity is protected before it is lost for good, and (ii) as fulfilling an important educative role, in building an environmental knowledge capital and – perhaps – contributing to the development of a sustainability habitus in the communities in which it is implemented.

### **5.2 THE STEWARDSHIP PRACTICE IN THE WESTERN CAPE**

In the interviews with the coordinators from the conservation agency, a fairly tightly inscribed perspective was given by both as to the meaning of the stewardship approach. Contrary to this, the data reflects that:

**Analytical Statement 1: *The stewardship initiatives reviewed reflect plural approaches to the idea and diverse perspectives on the concept.***

In the Western Cape, the context in which the stewardship concept gets interpreted and then implemented is complex. Complications arise due to differing approaches to the concept – as these differences in approach result in the postulation of varying objectives for the programmes charged with the practical implementation of its conservation ideals.

This was clearly illustrated to me during my interview sessions, when the implementers of the various stewardship initiatives I interviewed all asked me to confirm “which stewardship approach” I was intent on investigating. This question was asked to confirm my awareness of the fact that more than one approach to the way in which stewardship is currently implemented in South Africa exists. Sections 4.2.1 and 4.3.1 of this thesis reflect these discussions in some detail.

Both implementers from “other initiatives” that I interviewed were quick to identify alternative approaches to stewardship, reflecting the differences in their objectives compared to the CNSP’s: “Other NGO’s for instance, also make use of stewardship, but that is in the broader sense of the word and [purely concerns] education.” (NQ1, see section 4.2.1.1)

The interviewee from the BWI was of the opinion that the broader, more informative and more extensive approach to stewardship that their initiative has been employing over the last couple of years, is much more successful in getting landowners to “understand” what stewardship is all about, than the tightly-focussed approach usually adopted by conservation agencies. (NQ2, See section 4.2.1.1)

To further test this theory, I looked at various international examples, to gain insight into how overseas stewardship initiatives interpret the concept. Section 2.2 of this thesis refers to four international examples, all of which seem to view stewardship as consisting of a much broader focus, and wide-ranging ideals of *general* sustainability. In this conception, sustainable land use practices and biodiversity conservation are but two of many important considerations in the whole process of social change.

Therefore, my data seems to indicate that the CNSP has got a very focussed approach to stewardship, when compared to both other conservation initiatives in South Africa, and international stewardship projects. These latter parties conceive of stewardship as having an educational agenda, and being guided by the more holistic objective of ensuring “that we all live and develop as part of nature, valuing the diversity of life, not taking from our natural resources more than we can replenish, and leaving future generations with at least as rich an environmental heritage as was bestowed to us” (See section 2.2).

An official from the WWF, who in the last decade has played an important role not only in the practical development of stewardship in South Africa, but also in the establishment of the various provincial Stewardship Programme`s, also contributed to this discussion. He is of the opinion that one`s approach to stewardship fundamentally depends on what you hope to achieve through its implementation. If, as with the implementers of the CNSP, one is seeking to secure critical biodiversity areas – because, after all, that is what ultimately quantifies one`s performance – then one will have certain procedures and methodologies to follow. If, however, one postulates social learning as an outcome of the stewardship approach, then one`s procedures and methodologies will have to adapt in order to be more reflective of this broader objective. (NQ2, see 4.2.1.1)

Hence, it seems as if there is a direct correlation between the interpretation/postulated objectives of a stewardship approach, and the procedures/methodologies used to implement it.

***Analytical Statement 2: Practices observed in the field do not directly correspond to the institutional procedures prescribed by the CNSP's operational manual***

According to my research data, there is a discrepancy between the procedures prescribed in the CNSP`s Institutional Operational Manual, according to which the programme should be implemented, and the way it actually materialises in the field (see section 4.2.1.2).

The two stewardship coordinators commented on this, as they are the ones who are confronted on a daily basis with the dilemma of the institutional expectations that are placed on them, versus the real-world opportunities that are provided. Even though the Institutional Operational Manual is very informative (see Appendix 5), it seems as though it does not fulfill all the needs of the implementers, all the time.

They suggested a range of additional procedures and practices to supplement the existing ones – these included the establishment of cooperative governance structures; the adoption of a broader landscape-scale approach; raising more awareness than is expected; and working with different generations and audiences, as this enables more learning to occur *within* the farming communities involved (see Chapter 4).

They further emphasised that the process of implementing the BSP must be kept flexible, allowing the *context* of each case to determine the methods that are employed. Here, the reader is reminded of my discussion with the stewardship coordinator from the GCBC, who claimed that a “three- or four-pronged approach” was necessitated by their particular context (CS2-Q5, see section 4.3.1.1). Furthermore, this notion is supported by the research of Reid and Nikel (2008), who claim that “different modes and approaches to participation in environmental learning are required, i.e. there is no single best approach for all situations” (p.33).

These two analytical statements, and the discussions thereof, have served to emphasise (i) the importance of understanding exactly which conceptualisation of stewardship (the general, or the specific) one wishes to implement, as this will directly affect the practices and procedures that one follows; and (ii), that although the CNSP has got specific objectives and firm guidelines laid out in its Operational Manual, the reality is that, in practice, sometimes the conservation ideal requires additional social interventions to ensure that its outcomes are met.

### 5.3 LANDOWNER'S CONSIDERATION OF THE ENVIRONMENT

**Analytical Statement 3:** *The evidence suggests that landowners' involvement in the stewardship programme has had a positive impact on their environmental attitudes and practices.*

Growth in the landowners' environmental understanding (environmental knowledge capital) was revealed by the case evidence to be a very important aspect of the implementation of the CNSP. All the landowners admitted that the CNSP had contributed to building an environmental capital in their communities, which had never existed before. According to Bourdieu (see section 2.7.2.2), an environmental capital also entails an understanding of the interconnectedness of social, cultural, political, technological and economic systems, in terms of the effect they have on the environment. This is for two reasons: firstly, because it is within these systems that sustainable initiatives will have their foundation, and secondly, because knowledge of the root causes of environmental problems is essential for real progress towards sustainable solutions (Bowers, 2000 and Fien, 1997, in Karol and Gale, 2004, p.6).

In this vein, landowner CS1-Q3 felt that the most important objective for the CNSP was to achieve "attitude changes" amongst the landowners involved, and that they should not worry so much about "the paperwork and the signatures of the landowners." He said that "individual victories" will not ensure the overall success of the programme, and that for deep, systemic change to occur, stewardship coordinators should focus on "changing the minds" of the farmers in the area (CS1-Q3, see section 4.2.1.3).

Petty (see section 2.7.2.1.) points out that a 'conservation attitude' can be seen as a general evaluation that people make of themselves, either as custodians or rightful owners of their natural resources. Some of the interviewees – tellingly, most especially those who were enthusiastic about conservation practices – revealed that they come from families who have through generations conceived of their natural environment as part of their heritage, and who have always seen themselves as "custodians" of this natural asset (CS1-Q3, see section 4.2.2.1). Thus, I believe that fostering *this* kind of conception of their relationship to

their natural environment could be the catalyst for leading farmers to embrace both the ideals and suggested practices put forward by the CNSP.

McDowell (as cited in Winter, 2003; see point 2.7.2.1) asserts that the guidelines for assessing an individual's 'conservational attitude' cohere around two considerations: (i) the extent of their understanding of general nature conservation principles, and (ii) their receptiveness to ideas and suggestions regarding their natural land. In most cases, I found that the landowners I interviewed were (i) knowledgeable about general conservation principles, and (ii) receptive to the CNSP's interventions on their properties.

Landowner CS1-Q2 admitted that it was his exposure to the stewardship project which stimulated his curiosity in the environment (CS1-Q2, see section 4.2.2.1), while landowner CS1-Q4 says that he "only started to realise what this [conservancy] business is all about" after the stewardship official had explained things very clearly to him (CS1-Q4: see section 4.2.2.1). Even the community group confirmed that their environmental understanding had improved as a result of their exposure to the CNSP, and expressed their appreciation of this fact as follows: "They helped us so much because we did not know anything about conservation before...and now things have changed so drastically" (see section 4.2.2.2).

Thus, it is apparent that the implementation of the CNSP in the case study areas is having a positive impact on the 'conservation attitudes' of the farming community members involved.

#### **5.4 HOW CONSERVATION EDUCATION IS UNDERSTOOD WITHIN STEWARDSHIP**

***Analytical Statement 4: The implementation of the CNSP in the case study areas is being (and should be) undertaken as an exercise in participatory learning.***

The two stewardship coordinators I interviewed told me that they had learned, through their practical experiences in the field, that the main difference between implementing stewardship as opposed to any other conservation education initiative, is that they have to

acknowledge that “people live in the landscape” which the programme is targeting, and – consequently – that creating an environment in which participatory learning may occur, is absolutely crucial to its success. One of the ways which they have found which works quite well, in fostering this kind of relationship between themselves and the landowners, is ensuring that the intentions and the conceptual bearings of the programme are clearly explained to the landowners during the initial stages of interaction (CS2-Q5: see section 4.3.3).

Reid and Nikel (2008, p.33) argue that different modes and approaches to participation in environmental learning are required, i.e. there is no single best approach for all situations. However, no matter how it is achieved, what is unarguable when one reflects on the research data is that participatory learning is an essential characteristic of social change. The theoretical underpinnings of this assertion have been discussed at length in section 2.7 of this thesis – for now, suffice it to remind the reader of Wenger’s important insight: that learning happens through interactions and observations that take place between people and their social environment, and comes largely from the individual’s participation in everyday life (1998, p.35).

Moreover, the data from the interview process constantly emphasises the need for “engagement” on the part of landowners with the various policies and practices of the CNSP. It emerged that although historically, landowners have been viewed as the “ugly stepchildren” in the conservancy initiative model, in recent times, it has become important for stewardship officials to realise that they are actually “very important roleplayers”, and that without them, “there is [no such thing as a] conservation ideal” (CS2-Q5; see section 4.3.1.2). It is worth re-quoting O’Donoghue at this stage, as he seems to provide an expression of this exact phenomenon:

Early conservation and education ideals were all about “getting to people” through communicative and media campaigns and extension. With the advent of a democratic state the approaches changed to “getting people together” to engage with diverse environment and sustainability concerns in a participatory turn. These more co-engaged approaches attempted to foster better ways of doing these things

in local contexts (collaborative extension and stewardship superseding earlier extension and communicative interventions). (2007, p. 139 – *emphasis added*)

Another extremely interesting insight, along these lines, was given to me by the stewardship coordinator of the GCBC:

A major challenge which the conservationists implementing CNSP and other programmes alike have to consider is that in the past conservation was conducted as a science which thought that there was only one right answer to anything, and that was our answer. All of the others were wrong. Now, within the Postmodern paradigm, there are multiple narratives, and also multiple truths and the sum of all these truths is the main truth. (CS2-Q5: See section 4.3.1.2)

Landowners need to engage with the CNSP in ways that promote participatory learning. However, in order for this to occur, conservation agencies first need to realise that their stewardship strategies must evolve to accommodate a Postmodern perspective, in which the landowners are treated as “equal partners” in the learning process.

**Analytical Statement 5: *Landowners identify stewardship as contributing to the development of an ‘environmental habitus’ in their communities.***

As described in the transcriptions presented in Chapter 4, there is a shared sentiment amongst landowners in the case study areas that the CNSP is succeeding in creating an environmental knowledge capital in their communities.

The landowners constantly referred to this knowledge capital when explaining their enthusiasm for conservation ideals and their accompanying land-use practices. By receiving “more and more information” from stewardship officials about their immediate biodiversity and surrounding environment, and how sustainable practices can serve to protect these valuable natural assets, they became more aware, and capacitated to change their perceptions and value-systems, and to decide on their own level of involvement in the programme. As Karol and Gale (2004, p.9) note, “through increased valuing of

environmental capital within all educational contexts, we believe both teachers and students have the potential to develop a habitus of sustainability.”

Moreover, Karol and Gale (2004, p.9) argue that the accumulation of environmental capital will assist people in understanding their personal complicity in environmental degradation, and hence what *they* can do to further the interests of sustainability. The example of the two community members who partook in the Nature Guardianship Course offered by the CNSP, and afterwards couldn't stop asking for more information to share with their community members, is an excellent illustration of this point (see section 4.2.3.2). Through their involvement in the course, these individuals were given the opportunity to become environmental advocates in their community, while at the same time, being encouraged to engage with new concepts, and to develop new skills.

Wals (1990, in Karol and Gale, 2004, p.6) develops this point further, by pointing out that knowledge alone is not sufficient for resolving environmental problems. In order for people to be able to *act* upon their knowledge – that is, to *create* an environmental habitus – they need to become acquainted with a variety of “action skills” (*ibid.*). When seeking to create an environmental capital, therefore, educational initiatives such as the CNSP should focus on the development of skills pertaining to action, such as communication skills, collaboration skills, decision-making skills, action-taking skills, etc. Landowner CS1-Q2 shared his experience of learning in this way:

The most important thing was that the course did not just consist of book-work, but we went out into the field and we experienced things out there. As we went out we developed more knowledge and skills. (CS1-Q2:65-66; see section 4.2.3.1)

Finally, the interviewees also suggested how the implementers of the CNSP should set about ensuring the continued growth of an environmental habitus in their communities – that is, by sharing their conservation knowledge and its related skills across *all* generations and social strata. The interviewees felt that the CNSP's message needed to benefit not just the landowners, but the entire farming community (including the labourers and their

families), in order for meaningful and lasting social change to occur. In the words of the Chairperson of the GCBC Conservancy:

See how beautifully the [the conservancy ideal and the local community members] now hold hands – now interest is coming from my people, because they have been empowered to do such work and make certain managerial decisions on my farm. (CS2-Q6: See section 4.3.3.1)

## 5.5 REFLEXIVITY AND CHANGE

***Analytical Statement 6: Learning about the administrative and legal processes of stewardship, as well as the emergent community responses to it, is part of a process of reflexive deliberation that is itself crucial to social change.***

The stewardship coordinator of the Upper Breede River was asked that if in his opinion, the stewardship approach had contributed to a better understanding of biodiversity and conservation issues on the part of landowners in the area, and if this knowledge capital had enabled them to pursue more sustainable farming methods. He responded in the affirmative, saying,

Definitely, if you speak to those landowners, first they did not know that there is value to the veld, now they know there is importance and they know that there are species there that are not found anywhere else in the world... Certain things like that, for us it might seem like general knowledge, but for them it is now something that they have been enlightened about. (CS1-Q1:279-284; see section 4.2.4.2)

Moreover, this process of reflexive deliberation is not something reserved for only one party in the stewardship relationship. The stewardship coordinators from both case study areas made constant reference to the importance of self-examination and reflection to their own practices – in terms of navigating the legislative terrain, incorporating biodiversity conservation into wider social aims, learning more about the context in which their operations are taking place, and fostering better interpersonal relationships with stewards and captains of industry in the area (see sections 4.2.4 and 4.3.4). In the words of the stewardship coordinator from the GCBC,

When you get to a wall, and you`re supposed to do something or change your way of thinking to enable you to go around the wall, well, sometimes we walk straight into

the wall, because we just don't have it in us to change and move around this obstacle. Sometimes it is just too difficult to acknowledge that someone else has an opinion which differs from yours. This comes back to emotional intelligence: when you hear something which shakes your foundations, or is so totally different to your own beliefs, then you have to do some self-evaluation, go back and learn, and then go back to the farmer and tell him that you have taken his way of thinking to heart. I don't think we do enough of that self-evaluation, which forces us to go forward, make some progress and learn from each other. (CS2-Q5:403-409; see section 4.3.4.3)

Wals (2007, p.38; see section 2.7.1.3) sees reflexivity as an important, but underused, human ability, and as a key aspect of transformative learning: "A reflexive society requires reflexive citizens able to participate in and contribute to processes of change." In his view, it is crucial that learning systems are reflexive – meaning that they must be both (i) willing to question existing routines, norms, values and interests, and (ii) able to provide learners with enough skills to change these existing thought structures if they choose to do so.

Thus, to my mind, the research data I have presented suggests very strongly that, (i) the implementation of the CNSP in the case study areas has resulted in the creation of a learning system that facilitates reflexive deliberation, and (ii) that some of the landowners have taken up this opportunity to partake in this learning system and now show a better understanding of biodiversity and conservation issues. The reflexivity has unfortunately not in all cases penetrated these landowner's practices yet and the transcriptions does not show landowners ready and actively pursuing more sustainable farming methods yet.

## **5.6 SOCIAL LEARNING AND HOW IT MANIFESTS WITHIN STEWARDSHIP**

***Analytical Statement 7: The evidence suggests that, in the case study areas, the practice of biodiversity stewardship is being adopted by emergent 'communities of practice' as a meaningful process of social learning and change.***

This final analytical statement was developed in relation to the fourth research goal of this study – "To develop a conceptual framework for the basic tenets of social learning, and to identify the characteristics that make it an effective educational approach." In the following discussion, I shall show (i) the conceptual inter-relation of these concepts (social learning,

stewardship, communities of practice), and (ii) how the case evidence suggests that – in the two areas I investigated – social learning is entwined with the implementation of the CNSP.

I shall make use of a sustained discussion of the ‘sequential moments’ (see section 2.8) which compose Wals’ model of social learning to give structure to my argument.

#### 5.6.1 A conceptual framework for the CNSP as an approach to social learning

***5.6.1.1 Orientation and Exploration: Identify key factors and issues of concern, and address them in a way that connects with learners’ prior experiences and background. (Wals, 2007, p.41)***

The Western Cape conservation agency has got a specific objective within their Biodiversity Stewardship Programme (CS1-Q1:11-13). The landowners identified to participate in this program need to be *oriented* (informatively adjusted), so that they can make the logical connections that will allow them to incorporate the new knowledge provided to them by the CNSP into their current frames of reference, and ways of thinking about their contexts. This activity requires exploration and orientation on the part of both the implementers and the landowners.

Currently, the conservation agency deals with this activity through the procedures outlined in their Operational Procedures Manual (Phase 1:3.1, pp. 14–20). According to the coordinators that I interviewed, the educational process, which includes aspects of orientation and exploration, underlies the whole stewardship programme:

If you talk to a landowner about his property and securing that, a certain level of education and awareness-raising has to take place.....and we as stewardship officials, play the role of agents of change. We are implementing how people see their environment and we facilitate change in their attitude and how they perceive their natural veld. (CS1-Q1:214 -220).

Seen from the landowners’ perspectives, the following explanation of an exploratory moment was given by Landowner CS1:Q3:

Even though they highlighted the whole farm as a conservation zone, and there were certain areas which they felt very strong about and declared it a no-go area, I had to include those into my productive unit. So our relationship was a mutual

action from both sides and we grew and learnt together. Stewardship certainly brought me closer to the conservation agency, and the fact that they said no to my development intentions, forced me to open up to them. (CS1-Q3:123-126)

**5.6.1.2 The raising of self-awareness and deconstruction (deframing): Become conscious of one's own understanding of the issues or challenges identified, and learn about alternative understandings through discussion, clarification, and dissonance.**

After the 'orientation and exploration moment' of social learning, another moment follows concerning the raising of self-awareness amongst learners. According to Wals (2007, p.41), this refers to the time in the learning process in which the learner (in this case the landowner), *grows conscious of* their own position regarding the "new issue or challenge" that they are being confronted with.

Landowner CS1-Q3 described his experience of this process:

Initially the stewardship official and I were at loggerheads about his stewardship idea. But I am very open to change, and the more we met and he explained his side as to why they are so serious about certain areas on my farm, the more I started to see where they were coming from. Only then I started to realise that it is not only about the tortoises and the birds, but there are loads of plants which are also very sensitive, and important...And only then, after all this information was made available to me [and I could see the role I had to play], was I satisfied. (CS1-Q3:298-302)

Kaufman and Smith (1999, as cited in Wals, 2007, p.40) assert that becoming conscious of one's own frame of reference, deconstructing this frame, and then "reframing" in the light of new concepts and new knowledge, are the central steps in the transformative learning process. People can become so stuck in their existing epistemological frames – their ideas, opinions, ways of looking at the world, ways of interpreting reality – that they fail to see how these frames colour their judgement and their social interactions, and, as a result, they often become "closed off" to learning about new ideas.

This reflects a very important, maybe the most important, aspect of social learning – that people need to transcend their individual knowledge structures, in order to reach a place where they are engaged with others in a *shared understanding* of the issues at hand, and are thus empowered to *work with them* on finding solutions that will benefit all parties involved (Wals, 2007, p. 41).

A crucial first step in social learning is “*becoming aware*” – growing conscious – of one’s own frame of reference, and how it relates to others’. Thus, if the implementation of the CNSP is to be successful, stewardship coordinators need to enable landowners to undergo this process. And indeed, the requests from the landowners I interviewed – for continual communication between themselves and the conservation agents, and for more information re conservation issues – might be seen as an expression of Wals’ ‘deframing moment’, where constant clarification of the *reasons* behind alternative ways of looking at the world, allows learners to come to terms with the different value-systems they are being confronted with.

#### **5.6.1.3 Co-creating: The joint (re)construction of ideas, through collaborative processes of deliberation and discussion.**

The Cederberg Conservancy is an example of how the idea of ‘co-creating’ alternative ideas may be applied, to better manage the natural resources of a given geographical area. By constantly challenging each other with fresh ideas about sustainable practices, they have shaped a community where the majority (80%) of members are pro-conservation – and, consequently, individuals feel “left out” when they *don’t* partake in conservancy efforts:

Farmers like a challenge, and therefore we challenged our fellow farmers in our conservancy area.... [We remind them that they] probably want their children to see what a leopard looks like one day, and if they don’t farm correctly now, [if they don’t farm] in a sustainable and conservation-friendly manner, then this will never happen.  
(CS2-Q6:166-170)

According to Wals (2007, p.40), social learning requires reflection and reflexivity throughout the entire process – if only to improve the quality of the process itself, and to monitor the progress that is being made. This is exactly how the Cederberg Conservancy has been dealing with environmental and conservation issues over the past decade.

In the Upper Breede River area, the co-creation of alternative ideas within the BSP has been occurring in a variety of innovative ways, such as farmer field days, one-on-one contact sessions, workshops, etc. These measures have ensured that the landowners are more informed; that they now have a broader awareness both of biodiversity, and their responsibilities in terms of its conservation (CS1-Q1:369-371).

The stewardship coordinator revealed that during one of the farmer field days he hosted a couple of years ago, he invited guest speakers to talk about certain aspects of biodiversity conservation. The landowners and farm labourers were then taken into the field for some real-life encounters with these issues. This turned out to be an amazing learning experience, in which ideas were being developed *between* learners, in a participatory, collaborative manner:

We were just facilitators of the learning process – it was the farmers themselves that were interacting and talking and disagreeing with each other and the conservationists. We as officials were standing on the side whilst they were discussing the detail and creating their own understanding. This was not done only as part of the stewardship initiative, but as part of the greater landscape programme, the broader stewardship concept. (CS1-Q1:123 -127)

***5.6.1.4 Application/Experimentation: The translation of co-created ideas into collaborative efforts, and the practical testing of these ideas to determine if they meet the challenges that have been identified.***

As Reed & Cundill (2010, p.2) states in their definition of what constitutes social learning, after a change in understanding has taken place, this change needs to go beyond the individual, and – through the establishment of communities of practice – become entrenched in their wider social climate. This will ensure (i) that the newly-constructed knowledge is “kept alive” by the actors operating within this CoP, and (ii) that the co-created solutions are given the opportunity to prove their practical worth, and undergo refinement if necessary.

Within the CNSP, one of the mechanisms used to establish these communities of practice, is the Environmental Management Plan, which is also called the Stewardship Management Plan (SMP). Crucially, the SMPs are drafted by the conservation agents *in collaboration with* the landowners involved, and are designed to guide landowners toward achieving the targets in terms of sustainable land use and farming practices laid out for them in their stewardship contracts.

### **5.6.1.5 Reviewing**

Evidence from the Stewardship Operational Procedures Manual indicates the provision of an assessment tool within the CNSP, which connects well to the final ‘moment’ in Wals’ framework of social learning (which he simply calls ‘reviewing’). The annual ‘stewardship audit’ gets done with each of the new stewardship participants, as part of appraising the Stewardship Management Plan and the actions agreed upon therein (see 7.1.4 above). This audit is intervention-focused and linked to and consistent with the site assessment, provisions and targets laid out in the stewardship contract signed between landowners and conservation agents.

It must be remembered that a property that is declared a ‘contract nature reserve’, is accorded the same status as a provincial reserve, and therefore, should be maintained and managed with the same dedication. A fundamental objective of the CNSP is to establish sites where biodiversity conservation is not jeopardised by bad management practices (Operational Manual: 3.4, pp. 28-30). Thus, by conducting annual stewardship audits, the conservation agency is able to meet with landowners to formally review their progress in terms of achieving the goals set out for them in the SMPs. The auditors can monitor the management practices of the landowners, and – if it is deemed necessary – construct new action plans to remedy any problems they observe.

The difference in this approach, compared to the once-off process of “review” mentioned by Wals (2007) in his framework, is that it is dynamic, forming part of the stewardship agreement throughout its lifespan. As long as the legally-binding contract between the two parties exists, the conservation agency has the responsibility of conducting stewardship audits on an annual basis, and the landowner has the responsibility of implementing and managing the objectives agreed upon in the SMP they helped to create.

Thus, in this way, learning about and adapting to conservation practices becomes a matter of *lifestyle* for the landowner and his farming community, a cyclical process of learning by doing and learning through experience. Moreover, this learning process never stops, as every year the landowners are afforded an opportunity to monitor their progress, and (if

necessary) to reconceptualise their management practices with regard to the natural resources on their properties.

## 5.7 CONCLUSION

In this chapter, I have used my research data – both the raw evidence obtained from the interview process, and the theoretical considerations derived from my literature review – to construct a conceptual framework for understanding the BSP as an educational initiative aimed at promoting social learning and change.

To assist me in this endeavour, I formulated seven analytical statements to demonstrate:

- (a) That one's conceptualisation of 'stewardship' will affect one's implementation of its ideals (statements 1 and 2),
- (b) That, in the case study areas, stewardship is seen as contributing to the creation of an environmental knowledge capital and an environmental habitus in the communities in which it is implemented (statements 3 and 5),
- (c) That essential to the creation of this knowledge, are the concepts of participatory learning, reflexive deliberation, and communities of practice (statements 4 and 6),
- (d) And as such, if one looks at Wals' theory of 'sequential moments' in the social learning process, the CNSP can rightly be said to be facilitating *this kind* of learning in the case study areas (statement 7).

Thus, I believe I have been successful in developing a conceptual framework that allows one to understand how the CNSP functions, in the case study areas, as (i) a meaningful process of social learning, and as such, (ii) a crucial component of social change. (The framework is also represented schematically, overleaf.)

In Chapter 6, I draw on these findings to make concluding recommendations for future research into the topic, and for future implementations of the CNSP and similar conservancy initiatives.

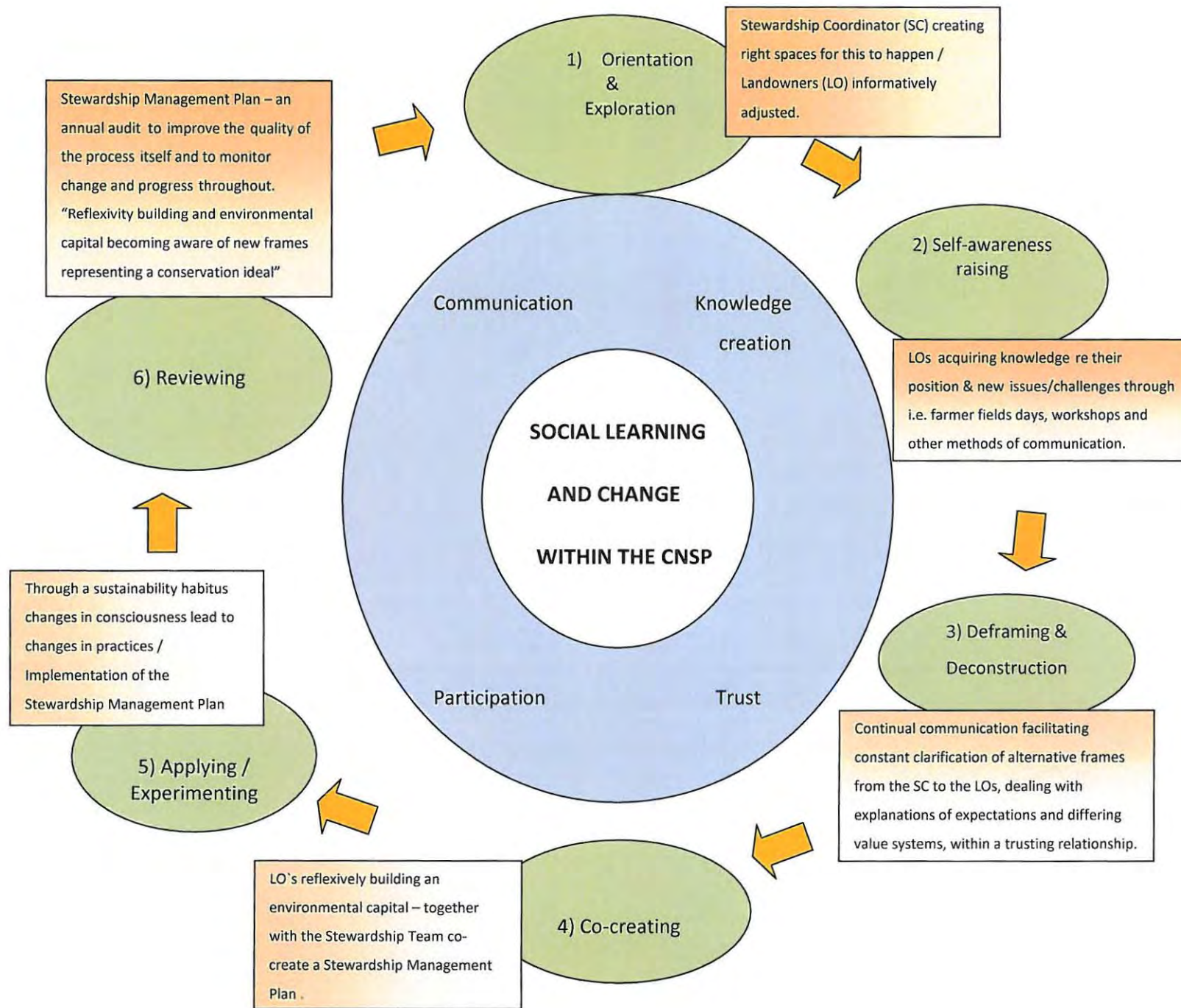


Diagram 3: Components of a social theory of learning within the CNSP

## CHAPTER 6: CONCLUDING SYNTHESIS

### 6.1 INTRODUCTION

In this chapter, I provide a brief summary of my key findings, in relation to the research question and the overall aims of my study, and offer recommendations for future research into the topic and for future implementations of the CNSP and other conservancy initiatives.

### 6.2 CRITICAL REVIEW

As stated in Chapter 1 (see section 1.2), one of the objectives of this study was to gain deeper insights into the processes and procedures of the CNSP in the two case study areas, and to determine to what extent conservation education practices form part of these.

Drawing on a wide range of research material – published and electronic articles, interview data, procedural handbooks, etc. – I discovered the inter-relationship that exists in the learning process between (i) an individual's orientation towards a new idea, (ii) the raising of their self-awareness and the deconstruction of their prior epistemological structures, (iii) how participatory learning methods can lead to the co-creation of new knowledge, and (iv) how attitude changes on the part of learners can lead – through the establishment of communities of practice – to changes in their everyday actions. Wals' notion of 'sequential moments' in the learning process was particularly useful to my understanding of these concepts.

These insights, taken from the research field of "social learning", provided me with a new perspective from which to view the implementation of the CNSP in the two case study areas. As a result, the focus of my research shifted, and allowed me to investigate whether (i) the educational methods employed by conservation agents in the case study areas were indicative of a "social learning" approach, and (ii) whether these methods led to the creation of an environmental knowledge capital, and a "habitus of sustainability", within the communities in which they were employed.

As discussed in Chapter 5, I believe that my research has succeeded in confirming that both of these hypotheses are, in fact, true of the case study areas I investigated.

### 6.3 KEY FINDINGS

I have based my key findings on the seven analytical statements formulated in Chapter 5:

- 1) There is a definite case to be made for the concept of stewardship having diverse meanings and definitions, and for these to depend on the objectives of the institutions and individuals involved with its implementation. My research revealed that two major trends in the conceptualisation of the concept exist: (i) a broader, more general and more holistic outlook, as typified by international stewardship initiatives, of biodiversity stewardship being subsumed in greater processes of sustainable social change, and (ii) a more focussed approach, as typified by South African conservation agencies, that is specifically geared toward securing tracts of biodiverse land that are currently under private ownership.
  
- 2) Data gleaned from the interview process strongly suggests that implementers of the CNSP need to adopt a more open and flexible approach when engaging with landowners, than the tightly-focussed one prescribed to them by the CNSP's Operational Procedures Manual. This is especially true for their initial interactions with landowners, when the intentions of the programme must be clearly explained, and the perspectives of the landowners must be taken into account. Throughout the interview process, the importance of stewardship coordinators being flexible, approachable, and willing to engage with landowners on *personal* terms, was constantly stressed.
  
- 3) All the interviewees admitted that the CNSP functioned as an "instrument of change" in their communities. They characterised this "change", variously, as attitude changes on the part of landowners in the area; as the growth of an "environmental consciousness" within their communities; as the willful adoption of more sustainable practices on the

part of farmers; and as providing opportunities for social upliftment to previously disadvantaged members of the farming communities.

- 4) The interview data made it abundantly clear that the implementers of the CNSP in the case study areas are ensuring that “education forms the foundation” of all their interactions with the landowners involved in the programme. Numerous examples were given of practices – e.g. farmer field days, workshops, courses, one-on-one contact sessions – designed to engage landowners, through collaborative learning processes, in the building of their community’s environmental knowledge capital.
- 5) The data indicated that one of the most crucial elements of the success of the CNSP in the case study areas, is the acknowledgement on the part of implementers that the landowners are “equal partners” in the fight against environmental degradation. This paradigm shift has encouraged landowners to *participate* in conservation initiatives, and to “take conservation ideals on board.” By being made conscious of *their* responsibilities to their natural environment, the landowners have begun to see themselves as “custodians” of their land and its natural assets.
- 6) Learning and change, brought about through reflexive deliberation, is not only occurring on the part of landowners in the case study areas, but the stewardship officials and broader farming community members as well. The data indicates that ‘social learning’ is taking place, and that ‘communities of practice’ are being established in these areas.

#### **6.4 BROADER IMPLICATIONS FOR ENVIRONMENTAL EDUCATION**

As discussed in section 2.6 of this thesis, environmental education’s early history was heavily influenced by models of learning that focussed on behavioural change. These theories drew much on behavioural psychology, where people were seldom seen as vital

parts of larger social networks – and they advanced a pedagogy that largely consisted of “transmitting knowledge” to passive recipients.

Over time, however, environmental education started to reflect global shifts in theories of learning, and educators became encouraged to create opportunities for learners to actively *participate* in hands-on learning experiences; to debate issues, to form their own opinions. Active learning entails that participants are involved in the *creation* of new knowledge – and not merely receiving a message from somebody else, which they might not understand nor take interest in. The concept of ‘social learning’, which has been discussed at length in this thesis, is a prime example of an approach to education that reflects the principles of participatory learning.

In a parallel fashion, early conservation programmes tended, both in terms of their management strategies and underlying philosophies, to keep nature and people separate from each other. However, since the 1990s, South African conservation agencies have been striving to work towards a more integrated approach of getting people and the environment together.

Over the last two decades, conservationists have been given the responsibility of looking after protected areas. They have attempted to work in a proactive manner, by incorporating people from outside the ambit of conservation agencies into their projects. Mainly, this has taken the form of encouraging commercial farmers and landowners to form conservancies. The high-profile introduction of the Biodiversity Stewardship Programme into the CAPE Bioregional Initiative is a good example of these trends in conservation practices (Rosenberg, 2009, p.3).

Thus, insofar as my study has shown the *evidence* of social learning taking place within the context of the implementation of the CNSP, it seems as though we can declare, with some certainty, that the features of participatory learning that I have identified in my study – collaborative extension, shared learning, co-management, joint action – are crucial to the continued success of environmental education in the 21<sup>st</sup> Century.

## 6.5 RECOMMENDATIONS

- Stewardship initiatives should be based on the foundation of social learning. The conceptual framework provided by Wals (2007), and discussed in Chapter 5 of this thesis, could be used to guide the implementers in this approach.
- Any stewardship initiative should capitalise on the “learning zealous” – that is, those landowners and farming communities that show enthusiasm for conservation practices. By building their environmental knowledge capital, and by equipping them with conservation skills, one creates a ‘community of practice’ where *all* members of the society contribute toward environmentalism.
- Stewardship coordinators should foster links between government departments and industries in the areas in which they are operating, as landowners see this as a sign of coherence, and are able to view biodiversity stewardship as integral to bigger processes of social change.
- Stewardship coordinators should make more extensive use of landowners in the ‘deconstruction’ phase of the social learning process. Landowners should be encouraged to talk to each other, and to share their opinions and experiences of conservation practices. Individuals are more receptive to new ideas when they encounter them in the context of their own community of practice.
- Institutionally, it might be beneficial for any organisation that considers using the stewardship approach, to involve their officials in a stewardship extension course, where they will get to learn from each other, and share information about their approaches and about the sociological and emotional challenges of forming partnerships with private landowners.

## **6.6 CONCLUSION**

This research study has explored the implementation of Cape Nature's Biodiversity Stewardship Program, in terms of its function as a practice of social learning in two case study areas in the Western Cape. Moreover, it has identified that the CNSP has been successful in building an environmental knowledge capital amongst those involved in its implementation and operation.

I hope that this study has been informative, and I trust that it has contributed to the field of research into conservation-education practices – and specifically, into how social learning, through the establishment of communities of practice, can lead to the creation of environmental capital, and the development of an environmental habitus, within the communities in which it is practiced.

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	Research Goals	Methodology	Methods	Purpose
Phase 1	To do a literature review of the development of Stewardship, looking into the manifested practices & methods used, as well as their applications and outcomes internationally and in South Africa.	Literature review of research studies, policy documents and case studies in the field of practice, through library searches and internet searches.	Document analysis (historical document and material content analysis).  Literature search at libraries  Internet search	To understand the context of the development of the concept stewardship internationally and to acquire clarity on which format it is currently applied, in the field of Environmental Education, and the achievements to date. To sketch the context of how the stewardship concept are experienced by other participants in other countries because of its different interpretation and implementation.
Phase 2	<ul style="list-style-type: none"> <li>To develop a contextual profile on the Biodiversity Stewardship Programme in South Africa, including legislative framework underlying the approach &amp; the status it currently enjoys within government structures. * To develop a conceptual framework on what are the basic characteristics of Social Learning and what needs to be included in a learning approach, for it to be successful in this objective?</li> </ul>	<p>A further literature review and document analysis of policy documents, research documents and other material clarifying this research goal.</p> <p>Literature review of all the theoretical study material we received throughout the year plus other resources I can find in the library and through resource searches.</p>	<p>Interviews with officials from DEAT and other Government structures on a Provincial level i.e. Cape Nature, which will inform the subject and provide more leads to be able to draw a contextual profile. * Semi-structured interviews * Telephone interviews * Internet Surveys * Document analysis * Library searches</p>	To draw a contextual profile of the core of the research study, and also bringing it closer to home. To provide more clarity on how to approach the Provincial Case Studies: people, agencies, structures instituted (Review Panels, Stakeholder Forums, Advisory Committees etc.) and policy documents, and other literature, * Develop a framework for looking into case evidence to interpret stewardship practices in a theoretical context.
Phase 3	<ul style="list-style-type: none"> <li>To undertake two case studies within the Western Cape to ascertain how the Stewardship approach has been applied through their policies, practices and educative methods, and what is happening with regard to sustainable land use management practices and an informed biodiversity knowledge capital?</li> </ul>	2 Provincial Case Studies within the Western Cape on an Institutional level - Approaches & Practices Implemented	<ul style="list-style-type: none"> <li>* Literature review &amp; Document Analysis</li> <li>* Semi structured and structured Interviews as well as a review of reports on developing practice.</li> <li>* Telephonic Interviews</li> </ul>	Through in depth and pragmatic realities this picture is completed through this interesting re-search into the various ways of community applications of this new and innovative Conservation and Social Learning approach. To develop a comprehensive understanding from which recommendations could be put forward for future use and implementation by other organisations/programmes.
<b>Final Analysis / Recommendations:</b> Make recommendations about Stewardship as a potential social learning approach for facilitating knowledge transfer of conservation and sustainability practices.				

Appendix 1: Table indicating the Research phases selected during 2009.

Appendix 2: Layout of the categories and sub-categories used during data analysis

Sources of Data	Cases	Categories	Sub-Categories
Semi-Structured Interviews	<p><b>4.2 Case Study 1: Upper Breede River Valley</b></p> <ul style="list-style-type: none"> <li>Stewardship Official implementing the program</li> <li>Private Landowners exposed to the Stewardship program</li> </ul>	<p>4.2.1 &amp; 4.3.1</p> <p><b>Stewardship</b></p>	4.2.1.1 & 4.3.1.1 Application of the concept
			4.2.1.2 & 4.3.1.2 Practices and Methods (relationships/partnerships/approaches)
			4.2.1.3 & 4.3.1.3 Objectives & Outcomes
			4.2.1.4 & 4.3.1.4 Capacity
Document Analysis	<ul style="list-style-type: none"> <li>Neutral Official connected to Stewardship through organisation &amp; mandate</li> </ul>	<p>4.2.2 &amp; 4.3.2</p> <p><b>Environmental / Conservation Understanding</b></p>	4.2.2.1 & 4.3.2.1 Historical Environmental Understanding
			4.2.2.2 & 4.3.2.2 Current Environmental Understanding
			4.2.2.3 & 4.3.2.3 Impact of the Stewardship Programme on this understanding
	<p><b>4.3 Case Study 2: Greater Cederberg Biodiversity Corridor</b></p> <ul style="list-style-type: none"> <li>Stewardship Official implementing the program</li> </ul>	<p>4.2.3 &amp; 4.3.3</p> <p><b>Knowledge building / Learning Processes</b></p>	4.2.3.1 & 4.3.3.1 Institutional structures & strategies
			4.2.3.2 & 4.3.3.2 Type of info / Level of info
			4.2.3.3 & 4.3.3.3 Educational method(s) leading to agency
	<ul style="list-style-type: none"> <li>Private Landowners exposed to the Stewardship program</li> <li>Neutral Official connected to Stewardship through organisation &amp; mandate</li> </ul>	<p>4.2.4 &amp; 4.3.4</p> <p><b>Reflexivity</b></p>	4.2.4.1 & 4.3.4.1 Structural factors
			4.2.4.2 & 4.3.4.2 Reflexive Deliberations (Internal conversations)
			4.2.4.3 & 4.3.4.3 Reflexive Competence
			<p>4.2.5 &amp; 4.3.5</p> <p><b>Community of Practice</b></p>
4.2.5.2 & 4.3.5.2 Other farmers			
4.2.5.3 & 4.3.5.3 Other Stewards			
		4.2.5.4 & 4.3.5.4 Other Government Departments & Conservation Agency	

## Appendix 3: Interview Schedule

**Dear**

(Case Study 1:Q1)

The following is a further explanation of the theme of my Thesis, to in due course receive my M.Ed (Environmental Education) Degree from Rhodes University. You have been selected through my research preparation and literature review to be part of my data gathering process. When you receive this, I would have already made telephonic contact with you to ask your permission in becoming part of my research project, to which you would have agreed.

This questionnaire is therefore sent to you as the next step, in preparation of the personal interview I will have with you on the 1<sup>st</sup> of July 2010, at 11am. It is also to give you more background on what I intend to discuss during our interview and also to assist in your thought process.

**I do hope you find this useful.**

**Thanks again for your participation.**

**Claret Walker**

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### **Research Title:**

A review of the emergent Stewardship practices as education processes to foster social learning and change: Three cases of Stewardship practice in the Western Cape

### **Research Question:**

How has Stewardship emerged as a conservation education practice of collaborative social learning to foster change over the last 10 years in the Western Cape Province of South Africa.

### **Research Goals:**

- 1) To do a literature review of the development of stewardship in an international context, looking into the manifested practices and methods used, as well as their applications and outcomes.
- 2) To develop a conceptual framework on what are the basic characteristics of social learning and what needs to be included in a learning approach for it to be successful in its objectives?
- 3) To undertake three case studies within the Western Cape to ascertain how the stewardship approach has been applied through their policies, practices and educative methods and what is happening with regard to sustainable land use management practices and an informed biodiversity knowledge capital?
- 4) To make recommendations about stewardship as an education process facilitating social learning of biodiversity conservation and sustainability practices to other provinces and programmes who might benefit from this approach.

### **Questionnaire**

1: Please give a quick overview of your status within your organisation, and how your designated job description (the position you're filling) fits into your organisations mandate. (Collect any documents available)

2: How long has your organisation been involved with Biodiversity Stewardship?

3: Where does Biodiversity Stewardship fit into the suite of biodiversity conservation legislation of the Western Cape Province / Cape Nature's mandate?

4: Do you know why your organisation deemed it necessary to start using the Stewardship approach?

5: What was the main objective/purpose of Cape Nature's involvement in Stewardship, and has this focus changed over time (after 10 years of implementation)?

5.1: Do you think the stewardship approach is here to stay within your organisation's policies, practices and educative methods?

6: Does your Organisation have a separate Conservation Education Directorate for public and community engagement?

6.1: If so, how do they coordinate their activities with your Stewardship Programme?

6.2: If not, do you think your fellow colleagues within Cape Nature realise that the stewardship programme has the responsibility as an education process of advocating sustainable land use management on top of its protected areas mandate, to foster environmental learning and land use change.

7: What is your personal feeling about Stewardship as an education process? Please elaborate on your perspective.

8: Do you see your programme as an environmental educative initiative within the Slanghoek valley? Please elaborate and explain how your programme has been perceived by the landowners you involve?

9: Do you know what is meant with the term "social learning"?

9.1: Have you ever seen or contextualised stewardship in this framework as a typical "conservation education practice of social learning"?

10: Can you take me through the methodology (framework) you typically use when you approach a farmer to become involved in the stewardship programme?

10.1: Can you describe your experience of the farmer's perceptions of these interventions, the first time when you interact with them, as well as through the successive interactions building a relationship with them?

11: Would you say that the stewardship approach has contributed (+/-) to a better understanding of biodiversity & conservation issues by private land owners of their own properties? Is there any way of measuring this?

11.1: Would you say that this automatically lead towards practical changes and bettering of land use/farming practices on their properties?

12: Would you say that the stewardship program in the Slanghoek Valley has contributed to a more uniformed understanding of the collective natural resource challenges and potential solutions by the community of farmers of this geographical area?

13: Which aspects of the stewardship approach has been crucial in attaining this conceptual & behavioural change and knowledge capital within the private land owners?

14: Individuals learn very effectively in a social context, and Stewardship offers this possibility to landowners to learn and be educated about biodiversity and conservation issues, through informal learning activities and personal relationships between individuals as well as within communities (communities of practice). How important is this social learning aspect (communal engagement) in the success of the Stewardship programme? Or does this leave the land owners feeling exposed and negative towards participating in these initiatives?

15: Since the post-modern era, environmental education involves much more than “top- down” messages about biodiversity loss and wildlife experiences – much more focus is placed on frameworks and structures that can foster local problem solving amongst participants at a local level? Would you say that the stewardship approach could be classified as one of these post-modern solutions?

16: Is there anything different to the Stewardship approach compared to other educational processes used by Cape Nature (in the past and currently), to contribute to awareness raising and value changes of landowners, which you can note and discuss?

17: The proposed study will examine stewardship & attempt to develop an understanding of how this education process has positioned itself as a **biodiversity conservation education** practice that engages landowners in better land management and biodiversity conservation.

How do you go about to achieve participation/collaboration of all the landowners in the designated area of concern in your project area?

18: What are some of the prominent questions/concerns/reservations you get from the landowners before they involve themselves completely in the stewardship programme?

19: What are some of the requests from the landowners in terms of learning and further knowledge building once they are involved in the programme?

20: What are typical successes achieved by your Stewardship Programme in the Slanghoek Valley, e.g.

- a definite growth in size (ha) of protected areas within your project area since your inception,
- farmers becoming more informed about their properties’ biodiversity status and their social and ecological responsibility towards attaining sustainable land use management, leading to the preservation of certain species on their property,
- farmers signing up to the program and becoming advocates for conservation management within their community (Community of practice),
- better land use practices on a short term basis whilst you are intervening, without the long term sustainability which you would prefer otherwise?
- Other?

Thank you for your time, Claret Walker, 078 3060 183

## Appendix 4: An example of one of the Transcribed Interviews including coding in colour

Transcription: CS2:Q6

CW: Gee agtergrond

**1: Hoe het jy oorspronklik betrokke geraak by boerdery? Wat is jou geskiedenis van boer en die gepaardgaande praktyke? (Familiegeskiedenis / Ander interessante stories hier rondom)?**

Eintlik was dit vir my maklik gewees, want ons het groot geword in die Cederberge, almal het mos nou maar 'n "hipe" rondom die Cederberge, so van kleins af vertel almal vir jou hoe gelukkig jy is om te bly waar jy bly. Wat dit interessante maak is die feit dat my kind is die 8ste geslag op die plaas, so maw. van 1820 is die grond in die Nieuwoudt familie en die familie en al die Nieuwoudts in die Cederberge het nou maar gegroei saam met Cape Nature, so die omgewing en mense was altyd naby aan 'n omgewings organisasie wat ge-operate het, en daar was maar soms "clashes" gewees jy weet, veral om bv. Luiperds, die greenies dink mos nou maar so en die boere dink mos nou maar so, so dit is eintlik maklik in 'n mate vir ons om aan te gepas het in die ding, ons het gegroei in die ding in oor tyd. In die vroeer tyd het die boere maklik aangepas daarby want daar was altyd 'n bewarings aspek rondom en in jou onmiddellike omgewing, verstaan jy, nie noodwendig reg nie, want as jy vat wat CN in 1948, 1968, 1998 en in 2008 gedoen het dan gaan jy 4 verskillende management plans sien. Daar was altyd daai dialoog en die ouens was altyd daar en ons het 'n gemaklikheids verhouding gehad – ons het blootstelling gehad en vandag, as ek kyk na my kinders wat se blootstelling hulle het, is dit ongelooflik met die goed wat daar aangaan. Dan moet ek net by se in 1997 toe die Cederberg Bewarea gestig is, ons het nie eintlik geweet hoe mens dit doen en wat dit is nie, en daai tyd het CN besef hulle het nie die mannekrag en befondsing nie en hulle kon nie bewaring op privaat grond of in die breer Wes Kaap toepas as hulle nie na die bewarea konsep toe gaan nie, maar wat nog al baie interessante was was toe hulle die dag die Cederberg Bewarea gestig het, het hulle gese dit is seker een van die dele waar 'n bewarea gestig word waar dit die minste kans het vir survival in die Weskaap of dalk in die hele land. Want ek meen dit was die eerste keer in 300jaar wat hulle almal van die Cederberg rondom een tafel gehad het. En dit was al klaar 'n reuse sukses en almal was baie nuuskierig oor hoe dit gebeur het. En vandaar af het die ding gegroei en ek se jou ons het 'n gemiddeld van 97% van die grondgebied op 'n ledevergadering word verteenwoordig onshet 19 grondeienaars, en die ouens is al so dat, ons het kwartaaliks vergadering, en ons is al so dat as hy nie daar is nie dan bel hy en se wat het daar gebeur – wanneer kom die minutes deur?

Die eerste 3 jaar het ons maar water getrap en so en CN het die leidende rol gespeel, hulle was die sekretaris en hulle was die ouens wat die werk gedoen het, hulle het geweet hoe werk 'n bewarea en ons nie, maar dis interessant dat die klem toe nou agv hulle mannekrag wat minder geraak het, ons moes toe in die volgedne drie jaar hier van 2000 - 2004 toe moes ons self half beginne beheer vat van die situasie en ek het toe in einde 2004 voorsitter geword en toe vandaar af is dit absoluut net in ons hande, en CN het net 'n lid geraak van hierdie bewarea. Ons is geskool en ons het geroel – dit was half so mentorskap, hierdie ding het so half gegroei tot waar ons vandag is. Op 'n more het ek toe gesit en besef maar dit is mos nie nou net dit nie, en what is next? Ons het ons grond in 'n bewarea alhoewel jy net 'n lid is, maar ons operate en ons het 'n dagbestuur waar elke ou sy eie verantwoordelijkheid het, een ou skakel net met CN een ou kyk net na die paaië netwerk, en dis net boere, ons veiligheids netwerk hoe ons dit hanteer is dit is van plaas veiligheid tot toerisme as daar iemand is wat ons nodig het, ons brandbeskermings vereeniging en ons arbieters opleiding - ons is al daar waar ons arbeiders is al opgelei as veldwagter en hierdie ouens gaan stap in die veld met die cybertrackers en hulle samel ons inligting in. Ons het nou die dag getel daar is 45 verskillende projekte en dinge wat op ons agenda op een stadium was, toe se ons nou moet ons beginne met sub kommittees en hulle operate op hulle eie en hulle gee net terugvoer op die ledevergaderings.

2008 het ons met die eerste 4 Stewardship programme beginne en toe kom die GCBC na ons toe en se luister die ding in nou geimplimenter en ons het weereens nie die mense op die grond om hierdie dinge te monitor saam met julle nie, hoe doen ons dit nou? Toe gaan doen ons aansoek vir 'n grant saam met hulle vir die World Bank – en ons kry toe amper 'n milj Rand grant by die mense waarmee ons toe vir die bewarea 'n projekbestuurder kon aanstel wat toe die S program implimenter en negotiate en daar het natuurlik uit hierdie ding 'n klomp voorstelle gekom en demands van hulle kant af voordat hulle die geld gee, soos bv. Ons moes inbou hoe gaan die breer bewarea, die 170 000ha groot bewarea, kyk daar is net 4CNR (die eerste 4), en die Projekbestuurder is toe aangestel om die kontrakte en die goed aan die gang te kry saam met ons grondeienaars en ons moes hom bestuur, die bewarea, ons moes met die management plan vorendag kom, ons het fisies self aansoek gedoen, want daar was 'n MoU tussen ons en CN gewees om die Bewarea te

bestuur, dit was net vir daai 4CNR, altesaam seker so 12 000ha, en toe se hulle vir ons dat een van die outcomes van die projek gaan wees, ons moet kyk of ons nie ouens van ons omgewing gemotiveer kan kry om verdere S ingeteken te kry nie. Ons het so 3maande gelede die grondwet van die RooiCederberge Karoo park geskryf en 'n addisionele 70 000ha het gevolg op daai eerste 12000ha, wat in CNR, ja die Cederberg Bewarea gaan voor volgende jaar se einde so 98% of kontrak natuur reservaat wees of BA wees, dis nou buite die bewerkbare grond. Maar ons kan op daai grond boer, daai goed moet gewei word. Ons het in die tussenstyd 'n kenner op die gebied gekry wat vir ons impakstudies kom doen het vir die hervestiging van die wild en die "pruning" van die renosterveld.

Die ander ding wat ek nou ook van ons wil se is ons het 'n verfilmings komitee gestig wat omsien na as hulle inkom om fliks te skiet – en hier se ons wat moet gebeur – so ons wil nie he hier moet selfoon torings opgaan op ons grond nie – en ons kan dit se – because we can – dit is op ONS grond – weet jy wie is ons – dit is ons grond, ons bewaar dit, ons bewerk dit, ons bestuur dit en hier sal nie 'n selfoontoring staan nie, nooit nie, klaar! Ons het 'n groot debat gehad so 2j gelede oor wat die impak sou wees as ons 'n selfoontoring daar staan gemaak het – en toe is die besluit nameens ons geneem: nr.1 dit sou baie baie duur gewees het en ons as Bewarea het toe besluit daarteen en ons se dit is 'n selfoon vrye omgewing. So alternatiewelik het ons satelietfone en scanners, om ons as boere te help. So jy kan sien ons Bewarea het eintlik 'n Boervereniging geword met die bewarings aspek wat net een deel daarvan is.

**CW: Hoe steek die boere mekaar aan onderling?**

JN: Ons is 'n Bewarea, ons het nou gegroei en ons het 'n gesamentlike toerisme komitee wat al hierdie massas toeriste bestuur en se: Kom ons kyk nou na ons getalle, ons hou dit eerder eksklusief en ons verseker ons maak geld. Ons is in die situasie waar ons al namens CN permitte uitreik op natuurbewaring se grond, sien jy die verhouding en vertrou wat daar is... ons laat 70-mense in seker blokke toe per dag.

So na 2004 toe die ding nou begin aktief raak. Ons was ook daar en ons moes toe self aan die luiperd bewarings komitee behoort en toe groei ons in die ding in en ek dink CN het gesien die ouens is gereed vir Stewardship programme maar hulle soek mense waar hulle die ding kon loods waar jy half as advertensie kan dien vorentoe soos in: kyk dis hoe dit werk in die Cederberge.

CW: kyk hulle het ook hulle targets wat hulle moet nakom nav die Protected Areas Strategy – so die "rule of thumb" is hulle gaan die maklike ouens eerste target.

JN: ...maar dis waar dinge toe nou mooi uitwerk want vir ons, die Cederberg Bewarea ouens, vir ons was dit "What is next?" Nou kom hulle met hierdie ding – en ons se toe nee ons moet nou eers hierdie dinge deurtrap en ons het ook baie aan die kontrakte geskaaf tot waar dit vir ons reg gevoel het – bv. Weidingsregte, toerisme, en die vraag vir ons was ons kom nou met al die goed, ons word gekonfronteer met die goed van alle kante af, van wynproduksie se kant af deur BWI, dan is daar Globalcap se dinge, wat doen jy – al daai goed het jowers 'n hofie of iets wat geaudit moet word – dan se ons vir hulle ons is 'n Bewarea, en hulle se dit is baie nice - maar wat doen julle? So toe na die tweede jaar toe se ons vir onself - dit is nou nice maar wat doen ons nou regtig? Ons weet ons kan meer doen, maar wat is dit? Toe begin ons sien bv. een simpel ding, die natuurlike predatore in die boorde raaksien en met natuurlike metodes begin hulle vir ons vertel, agv die blootstelling raak ons toe meer ingelig.

CW: Wat interessant is dat hier by julle is Bewareas die vehicle waarop die Stewardship ry en wat julle ding maak draai.

JN: Ek het op Nieuwoudtville die dag gese – ek en ons prokureur was daar om met die klomp boere daar te gesels oor die S ding en daar is dit nogal 'n komplekse storie daar met die grense want sommige reservatjies val oor die Noord Kaap grens na die WesKaap se kant toe – en hulle is toe nie so gemaklik nog met die hele idee van S nie. En CN het nie regtig geweet hoe om die situasie te hanteer nie – hulle het gegaan en bombardeer hierdie tee boere met S, en dit het nie gewerk nie – toe besluit hulle hulle kry ouens soos ons in om met die manne te gaan gesels – weet jy ons was so 10min in die praterij in toe sien ek die ouens se oeswem so – en toe begin hulle my al hoe meer te vra oor die Bewarea – en nie oor die hele S ding nie – en hulle wil meer en meer weet van die Bewarea en ek vertel van die bewarea en elke slag as die extension officers opstaan en hulle praat oor S dan beur die ouens terug na die bewarea toe – en toe op 'n stadium se ek hierdie aand is 'n reuse sukses – en hulle se hoe kan dit wees-want ons gaan niemand opsign nie – ek se ja maar hulle is nog nie 'n bewarea nie. En hulle soek iets waar in hulle 'n genootskap kan bou en waarin hulle gemaklik kan voel – en ek se gee vir hulle 'n target wat hulle mee gemaklik voel. Ons het nie sommer onmiddelik inmekaar geglo nie, dit het 'n tydjie gevat en dit is waarvoor 'n bewarea perfek is.

Toe ek voorsitter word moes ons op 'n stadium sit om dinges 'n...dis in daai tydperk wat Cape Nature begin ontrek het - hulle vat nie meer die leidende rol nie, nou val die verantwoordelikheid op ons, en ons sit by 'n

bewarea vergadering maar ons het nie eers 'n korum nie, ons moes ouens bel om proxy te kry om 'n besluit deurgevoer te kry, toe sit daar 5 ouens op die vergadering, en ek het nou net vir jou gese ons het nou 'n verteenwoordiging van 95% op elke lede vergadering, ek wil nie vir my die krediet gee nie, want ek het nice ouens om my, maar ek wil vir myself die krediet gee want ek weet hoe om myself te surround met ouens wat kan. Toe hulle my as voorsitter kies toe se ek maar ek wil daai ou en daai ou en daai ou op my dagkommittee he want ek weet hulle sal kan, en ons het gesit en gese luister hoe kry ons die mense terug, by die bewarea waar 'n ou skuldig gaan voel as hy nie meer by 'n bewarea vergadering deel vorm nie. Toe sien ons kom ons vat alles saam, 'n tipe van ...plaasveiligheid, forklift opleidings kursusse vir ons plaaswerkers en so aan. Ons het een aand lekker saam gebrui en toe se ons vir mekaar ons moet eienaarskap vat van hierdie grond, dit is nie iemand anders se grond nie dit is ons sin, ons moet eienaarskap vat dis ons situasie, ons pyne, ons erfenis ons kinders sin, dit word geleen vir ons, kom ons trek ons vingers uit ons agterente uit en ons doen dit – neem leiding, en hoe kry ons die mense terug en betrokke en toe se ons, maar kom ons vat alles – alle aspekte, klinieke, brandbeskermingsvereniging, plaasveiligheid bv. Toe begin en beding ons as een ou gaan vir opleiding van iets dan kry ons die ou om dit by ons te kom aanbied – ons doen dit in die Cederberge. Ons wou ook mense bewus maak van vuilnisverwydering en wastemanagement strategie – toe gaan skryf ons so 'n strategie en die Munisipaliteit van Clanwilliam en Ceres vat nou ons sinne.. hulle het dit op 'n raadsvergadering bespreek en nou implementeer hulle die Cederberg Bewarea se waste management strategy in die dorp.

CW: So julle het charge gevat van julle omgewing – so julle bewarea implementeer eintlik niks anders as landstewardship nie – en dit is hoe julle dit maak werk.

JN: Ja al daai ander komponente vorm nou deel daarvan – en ...

CW: ...daarom het CN dit redelik maklik gehad met julle want julle het reeds die konsep onder die knie gehad en hulle moes net die bewarings aspek ook onder julle aandag bring sodat julle dit ook by die bestaande S metode kon insluit van hoe julle die bewarea bestuur – en dit is hoekom dit so maklik hier vlam gevat het.

JN: Heeltemaal reg – maar ek moet vir jou se daar moet 'n proses wees – daar moet verhoudings gebou word – hierdie goed gebeur nie net nie – jy kan nie net instap op 'n ou se plaas en na 'n halfuur se inligting gee en traktaatjie of drie daar neer gooi dan dink dit is nou gedane sake nie.

CW: Nou daai proses is dit wat ek eintlik in belang stel. Is die manier hoe hulle dit met julle gedoen het – was dit genoegsaam vir julle om dit te verstaan en om die boodskap oor te gedra het.

JN: Ja maar dit was onwetend – die proses soos wat dit met ons gebeur het ne, ek is 100% seker hulle het dit nie so beplan nie- dat Bewareas oorgaan into Stewardship - in ander areas target hulle hierdie en hierdie ou heel eerste en hulle doen dit wetend – en dit is die verskil – onwetend by ons het die dialoog wat heelyd daar is die kommunikasie wat heelyd daar is die verhouding wat heelyd daar is, het gemaak en gegroei asof dit 'n normale storie was, maar nou gaan hulle en hulle gaan target die ou onmiddelik nou om hulle targets by te hou. Dit werk nie so nie – jy kan nie net instap op sy plaas en se ek raak nou saam met jou baas op jou plaas en ons gaan dit saam bestuur nie – en so 'n arme nuwe siel gaan mos totaal overwhelmed voel – Dus moet jou tydaspect en die groei saam is absoluut integraal vir die sukses daarvan.

Staan 'n tree terug en doen die ding eerder stadig as wat jy in dit in jaag en almal afskrik.

CW: Hier is 'n artikel geskryf en die manier hoe hy dit hier se is soo goed – social learning en die most important role is to create the right space and context – en...

JN: ...en dis so waar as jy nie daai regte ruimte skep vir die ding om te gebeur nie – dan gaan hy net vou!

CW: Hoeveel is dit nou in terme van CNR –

JN: jy moet nou onthou op hierdie stadium is dit 9 grondeienaars verder – nee baie van daai 4 het, nee 1 van daai vier het sy ander gronde ook bygesit en ons is in die proses om nog 'n klomp op te sign –

CW: Ja hierdie hele proses word nou gerun deur 'n regte projebestuurder –

JN: Ja en 1keer 'n week word al die data deurgestuur aan CN op Matjiesfontein en ons veldwagters stap saam met CN se veldwagter – en dit is 'n nuwe lewe vir hom – en toe sien die ouens hier gebeur dinge. En verder is daar nog 'n alien clearing projek ook geloods en dit was 'n reuse sukses – maar nou as ek nou alien clearing doen dan doen ek dit uit my eie sak uit. Bye moet ook gemonitor word – bv. my veldwagter tel dinge op in die veld as hy stap en kom se vir my Mnr daar is nie bye nie dit is te droog die jaar – so nou kan ek bestuursbesluite maak op grond van daai ou se aanbevelings en so raak hy meer en meer deel van my boerdery se bestuur. Sien hoe mooi vat die twee nou hande – so nou kom dit van my mense af want hulle is bemagtig om ook sulke besluite te kan neem. Dit is vir my lekker om vir die ou te gaan se jy het dit vir ons raakgesien – en dankie en so voel die ou nou weer goed en vertel dit vir sy vriende en so wen jy hom onmiddelik oor.

CW: Om terug te kom na die leer toe – gebeur daar genoeg inligting oordrag van CN na julle toe?

JN: Nee, maar op die stadium is hulle mos nou "understaffed", en hulle het net bloot nie die mense op die grond nie – hulle het nie die kapasiteit nie. En ons het toe besef dat hierdie ouens gaan nie by hulle targets uitkom nie en ek bel toe vir Jenifer en ek se jy is mos nie naby jou targets nie – en sy se nee sy is nie **en ek se toe vir haar maar ek het 'n paar ouens wat belang stel want ek het al met hulle koppe gesmokkel** – wat sal jy ons betaal as ons vir jou ouens kry om op te sign – en sy se toe sy sal kyk of sy 'n "grant" in die hande kan kry. Sy kom toe terug na my toe en se hier is die deal – as ek vir haar 6kontrakte bring – vir elke 6kontrakte betaal sy my R200 000 – so toe se ek deal – Maar kyk, hierdie goed moet darem nou 'n lewensvatbare reserwaasje wees - so daar "line" ek toe sommer vir haar 6 op – en ek se vir die ander ouens nou bly julle stil – julle onderhandel met niemand anders nie – **maar toe besluit ons ons onderteken toe 'n kontrak met CN dat ons as werwingsagente sal optree namens CN en toe create ons vir onself R200 000 vir ons beware in 'n aparte rekening en dit is waarmee ons die Rooi Cederberg Karoo park begin stig het** – die vereistes vir die park is dat jy moet 'n Bewarings Ooreenkoms (BA) he maar verkieslik al die eiendom binne hom moet verkieslik 'n Kontrak Natuur Reserwaat (CNR) wees en op die omliggende is hy so 70 000ha groot. **So dit is ons aanvangs kapitaal en die volgende ding wat ons gaan "try" is om konsultante aan te stel wat vir ons gaan geld source – en 'n hele span wat vir ons die plek gaan run en manage.**

CW: As julle kan se wat se behoeftes bestaan daar veder vir leer en hoe gaan of sien julle dit maak werk? Gebruik Garth se voorbeeld van Boeredae – en hoor of dit is iets wat hulle dalk in die Cederberg ook sal wil he?

JN: **Wat ons gedoen het is Ope dae – en ons nooit...die idee is eintlik om ondersteuners van die beware te hê en vriende van die beware en ouens wat besigheid doen en ons plaaswerkers en dan kry ons sprekers uit – ons het so twee drie jaar gelede – mense gekry om buite te wees – en nie binne in 'n lokaal nie – ons stap by met 'n geoloog of ons maak sulke spanne op waar die bank bestuurder saam met die trekkerdrywer stap en gesels.**

CW: Wat van Community of Practice – weereens Slanghoek se vb werk nie regtig nie – en vir Sosiale Leer om plaas te vind het jy nodig om dit te deel met jou kollegas en dit uit te dra? Maar hier klink dit vir my of dit heeltemaal werk en jy is gemaklik om op te staan en daai boodskap te verkondig.

JN: **Ons het gese kom ons maak dit 'n challenge. Boere hou van 'n challenge – en toe se ons vir die ouens bv, as jy met skape boer wil jy seker eendag he jou kind moet sien hoe lyk 'n luiperd – en as jy nie nou reg boer nie en as jy nie kan bewys jy boer omgewings vriendelik nie dan gaan dit nooit gebeur nie – so hoekom wag tot dan, kom ons doen dit nou al – word deel van die generasie wat 'n verskil gaan kan maak. So doen dit net – weet jy jy sit en lieg vir jousef as jy se jy gaan dit nie doen nie. By ons is dit 'n meerderheidsgevoel – hier is dit 80-20 vir bewaring en die ouens voel uit as hy dit nie doen nie – en wie wil nou uit voel?**

Dit het seker ook met leierskap te doen? En ek moet se ek is seker maar 'n sterk leier - ek het besluit ek maak nie meer bobbejane dood nie –en ek se vir jou daar is maniere om hulle probleme te stabiliseer – en ek het begin met 'n plan en ek het bobbejaan monitors neergsit en naderhand sien almal dit werk – en nou doen almal monitors ...so wat het jy op die ou einde van die dag om te verloor – **en so begin die boodskap af te smeer en al is ek nie meer daar nie daar is nou al 4-5 ander ouens wat net so opgewonde en aan die brand is hulle het my nie meer nodig nie.**

**Op hierdie stadium is CN is maar net 'n lid van ons bewarea, hulle is nie meer die instansie wat dinge vir ons reël nie- As jy nie wil deel wees van ons nie – dan is julle uit. So partykeer moet hulle net ophou hardegat wees en saam speel. So ons kan sonder hulle "operate" dankie – maar dit is nice om hulle as deel van dit te he want afterall bly hierdie ouens die "custodians" van al hierdie goed en hulle kan vir ons soveel beteken**

**2: Kan jy vir my vertel wat is jou ingesteldheid nog altyd gewees teenoor bewarings aspekte (van voordat jy betrokke geraak het met Stewardship),**

- binne die omgewing (oor die algemeen )
- binne die boerdery omgewing?

**2.1: Was jy as mens iemand wat twee keer daarvoor sou dink om eerder 'n ding op 'n omgewings vriendelike manier te doen? (gebruik enige voorbeeld uit jou eie lewe /konteks indien wel)**

**2.2: Het jy al in jou lewe op enige manier probeer om meer inligting oor omgewings aspekte in te samel? (bv. boeke, artikels in tydskrifte/tv/studeer daarvoor/vra ander Departementele bemaptes uit daarvoor) ? Hoekom?**

**2.3: Sou jy jousef as 'n inherente omgewings bewuste individu bestempel?**

My praktyke het nie veel verander nie – dit is nodig dat daar balans moet wees en dit is waarna mens moet streef – kyk ek is nie 'n bunny hugger nie – maar daar moet balans wees en ek dink hierdie goed moet hand aan hand loop – die inligting wat jy uit die bewarea uitkry kan jy begin toepas in jou boerdery – en dit was nice.

Ons is 'n klomp dinamiese ouens bymekaar en ons vra konstant vir mekaar "what is next" en ons hou daarvan om te groei – ons is nie staties nie. Dalk sou ons nie nou al daar gewees het waar ons nou is nie – die proses sou dalk baie stadiger gewees het so dit is dalk waar S ingekom het is om ons die ander dinge te wys en bloot te stel daaraan. Ek sou dalk eers oor 5j uitgekom het waar ons nou is. Blootstelling is 'n wonderlike ding.

CW: Werkers en hoe hulle deel geraak het van die proses – werkers word bemagtig en groei. Vb van Slanghoek. Werkers word nou eienaars en hulle word bemagtig – 2 veldwagters, Abram en David.

JN: Op ons ope dae sit ons die werkers saam met die geoloog of die bankbestuurder. Ons het nou 'n projek waar ons ook spekbome gaan groei in Matjiesfontein en dan gaan ons dit oralste laat uitplant in die veld.

**3: Het jy in jou boerdery geskiedenis enige omgewings vriendelike praktyke aangewend op jou grond? Waar het jy inligting hieroor gekry/ Wie het jou meer hiervan vertel/geadviseur?**

**3.1: Hoe was Department Landbou hierby betrokke met hulle "extension service" projek?**

**3.2 Het dit verander / of meer geraak nadat jy ingekoop het in die Voogdyskap projek? Vertel meer asb.**

No where – daar is nie meer amptenare van landou wat ek sien of van weet nie. Hulle het mense wat die job moet doen – maar hulle het nie mense wat met mense kan werk nie! Dit is die grootste probleem van al die probleme!

**4: Hoe is jy genader deur die Voogdyskap beampte om deel te raak van die Inisiatief? Wat se metode het hy gebruik?**

**4.1: Wat is jou gevoel oor dié metode wat deur die beampte gevolg is - was dit van pas met meer as genoeg verduidelikings en/of inligting wat met jou gedeel was van die begin af – of sou jy graag meer wou weet oor die biodiversiteit en potensiele praktyke op jou grond?**

**4.2: Wat volgens jou is die sterkpunte en die swakpunte van die metode waarop die Stewardship inisiatief aan jou beskikbaar gestel is? (Bespreek en maak aanbevelings asb.)**

**5: Was dit nodig vir jou om jou oorspronklike opinie (perspektief) rondom omgewings aspekte binne jou boerdery te verander / te wysig, nadat jy by die Stewardship projek aangesluit het?**

**5.2: Indien wel, was dit vir jou maklik binne jou gemeenskap om hierdie aanpassing te maak – en hoe het jy dit reggekry?**

**6: Was dit nodig vir jou om jou boerdery praktyke te verander / te wysig, om hierby aan te pas?**

**6.1: Hoe het jy hiervan bewus geraak / inligting gekry oor potensiele nuwe maniere van volhoubaar te werk gaan?**

**7. Wat is die verhouding tussen jou en jou mede boere in jou onmiddelijke omgewing?**

**7.1: Is daar enigsens sprake van jou en jou mede plaasboere van julle omgewing, om hierdie aspekte van boerdery te bespreek en saam te besluit op 'n pad vorentoe? (Samewerking tussen grondeienaars –is dit 'n realiteit?)**

**8: Hoe word die omgewings vriendelike praktyke aan grondeienaars bekend gemaak –sodat daar die nodige groei en volhoubaarheid by jou sal ontwikkel?**

- Deur kennis te deel (boeke kennis = brosjures, boeke , kaarte en ander wetenskaplike inligting wat aan jou gegee word plus elektroniese opsies van inligting opsoek?
- Deur plaas besoeke en veldwerk vanaf die voogdyskap beampte
- Deur boere dae / kennis deel dae
- Deur opvolg besoeke en die hersien van die nuwe praktyke deur die voogdyskap beampte en die eenaar?

**9: Wat is jou opinie oor die mees effektiewe manier van leer van die omgewings en biodiversiteit kennis?**

**10: Is daar enige aanbevelings wat jy wil maak oor die manier waarop grondeienaars leer / blootgestel word aan bewarings aspekte binne die Voogdyskap projek – om dit meer suksesvol en volhoubaar te maak?**

**CW: Suksesse van Stewardship – hoe sou jy dit beskryf?**

Vir my gaan dit oor die implementering van daai bestuurplan en die uitvoering daarvan. En dit is 'n groot ding. Ek dink dit is so 'n gee en neem verhouding in hierdie ding en ons as grondeienaars wil sien dat hierdie groot stukke grond van ons reg bestuur word. Maar ons het nie die kennis daarvoor nie en nou het Natuurbewaring die kennis daarvan en hulle kan ons help om die goed te bestuur. As bewarings grond, ja. Is dit wat ek van my pa geleer het as 'n livestock farmer die regte manier – moet ons nie dalk ander maniere toepas nie – jy weet? Meer wisselbou? Dalk skuif die goed vroeër of skuif dit later, laat hy bietjie meer afgewissel word - wat is die frekwensie – die relocations van ander wild of kleiner wild – of moet ek dalk met minder goed boer?

Ek sien nou die dag `n ander boer van Williston en toe ek hom vra hoe gaan dit met jou veld toe se hy vir my maar hoekom vra jy hoe gaan dit met my veld, ek is `n skaap boer – Maar weet jy ek dink dit kom met ondervinding – dit is vir my hoe ouer `n ou word hoe meer sien jy ander goed raak – dit het vir my baie met sosiale blootstelling te doene – my fokus het so geskuif van waar ek was tot waar ek nou is – in die ou dae sou ek my nie gesteur het aan iemand wat vir my kom vertel het hoe en waar ek my goed moet oprig op my plaas nie – nou dink ek twee keer oor elke dinge en wonder tog waar sal die beste wees vir my grond en my plaas om dinge te sit. Jy sosialiseer en jy groei na goed toe en dit is wat die verhouding maak werk. Jy gaan kry blootstelling en leer by die ander ouens hoe doen hulle dinge.

## Appendix 5: Abstracts from the Stewardship Operational Procedures Manual

### Background

It has been recognised that in order to effectively conserve South Africa's biodiversity, conservation efforts must focus outside of formerly protected reserves, considering 80% of the country's most scarce and threatened habitats are privately owned. This requires a new approach to conservation extension and a shift away from reactive extension (i.e. responding to problems and enforcing regulations and permitting procedures) to proactive extension (i.e. engaging with a landowner before a problem is created) where stewardship is encouraged. To these ends, extension officers need to be better equipped with people skills relating to relationship building, conflict resolution, land negotiation, as well as hands-on knowledge, in the form of practical guidelines for managing natural ecosystems.

The demographics of land tenure are currently changing in South Africa as land reform programmes are being implemented. With the likely increase in the percentage of land under the ownership of emerging farmers, these landowners will require even greater assistance than what they currently receive for natural resource management and land conservation issues. For this reason, improving the skills base of extension officers is in keeping with the changing socio-political climate in this country. The traditional aim of extension in the agricultural sector is to empower people to such a degree that they become independent decision-makers. The overarching aim of extension, in the context of the Stewardship Programme, is to create partnerships between landowners and conservation organizations or departments to ensure that the security and appropriate management of endangered ecosystems is achieved. For conservation extension to be effective, it must meet the legitimate needs and objectives of the landowners and communities who live in the landscape where the conservation agency is operating.

### Piloting a new approach

Increasing the profile of private conservation amongst the many responsibilities of the provincial conservation agency, local authorities and landowners themselves requires dedicated support and capacity. To these ends, CapeNature and the Botanical Society of South Africa launched a two year partnership project in November 2002, funded by the Critical Ecosystem Partnership Fund. The purpose of the pilot phase was threefold:

- 1. To develop skilled conservation extension service capacity in CapeNature
- 2. To develop a range of stewardship options for private land
- 3. To test the implementation of these options in pilot areas using appropriate incentive measures

The implementation process followed was developed along the way, as the process was tested with a number of landowners as pilot cases. This operational manual is the product of two years of trial and error, and lessons learnt along the way. For this

reason, there are still some gaps in knowledge and products under development. It is therefore recommended that users of this manual get in touch with the Stewardship Programme Manager in order to obtain some of the latest versions of various products referred to in this manual (e.g. site assessment form, Management Plan proformas, and all legal contract proformas).

### The definition of Stewardship

Stewardship refers to the wise use, management and protection of that which has been entrusted to you. Within the context of conservation, stewardship means wisely using natural resources that you have been entrusted with on your property, protecting important ecosystems, effectively managing alien invasive species and fires, and grazing or harvesting without damaging the veld.

### The vision of Stewardship

The vision of the Stewardship Program is threefold:

- To ensure that privately owned areas with high biodiversity value receive secure conservation status and are linked to a network of other conservation areas in the landscape.
- To ensure that landowners who commit their property to a stewardship option, will enjoy tangible benefits for their conservation actions.
- To expand biodiversity conservation by encouraging commitment to, and implementation of, good biodiversity management practice, on privately owned land, in such a way that the private landowner becomes an empowered decision maker.

### Central Principals

The Central Principles of the Stewardship Programme are as follows:

- **Site security is all important** – without securing the conservation status of land and giving it legal status, the future existence of that site is not guaranteed. I.e. basing conservation of irreplaceable biodiversity on gentleman's agreements alone is very risky!
- **Landowner-focused extension is the key** - One of the main reasons why biodiversity is disappearing at an alarming rate on private land is because there has been insufficient "feet on the ground" and capacity within CAPENATURE to inform, help and support those who make decisions about private land use.
- **Focus on priorities** – i.e. make conservation count in the areas that it counts! Resources, time and energy are wasted when conservation effort is expended in areas that are not priorities for conservation (either because that type of vegetation or ecosystem is sufficiently protected, not under threat or has become irreparably disturbed).
- **Biodiversity is the bottom line!** – decisions made about which properties should be the focus of conservation investment should be very defensible and based entirely on the biodiversity value of the land, and not who owns the land, their political or economic status etc.
- **People's needs matter!** – For a private land extension programme to be effective, the approach must be centred on two things: i) understanding the attitudes and motivations of the residing people; and ii) meeting the needs of these people as far as possible that would enable them to better manage the natural habitats on their properties.

### CapeNature's three Stewardship options

The Three Stewardship options that the CapeNature Conservation Stewardship Programme are promoting include:

1. Conservation Areas
2. Biodiversity Agreements
3. Contract Nature Reserves

#### Why do we need new stewardship options?

There are many past & existing conservation designations that can be applied to privately owned land. However, there are a number of limitations in each of them that necessitates a re-look at the tools at our disposal, as follows.

#### Conservancies

Conservancies are groups of neighbouring properties which co-operatively manage their environment with a common vision. While these certainly provide a valuable platform for improving the environmental ethic amongst landowners and promoting co-operation between neighbours, conservancies have the following flaws...

- No site security – i.e. conservancy members are not legally obliged to set aside land for conservation and can easily pull out.
- Reliant on individual enthusiasm – if the chairperson or keen driver of the conservancy moves or pulls out, conservancies are prone to collapse.
- Require much admin to keep such a multi-stakeholder initiative running & effective.

#### **Private Nature Reserves (PNR's)**

Private Nature Reserves are catered for in the 1974 Western Cape Nature Conservation Board (WCNCB) Ordinance and more than 50 have been proclaimed in the Western Cape between 1974 and 2002. While the declaration of a PNR on a property provided the landowners with status & recognition, this designation is flawed in the following respects:

- No site security – although legally recognized in the 1974 WCNCB Ordinance, these sites are automatically deproclaimed with a change of land ownership. It is up to the will of the new landowner to continue the PNR status. This means that any investment in the site or relationship built between CapeNature and the landowner is lost every time the property changes hands.
- No management guidelines or obligation to manage – very few PNR's are regularly inspected and once proclaimed, the landowner is often left to manage it on their own without much input or advice.
- Biodiversity value of the land does not always warrant the status – PNR status is often awarded on landowner willingness alone and not on an objective assessment of the conservation value of the land. In this way "lollipop" PNR's have been proclaimed, which enjoy the label & marketing advantage but do not protect high priority biodiversity, or have land that has been previously disturbed, is severely alien infested etc.

#### **Natural Heritage Sites (NHS)**

These were previously proclaimed by the Department of Environmental Affairs & Tourism (DEAT), but this programme is now no longer running. While NHS's enjoyed good recognition and status, the limitations include:

- Site security – once again, a NHS does not have legal status and it is up to the goodwill of the landowner to continue them.
- No obligation to manage – there was very little auditing or control over sites once NHS status was awarded, and landowners were often left to manage them as they saw fit.
- No auditing – very seldom did any Natural Heritage Sites get audited, if ever. And what auditing was done, was very cursory and did not interrogate the appropriateness of current management.

#### **Sites of Conservation Significance (SOCS)**

These are catered for by the 1974 Cape Nature Conservation Ordinance and are meant to provide some form of recognition for sites that don't qualify for Natural Heritage Site status. However they have the same limitations as Natural Heritage Sites including:

- Site security
- No obligation to manage
- No auditing

#### **Protected Natural Environments (PNE's)**

These designations were catered for in the National Conservation Act. Five such areas were proclaimed in South Africa, prior to 2003. They comprise large, multi-stakeholder areas of adjoining properties. Their limitations included the following:

- No regulation or management regime
- Much administrative effort is required to keep the designation operational and effective considering they comprise of many land users

#### **Protected Environments (PE's)**

These are provided for in the recently promulgated Protected Areas Act 2004, and replace PNE's. They are the most flexible but least secure type of protected area. Although there are relatively few restrictions in a Protected Environment, mining and prospecting is only permitted with the Minister's permission. The Minister or MEC may issue regulations restricting inappropriate development or other activities that affect the PE.

Limitations include:

- Limited site security - there are relatively few restrictions on Protected Environments, and several other land uses can be accommodated within them.
- They resemble a land use control more than a conservation management mechanism.

### ***Biospheres***

Limitations include:

- Zonation of core, buffer & transition does not necessarily stop development nor does it offer site security for individual properties.

- Their multi-stakeholder, multi-landowner composition creates much admin and often much dispute and politics (as they are often managed by Section 21 companies fraught with individual agendas). Historically, biospheres have not been very successful in South Africa. After their proclamation, momentum often tapers and very little actually happens on the ground. Normally a single champion holds the biosphere together, and when they pull out or move on, the proactivity of the biosphere can sometimes grind to a halt.

Only advantage – biospheres generally improves general environmental awareness within the area.

Apart from the above-mentioned designations, there are many more options, each of which has their own characteristics such as...

- Mountain Catchment Areas
- "Friends of..." groups

This can become rather confusing for a landowner – which option is the most suitable for their needs? For these reasons, CapeNature has reduced and simplified the suite of options into three – namely Contract Nature Reserves, Biodiversity Agreements and Conservation Areas.

Note: Existing types of protected areas & previous designations (e.g. Natural Heritage Sites, PNR's) can be accommodated within this structure, by re-classifying them into the appropriate stewardship option according to the applicable criteria.

### **How does Stewardship link up with LandCare Area Wide Planning?**

It is understandable if after hearing about the Stewardship Programme, the feeling is "not another initiative!", as there are constantly new approaches being devised in conservation and natural resource management. However, it is important to realize what stewardship is bringing to the table that other initiatives don't, and where the opportunities are for close collaboration and partnerships. A point in case is LandCare Area-Wide Planning.

***LandCare funds have been successfully used to clear invasive alien vegetation as an incentive for Stewardship landowners.***

The Department of Agriculture in South Africa has launched a new strategy called LandCare Area Wide Planning (AWP), which is being implemented by the provincial departments. In the Western Cape, the Resource Conservation section of the Provincial Dept of Agriculture has begun piloting the initiative starting in the Slanghoek Valley Area Wide Plan. The rationale for LandCare AWP is that to effectively address many natural resource issues (such as the degradation of soil by water and wind erosion, pollution of drinking water supplies, invader plant infestation or pest and disease infestations), planning must be conducted at a scale larger than an individual farm. To these ends, the Department of Agriculture has adopted a strategy for larger scale planning than the individual farm plan scale, in which local people identify and address the concerns of their community while striving to improve or maintain the health of the land. It is a locally-led, community driven problem-solving process that integrates social, economic and ecological concerns over defined geographical areas. LandCare AWP uses the IDP (Integrated Development Planning) process within a municipality as the vehicle to obtain these goals.

At first glance, LandCare Area-Wide Planning has many objectives in common with CapeNature's Stewardship Program. So in what respects do these initiatives differ? An AWP process led by the community with the assistance of Dept of Agric. will map the natural resources in the area at a 1:10 000 scale, in order to get detailed and accurate landuse information (e.g. waterways, natural veld, agricultural land, old fallow lands). Information is gathered from the landowners about what their current problems are as well as future landuse plans, through a needs analysis. This might reveal potential areas of conflict between conservation & agricultural plans for that land. However mapping the resources & identifying community projects which LandCare can help fund, does not affect the future legal status of portions of land or necessarily ensure that critical ecosystems are conserved and not developed. This is where stewardship can offer the legal tools to secure portions of conservation-worthy land with landowners, and offer benefits and extension services to such willing landowners. During the Stewardship Project pilot phase, staff from both institutions collaborated and worked closely together. It became clear in the Slanghoek example, that landowners were much more receptive to stewardship after an Area Wide Plan for the community had been completed, as a result of the emphasis on the sustainable use of natural resources and heightened awareness created. It is therefore recommended before implementing a stewardship programme in an area, that contact is made with representatives of the Provincial Department of Agriculture for that region to discuss how a LandCare AWP initiative could be initiated and integrated simultaneously with off-reserve conservation efforts.

#### **In summary, Stewardship can provide:**

- Expertise on the legal framework for private conservation within SA legislation
- Site security through two of the stewardship options including Contract Nature Reserves & Biodiversity Agreements
- Professional support team of conservation extension expertise
- Competent land management interventions (e.g. fire management)

- Lobbying force for a suite of incentives
- Spatial planning at 1:50 000 scale to identify broad conservation priority areas

#### LandCare AWP can provide:

- Community led approach to natural resource planning
- Spatial planning at 1:10 000 scale (i.e. individual farm maps of land use & natural resources)
- Links to the IDP process of local government
- Integrated and diverse partners

### The purpose of this Operational Procedures Manual

The purpose of this document is to equip:

- extension staff (from government, provincial agency, local authority or NGO's) whether it be from the agricultural or environmental sector
- Nature reserve managers who interact with reserve neighbours
- and any other staff who interact with landowners, with a knowledge of stewardship principles and how to implement conservation stewardship in a landscape through landowner interactions and negotiations.

### Important provisos for reading this Operational Procedures Manual

1. A **'Steward'** is a landowner or manager, or other philanthropic person or organisation that is responsible for decisions pertaining to land and its use, where there is a voluntary or contractual commitment to manage the land, to ensure provision of sustainable ecosystem goods and services and/or conservation of specific elements of biodiversity.
2. **'Stewardship'** is the practice of carefully managing land usage to ensure natural systems and biodiversity are maintained or enhanced for future generations. Stewardship can be practiced on a voluntary / philanthropic basis, or as a result of regulation or contractual obligations. This practice may or may not be incentivised, and may be an individual or community acting in isolation or being supported by organizations and / or the State.
3. A **'Conservation Stewardship Programme'** is an integrative programme aimed at creating an enabling environment in which a sustainable land stewardship ethic can be encouraged in support of achieving the objectives of a Biodiversity Conservation Plan. This includes support of and lobbying for national and provincial interventions to create an enabling environment for land stewardship and for entrenching this land use in the long term.
4. The term **'Conservation Agency'** is used consistently throughout this document to refer to the organization that implements stewardship. However, this might differ according to the institutional arrangements in each province in South Africa, and could include a statutory board or government department, local authority or even a non-governmental organization, if deemed appropriate.

The word **'landowner'** is used to refer to male or female owners of properties. In some cases, interactions will take place with the manager of the property, in the absence of the landowner. However managers and owners are not differentiated in this manual.

5. Stewardship can be applied to **communal or privately owned land**. However, stewardship implementation has not been rigorously piloted or tested in South Africa in communal areas and therefore the stewardship implementation steps outlined in this document are specific to stewardship on private land, and may need to be adapted for communal land scenarios.

#### 3.1.1 Preparing for the Initial Visit

A Stewardship officer should be well prepared for the first visit and equipped with all the necessary "tools" and documentation that might be needed to refer to during the meeting.

#### Doing your homework

Gather information before the initial meeting and where no records exist this information will have to be obtained from direct interaction with the landowner. Before visiting the landowner the extension officer needs to research:

- The principles & policies of the organization or initiative you are representing.
- The physical environment of the property including vegetation types, climatic conditions, geology and general conservation priority based on systematic conservation plans for the area.
- The needs & socio-economic challenges of the community in which the landowner's property is located.
- Background and records of previous encounters with nature conservation agencies and whether any permits or authorizations have been granted or denied.
- Information from the Department of Agriculture relating to the agricultural potential of the area, type of farming system, past & current land use, location and extent of arable areas.
- Background on the "human potential" in the area which may include:
  - Landowner characteristics - such as names, preferred language, land tenure, religious orientation, whether the major source of income to ascertain their dependency on the land.
  - Structure of the community – who are the formal community leaders and what formal organisations exist (e.g. conservancies, farmers study groups, farmers associations). From this generate a list of potential leaders to identify a community champion.
  - Institutional factors – What other government departments are active in the area and who are the extension personnel and sales reps from the private sector e.g. fertilizer and agro-chemical firms. What partnership opportunities exist?

#### Checklist for Landowner Meetings:

- **Map of the farm and of the area:** You can refer to this during the conversation - bringing out a map to refer to the extent of the property, boundaries and neighbours can be one of the best ways to get conversation going on an initial visit.
- **All relevant brochures and information:** A good idea is to assemble a folder or file of all the pamphlets available on a number of conservation topics to issue the landowner as their "Info Pack". Refer to Appendix 6 for copies of the Stewardship brochures.
- **Field guides:** In case the landowner wants to walk through the natural area with you and wants to know the name of a species)
- **Photo album** (if available): Take along a photo album of any flora and fauna pictures taken in the area to stimulate interest. For example, when trying to create awareness for renosterveld show the landowner photos of how beautiful renosterveld can look in spring with close-ups of special species, as many landowners only see renosterveld as "drab and scruffy".
- **Site Assessment Form:** In case you observe features on the property while driving around that need to be captured for the site assessment.
- **Proformas of the legal agreements:** This should be made available in case the landowner wants to peruse the contracts up front in the beginning stages of negotiations.

#### Initial visit -creating a good impression

It is very important to make a good impression with a landowner at the first meeting or visit so that the landowner will welcome you back onto their property. In order to "get your foot into the door" by creating a favourable impression with a landowner, it is important to remember that an extension officer represents a standard bearer for a cause. A favourable personal interaction will create a favourable label for that cause and hopefully create a positive shift in attitude towards conservation for the landowner.

#### Guidelines to Create a Good Impression:

- The **general appearance** of the conservationist is important, in particular the choice of clothing, which should be modest, neat and clean.
- If the **landowner's home language** differs from that of the extension officer, the officer must at least attempt to initiate communication in the same language, as this will enhance goodwill & mutual respect.
- **Adjust vocabulary and language style** to suit that of the landowner – i.e. avoid flowery, scientific jargon that might go "straight over their head". Provision of an intricate scientific rationale for conservation is often completely wasted on the subject.
- Be an attentive and **sympathetic listener** – avoid a "know-it-all" attitude.
- **Knowledge and enthusiasm** (where possible) about the subject's interests (e.g. their children, farming or hobbies) will engender greater respect for "messages" which the extension agent may wish to later convey.
- Look for **common ground** regards generic topics to initiate conversation.
- The extensions officers should **not be perceived to be "telling landowners what to do"** concerning conservation on their properties.
- **Express admiration** for what the subjects own or manage, especially regarding the natural habitat on the property to instill pride in the landowner.
- Do not assume that the person you are talking to is the sole **decision maker**. His spouse may have a major influence and so it is best to address them as a couple.

- Successful extension workers are able to put themselves in the shoes of the landowners in order to **understand their opinions and problems**.

### Practical issues regarding the initial visit

- A personal visit to a landowner at their home should be pre-arranged at their convenience, on a date that is suitable for them. To arrange the initial visit contact the landowner, introduce yourself and your programme / organization, and explain why you would like to visit them. It is therefore recommended that you make an appointment with the landowner before arriving.
- Arriving late or at inopportune times such as on pay day, can damage your credibility. Remember that credibility is built on impartiality, patience and professionalism. At the meeting thank the landowner for their time and re-iterate your mandate, your credentials and the intended purpose of the visit.
- Address the landowner as Mr. / Mrs. in their home language and remember to use correct protocol, e.g. For Afrikaans speakers, say "u" and not "jy", and "Oom and Tannie" if appropriate.

Do not limit yourself to a specific time period with the landowner by having other commitments later that day. You must be able to spend as long as the landowner deems necessary and not have to rush off to another appointment. This shows dedicated interest for that individual landowner on the part of the extension officer.

- Make a mental note of the landowner's comments, concerns, interests and attitudes during conversation. Then as soon as possible after the appointment, record these observations down on paper, before you forget the detail of the interaction. It is very important to remember specific information conveyed by the landowner so that you can follow up on any actions and refer to their concerns in the next meeting.
- When leaving ask when it would be suitable to visit again. Should the landowner be unsure or prefer to contemplate the information you have left behind, allow them to contact you for the next visit. In the event that the landowner does not contact you, give them a call after approximately two weeks to enquire whether they would like to meet again.
- Should there have been any information which the landowner required or questions which you could not answer immediately, be sure to get the relevant information back to the landowner as soon as possible. Prompt follow-up can be one of the most powerful means of demonstrating your credibility and earning their favour for you and your cause.

### Friendship before function

Before you can "sell your product" to the landowner i.e. convince them to enter into one of the three stewardship options, the most crucial step involves simply building relationship with the landowner in order to gain their trust (i.e. "friendship before function"). While this stage may be time consuming and involve more than one visit and possibly many cups of coffee, the importance of establishing good rapport with the farmer through non-threatening, casual conversation should not be underestimated. Try and see the farmer's world through their eyes in order to be sympathetic with the limitations that they or their farming enterprise face - this will invariably impact on their ability to participate in conservation. To these ends, we must talk less and listen more in order to truly understand a farmer's reality.

After visiting with the landowner, it is recommended that you privately evaluate the interaction with the landowner by considering the following questions:

*Complete this section privately after you have concluded the interview:*

- |  |
|--|
| <input type="checkbox"/> Was the landowner at ease?<br><input type="checkbox"/> Did the landowner freely share information?<br><input type="checkbox"/> Was anything unclear or confusing?<br><input type="checkbox"/> Were there any surprises?<br><input type="checkbox"/> Are there issues worth re-considering?<br><input type="checkbox"/> Any other observations worth noting?<br><input type="checkbox"/> Are there any queries that require follow-up? |
|--|

### 3.1.2 Landowner attitude and needs assessment

#### Assessing landowner attitudes

It is often useful to directly ask landowners what they think and feel about conservation in general and the ecosystems on their farm. This can reveal many clues about their values, worldviews, why they act in certain ways, and the obstacles that would need to be addressed in order to change their attitudes so that they favour conservation. Attitudes towards conservation can be affected by:

6. knowledge and awareness levels,
7. personal interest in conservation,
8. perceived value of biodiversity,
9. perceptions regarding their conservation agency and

10. willingness to conserve.

Therefore it is useful to consider all five dimensions when investigating landowner attitudes.

For more detail and examples on what questions could be used to assess landowner attitudes through a formal survey, see Appendix 1b.

### Assessing landowner needs

Conservation extension services can only function if some of the goals of the landowner coincide with those of the conservation agency. It is therefore imperative to assess the primary need (s) of the landowner to determine how the conservation message can best be tailored to fulfil such needs. There is no recipe for success but attempts to create a learning environment where all concerned, landowner and extension officer, come to terms with their conservation problems and needs. The landowners you are interacting with are best placed to inform you of the current local needs as well as the problems experienced with previous extension efforts. The extension officer is the vital link between the rural community and the organisation he/she represents. **Remember that a need, when carefully considered, is nothing more than a perception that a void exists between the present situation and one that is believed to be more desirable.**

The aim of conducting a landowner needs analysis is four fold:

11. Firstly it will allow you to formulate a plan on the specific extension support required by a particular landowner.
12. It is a good indicator of the match between what they need and what you are able to give them. e.g. A suite of conservation incentives at your disposal designed to meet specific habitat management needs.
13. It should give a clear indication of individual needs and those needs shared by the broader community and through that allow for prioritisation of certain needs through group discussions.
14. Lastly it will give you the information required in order to group community members into target groups at a later date to simplify follow-up extension support ('target groups' are groups of landowners that have a number of similarities in common, such as needs, farming systems & ideologies).

Landowners are well aware of their own needs and requirements. It is a relatively easy exercise to gain an understanding of needs by prompting them with a few questions. Don't restrict the questioning to biodiversity related issues only but attempt to discover the broader financial, community and agricultural issues involved as they invariably impact on the management of biodiversity on the property and across the landscape. The questions listed below are suggested as prompts to guide your thinking, but is by no means an exhaustive list of what questions can be used to conduct a needs assessment:

#### 3.1.3 Introducing the landowner to Stewardship options

- When you have ascertained that the landowner is ready to hear about the options he/she has for conservation stewardship on their property, it is recommended that you use a professionally produced pamphlet to talk from, refer to and leave behind after the visit. For examples of the two pamphlets produced during the pilot phase of the Stewardship Programme, refer to Appendix 6.
- Start with a brief outline of the background that has led to the existence of a Stewardship Program. E.g. discuss some of the limitations of previous designations such as Private Nature Reserves and conservancies and why there is a need for new options with greater legal security.
- Depending on what vegetation types occur in the area in which you work, raise awareness about any endangered vegetation types that might be found in their area or on their farm. Spending time discussing the value of the natural habitat on their property and any other interesting features or ecological processes could make the landowner more willing to conserve what they own. Stress the importance of individual fragments and the part they play in the bigger picture.

If you are working in a delineated area (e.g. pilot area or priority region from conservation plan), **explain how and why the area was chosen for conservation action.** It is important for the landowner to realise why focussing on priorities is important, and why you do not want every single piece of natural vegetation or old lands under stringent conservation status. The role of different conservation agencies working in the same area should be clarified.

- Explain any **limitations** that you or your organisation face in terms of **capacity and resources** in order to give them a realistic picture of the status quo. Do not promise a level of service or assistance that you know you will not be able to handle or deliver on.
- Stress how important it is to think **long-term** and ensure any area remains conserved **beyond their lifetime.** Highlight the possible danger should they want to sell the property one day, that all the time and money invested in conservation could be wasted if the new owner decides to change land use and develop the conserved area, or even just neglects it. This is how you can convince the landowner of the usefulness of putting restrictions on the title deeds.
- **Address landowner fears upfront** (such as future government expropriation or political instability). Acknowledge their fears and concerns while stressing at the same time that stewardship is by no means a land expropriation strategy. Reassure them that they will not have to cede ownership rights to the conservancy agency and that they can retain all their normal landowner rights.

- Ensure that you do not create an "**incentives expectation**", but rather instil a "**stewardship mindset**". It is advisable not to even mention incentives unless the landowner directly asks you about whether any incentives or assistance is available.
- Keep the explanations about each stewardship option **simple** and **do not promote one option above the rest** – explain the pro's and con's of each in a non-biased manner. Placing emphasis on one option over the rest could raise expectations and then lead to later disappointment when the property does not qualify for that status (e.g. do not make it seem like Contract Nature Reserve status is the only option worth aspiring too, and that if you do not qualify for that, that your property is second best).
- **Use the map** provided on the stewardship pamphlet (or design your own) to explain **how the options could look on the landscape** – i.e. that any option can apply to a portion of the property or the entire property. Furthermore, a property can include all three stewardship options on one farm, depending on the biodiversity value of the different areas.
- Highlight the **voluntary nature** of all the stewardship options and that the contract conditions can be tailored to a landowner's individual needs. In this regard, the negotiation process around what the landowner and agency will do or provide is flexible.
- Make it clear that if they are interested in exploring the options with legal status, that the land will have to **meet certain criteria** and that the next step would be to conduct a **site assessment for biodiversity value**. Only once the outcome of the site assessment has been reviewed and made known to the landowner, can a final decision be made on which option to pursue.
- Make it clear **who will be negotiating the contract** and that you as conservation extension officer do not have the mandate to sign the contract. Rather your role is to play a **facilitating role** between the landowner, the conservation agency and any legal expertise that is required.
- Conclude by pointing out that in general, the Stewardship Program is a relatively new one, and that **patience is a prerequisite** while certain wrinkles are still being ironed out and systems made more efficient.
- Leave your contact details with the landowner, **let them digest the information in their own time** and allow them to contact you back when they are ready to discuss further or arrange for a site assessment to be done.

#### Golden rules:

- Do not make **promises** that cannot be fulfilled.
- **Be open, honest and transparent** with regards to all aspects of the stewardship options, especially regarding the legal contracts and restrictions.
- **Do not pressurize the landowner** to make a quick decision about which stewardship option they want to explore – go at their pace.

#### Capturing information into the Stewardship database

A comprehensive Stewardship database has been developed by CapeNature to manage the Stewardship Programme. The database is spatially organised and is linked directly to Arcview GIS. Microsoft Access stores the non-spatial data. New sites can be added directly in Arcview or through the database. A detailed help file is provided with the database to explain the methods of creating entries.

- The stewardship database has several sections including:
- **Landowner information** (including personal particulars, contact details, status etc)
- **Site information** (including current status, desired status, size, title deed numbers, vegetation types, history, directive issued, records of property visits & inspections, servitude rights, threats, rare species, alien species & densities, physical features etc.)
- **Information on the Management plan** (including revision date, due dates for each management action and who is responsible, costs incurred in management)
- **Contract Information** (including initiation date, registration date, expiry date)
- **Audit due** (date due for next annual audit)

**Incentives & Incentive delivery** (record of each incentive or form of assistance committed to by the agency and when it is successfully executed)

The **desired and actual Stewardship status** of each Stewardship site will be recorded in the database for which drop down lists have been provided to simplify data entry. The **management actions** required for each site also need to be recorded; these lists can be updated manually.

A series of **reports** can be produced from the database. These reports are designed to provide managers with important information regarding the status of stewardship sites, contracts, management plan actions and audits due. It will also provide a list of and record of incentive delivery.

The following general reports can be produced:

1. Audits due
2. Contracts expiring
3. Management Plans due for revision
4. Total costs spent per site on management actions
5. Management actions due
6. Total area under stewardship in each category.

The information that will be used to populate this database can be obtained from various sources. The main sources being:

- Landowner needs assessment form;
- Biodiversity Site Assessment form
- Management Plan
- Legal Contract
- Arcview GIS layers

It is essential that all information is entered accurately into the database as this will determine the quality and accuracy of the reports that can be produced. A central database will be maintained at the Scientific Services division of CapeNature to track all stewardship contracts in the province.

### 3.1.4 COMMUNICATIONS GUIDELINES FOR INTERACTING WITH LANDOWNERS

Communication is the key! Above all else, approaching, consulting, negotiating with and assisting landowners requires excellent communication and personal interaction skills. The success or failure of a land negotiation process can be solely dependent on the quality of the communication and impression created by the extension officer.

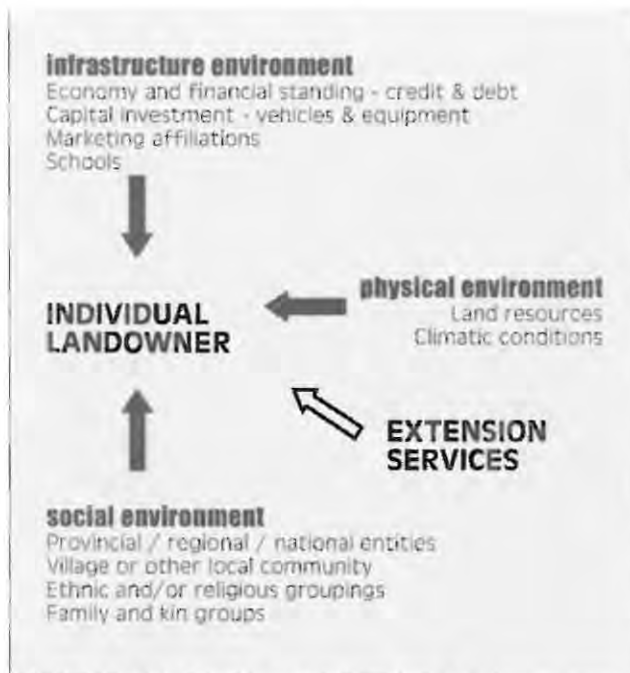
- Principles of Extension Communication:
  - Extension officers are professional communicators. The power of extension work lies in strong interpersonal connections with individuals and groups. Effective communication is the surest way to maintain these linkages.
  - Skilful communication with each person or community starts with knowing its culture and problems and analysing their needs and attitudes to risk.
  - When you know what landowners are thinking and how they perceive their environment you can formulate suitable messages at the right time to have maximum impact.
  - Strong links and liaison between conservation extension and agriculture are vital in improving the flow of quality information, which in turn benefits the farming community. Therefore, regularly communicate and share information with the agricultural extension officer in your area who interacts with the same farming community.
- It must be remembered that if you are an extension worker, you have the potential to be agents of change, and influence – therefore you must know what you are talking about! – i.e. be professional and know your subject matter.
- Give the landowner confidence that the decision is within his/her capability and best interest.

### Listening

- The key to good listening is not to dominate conversations, but to ask questions and concentrate on listening in order to see things from the farmer's point of view.
- Active listening implies not only using our ears, but also our voice, eyes and body language. This reassures the speaker that we are paying attention.
- To keep listening at an effective level you should:
  - Try to anticipate the landowners next point,
  - Sum up in your mind what they have said as well as hear the point the landowner is making and
  - Look behind their statements for attitudes and feelings that may help you to understand the farmer's point of view.
- One should be "receiver orientated" – that is, as a starting point you must find common ground for discussions and address all the landowners concerns before you attempt to introduce new ideas.
- Continually use feedback to evaluate the meaning the landowner places on his messages, and whether this meaning is the same that you intended to create. This information gives the extension officer the opportunity to change or modify messages to suit the receiver.

## Influences

A landowner's decision making is influenced by his social, infrastructural and physical environment. For an extension officer to be successful in landowner interactions it is essential that they are aware of these influences and use them to their benefit.



**Fig. 2 The decision making environment of the farmer.**  
(Diploma in Agriculture Extension, Elsberg Course Material 2004)

- The extent of to which a landowner is influenced by his Social and financial must be taken into account e.g. His financial situation may not allow him to consider setting aside any land for conservation because every piece of arable land has to be utilized.
- Landowners learn much from observing and discussing their colleague's experiences and/or members of their social circles. This means that when some members of the social groups have adopted a concept others will often follow.
- Opinion leaders in the community have considerable influence on the way in which people in their sphere of influence think and farm. For this reason, it is beneficial for an extension officer to first convince the respected opinion leader in the community who can then act as a champion for the concept and promote it amongst the rest of the community.

## Being Agents of Change

A number of options exist when trying to influence human behaviour. An extension officer needs to be aware of these to be a successful communicator.

Openly influencing a landowner's knowledge - through one-on-one communication or provision of reading material, hand-books etc.

**E.g.** Supplying the farmer with information such as alien clearing or restoration manuals and allowing the landowner to have access to scientific resources through the extension officer which will enable him or her to manage his property in a more environmentally aware manner.

This method may be applied when:

- You consider that the farmer can solve his own problems if he has more knowledge or has changed his attitudes,
- You are prepared to help the farmer collect more and better knowledge to help him change his attitudes and
- The landowner trusts your expertise and motives, and is prepared to co-operate with you in your task of changing his knowledge or attitudes.

1. **Advice** - Advice is given on which solution to choose for an issue or problem.

**E.g.** The landowner and extension officer identify a problem such as erosion, the stewardship officer should be able to advise the landowner on a possible solution or source the information from a partner such as Agriculture.

This method can be used if:

- The landowner agrees with you about the nature of the problem and the criteria for choosing a 'correct' solution
- You know enough about the farmers situation and have adequate information to solve the problem
- The landowner is confident that you can and will help find a solution

## 2. **Exchange** - goods or services are exchanged between the two groups.

**E.g.** The goods or services desired by the landowner could vary from tangible items such as fencing or game to services such as stewardship advice which could be a form of motivational incentive. In exchange for the goods or services, the landowner voluntarily sets some of their land aside and secures it by means of a contract with the conservation agency.

Conditions necessary when applying this method are:

- Each party in the exchange process considers the transaction to be in their favour,
- Each party has the goods or services desired by the other and
- Each party can only deliver their part when the exchange goods or services have been delivered by the other, or can trust that this will be done.

## 3. **Providing Means** - physical goods or means are provided.

**E.g.** The landowner is attempting to clear the alien vegetation on his property but does not have sufficient funds for herbicide, labour or equipment. The Stewardship Programme could either supplement the funding if the landowner has signed a contract or could source funding for the area from appropriate sectors such as the Provincial Department of Agriculture.

This method can be applied when:

- The landowner is trying to achieve certain goals which you consider to be appropriate,
- The farmer does not have the means available to achieve these goals and
- We have these means and are prepared to make them available to the farmer on a temporary or permanent basis.

## 4. **Providing Service** - the provision of services or expertise on behalf of the landowner

**E.g.** The mapping and planning of the removal alien plant species with a time & cost schedule, and not the actual task of removing them.

The method can be used if:

- You have the knowledge and/or means available to perform the task better or more economically than the landowner,
- You agree with the landowner that it is useful to perform these tasks and
- You are prepared to perform them for him

### **Some Additional Hints**

Be careful of negatively stereotyping all landowners and expecting all landowners to react in similar ways. Treat each person as a unique individual and give them the benefit of the doubt! Unfortunately, new extension officers to an area can be faced with the situation where landowners have not had a positive relationship with the previous officer, or there are unresolved issues with the conservation agency. The best solution is possibly to acknowledge their grievances, appeal to them to let bygones be bygones, and make every attempt to ensure a similar situation does not happen again.