CHAPTER 1

ORIENTATION AND BACKGROUND
1.1 INTRODUCTION

Reptiles, although essentially lacking the charismatic appeal held by their more anthropomorphic cousins, have long been associated with humans, either in legends, as a source of victuals, as ornaments, as pets, and/or as medicinal/curative ingredients. Generally lacking defence mechanisms, they have also regrettably been capriciously over-exploited to such an extent that it has become problematical, if not impossible, for some populations to remain viable. What is even more disconcerting is that reptiles have lived for almost 200 million years and have survived the major natural catastrophes, which eliminated the dinosaurs, but are now being extirpated by humans through unregulated trade, habitat loss and other criminally related peripheral threats.

Throughout the world they are jeopardised by a plethora of problems to which they are succumbing – populations are shrinking and species everywhere are threatened and vulnerable. Many are critically endangered; others hover on the very brink of extinction, some already having surpassed the point of no return. Survivors of countless millennia, our reptile heritage is being systematically squandered, and is facing imminent demise at the hands of humankind.

Customarily, criminological research worldwide has focussed on the more conventional, sensationalistic, and higher profile type crimes in society, especially those involving a readily identifiable victim, ignoring to a large extent crimes in the conservation realm. According to Baasch (1997:17), the obvious crime we have in society (subhuman crimes such as rape and murder) is of course of paramount importance, but if “less important” [natural resource] crimes such as reptile smuggling are ignored, one might well ask, what is the future of this planet. The paucity of action taken thus far in this arena vividly portrays the central thrust, lifestyle and philosophy of a capitalist system – the notion that humans have a right to make use of all the resources of the planet, that other life forms such as animals [whether terrestrial, aquatic
or marine] are there to serve our needs, and that humanity has no long-term obligations to future generations or the natural world (South 1998:214).

Compounding this situation in the South African context is the general lack of understanding for, and awareness of, issues such as conservation crime, and a seemingly apathetic generic attitude amongst South Africans towards such deviance, which in most other countries would be regarded as morally wrong. Kidd (1998:190) moots that the outlook of many South Africans in this regard has to a large extent been numbed/deadened by the widespread concern over rampant “ordinary” criminal activity which most people regard as more serious than natural resource/conservation/”environmental” offences. Zwecker (1998:10) mentions the following in this regard:

“n Onlangse opname deur een van die land se voorste meningspeilers, Markinor, het aangedui dat die omgewing, hetsy die fauna en flora of sy natuurlike bates, skoon lug, skoon water, of gesonde grond dit net gemaak het op hul lys van tien belangrikste “probleme” wat die mense in hul toekoms verwag. Onder die eerstes op die lys was natuurlik werksgeleenthede, opvoeding vir kinders, gesondheidsorg en misdaad’.

Conservation crimes are additionally, in the main, inconspicuous in nature with the deleterious effects realised going ominously unnoticed in the short to medium term, often even to the, so-called, trained eye.

Criminology, although a firmly entrenched discipline that has through the years contributed significantly towards understanding and addressing the problem of conventional crime and criminality, has barely begun to consider the questions and challenges raised in the conservation sphere. The significance and seriousness of natural resource crimes have only recently, in concert with a growing global awareness of conservation issues, begun, albeit apprehensively, to receive focussed attention from criminological scholars. It has, however, by no means received; it is submitted, full acknowledgement as a field of study in criminology. Although the foundations for a steadily emerging, and commonly termed environmental/ecological/green perspective in criminology seem to have already tentatively been laid, what is required for
the dual purposes of innovation and consolidation, and which will be passionately argued for in this research project, is recognition of this perspective as an unambiguous conservation criminological field (italics mine), both practically and theoretically.

In order to further place in perspective the challenges faced in the conservation crime arena, to illustrate the complexities and interrelatedness of the variables to be considered, and to broadly delineate the dynamics and gamut of this thesis, permit the researcher to, for a moment, play devil’s advocate and ask: Does one really need reptiles in one’s life? How many times in the past decade has a reptile made a significant contribution to your spiritual equilibrium, your monthly salary or the stability of your family unit? After careful consideration, ask yourself to what extent your life would be diminished if all the reptiles on the planet were to perish tomorrow in a mass display of instantaneous annihilation? What exactly would you lose? We have bounteous pictures, films, documentaries, museum artefacts, and the like, of reptiles to look at should we in any way grow melancholy. So, if you were never again to see a living reptile, what would you lose from your life?

Without having to speculate as to what the answers to these questions might be, it is not surprising to note that people are not channelling their disapproval towards natural resource offenders while there are hosts of murderers, rapists, vehicle hijackers, armed robbers, et cetera, committing crimes daily with impunity, crimes which will undoubtedly have a far greater negative impact on any one individual’s life than would any form of conservation [reptile] related deviance. It is, moreover, not surprising that there exists in the South African society a widely manifested indifference to conservation crime issues, a general environmental myopia and an unsophisticated lack of appreciation and knowledge of the extent and gravity of, particularly, the illegal reptile trade quandary.

This thesis has, therefore, been developed to explore the illegal exploitation of reptiles (herpetological deviance) as a form of conservation crime in the South African context in order to, amongst others, assess the contribution and
significance of an innovative conservation criminology. It is, furthermore, envisaged that this essentially pioneering study will contribute to enriching and revitalising the theoretical framework of a post-modern conservation criminological imperative, while simultaneously providing a *bona fide* exposé of the illegal reptile trade phenomenon in the Western Cape province.

### 1.2 RATIONALE

Natural resource and environmental degradation through illegal exploitation in its various forms has for many years now been of critical concern to those implicated with conservation and sustainable utilisation issues. Often intervention programmes have, due to pressure group insistence and censure, and even on the odd occasion public outcry, been implemented to check and control environmental perturbation, but sadly most have been directed at protecting those species perceived to possess a higher value, status and/or profile, for example, rhino and elephant poaching, cycad smuggling, and even of late, abalone poaching on the country’s south-western seaboard. Ironically the geometric tortoise (*Psammobates geometricus*), and many other endemic and indigenous reptile species, share a similar statutory protection status as the endangered rhinoceros and cycad, but are afforded nowhere near the same attention as those deemed to possess more utilitarian, appealing and anthropomorphic attributes.

The escalating problem of heinous and violent crime in South African society has of course done little to promote public censure of conservation related deviance and has effectively served to relegate natural resource crime issues to a distant second place, as society reels under a crime wave that directly affects their personal safety, their families, and their pockets, serving to a large extent to desensitise the general public towards conservation crime issues. To make matters worse, no specific crime category presently exists within which these, and other forms of conservation/natural resource crime, can be placed. The development of explanatory theories for conservation related deviance has additionally been severely neglected promoting, it is
submitted, the view that these crimes are inferior/insignificant in terms of policing economics and, furthermore, serving to undermine the seriousness of the current state of affairs within this field - only through a greater understanding of why conservation crime persists will a potential solution be exposed. It is, moreover, submitted that due to misperceptions about the sustainability of the reptile resource, policy disparity within conservation organisations, and even in many cases, the total absence of identifiable provincial and/or national strategy regarding herpetological resources as well as derisory conservation/scientific policing interest, a low general interest in reptiles has resulted in these organisms lacking a strong advocacy in wildlife protection, scientific research and conservation from within the South African community.

According to Bruwer (1997:6), reptiles are, habitually, traded and illegally exploited in a surreptitious and criminally professional manner within very exclusive circles, making the illegal trade therein seem almost non-existent and the prosecution of offenders a task of virtual impossibility. The damage caused by these reprehensible acts is, however, very real and if allowed to continue unabated will, in all probability, lead to many valuable and extremely rare endemic/indigenous species vanishing from our shores, compromising our rich natural legacy and negatively impacting on biotic diversity. By researching the fundamental dynamics and purview of this particular phenomenon it is envisaged that a valuable contribution will be made to protecting the natural resources in question and mitigating this type of deviance for the benefit of the resource and present and future generations.

It is further submitted that such an investigation will stimulate and promote an interest in conservation criminology, as a formally recognised derivative of the mainstream criminological discipline, thereby enriching and revitalising the criminological repertoire and, furthermore, facilitating the reappraisal of traditional notions about what qualifies as a serious crime and what does not.
1.3 AIM OF THE STUDY

Mouton and Marais (1989:43) state the following with regard to research aim/objective:

‘Met die navorsingsdoelstelling word ’n breë aanduiding van wat met die navorsing bereik wil word, gegee. Is die doel om te beskryf of te verklaar of dalk te voorspel of is die projek bloot verkennend van aard?’

The aim of this research project, which is chiefly exploratory in nature, but also embraces subtle nuances of explanation, is to identify conservation crime/criminology as a separate and viable crime category within the criminological discourse, develop an integrated and relevant elucidatory theory to satisfactorily explicate the aetiology of herpetological deviance, and to investigate the purview and fundamental dynamics of the illegal reptile trade phenomenon in the Western Cape province as a form of predominantly terrestrial conservation crime. An attempt will also be made to comprehensively elucidate and expound on its nature and extent, modus operandi and crime scenes, control mechanisms and effect and implications.

As briefly alluded to in the paragraphs above, it is envisaged that by placing this phenomenon in a criminological perspective, valid arguments will be raised for the formation of a separate, parsimonious and mutually exclusive conservation crime category. It is further envisaged that an acceptable crime causation explanation/perspective will be developed which, in conjunction with the conservation crime category, will ultimately produce a valid and reliable framework within which this particular form of deviance can be addressed in the South African context, and which will result in the concept of conservation criminology being rightfully afforded its own identity and formally and unambiguously recognised within the criminological domain.
1.4 ASSUMPTIONS

By reason of the chiefly exploratory nature of this research thesis, the formulation of a hypothesis is not entirely relevant and will, therefore, be supplanted by various assumptions. The following is assumed with regard to the illegal reptile trade, as a form of conservation crime, in the Western Cape province:

- Byzantine and ambiguous definitions/terminology regarding conservation crime, serves to isolate and render insignificant deviance in this field, promote confusion, as well as limit awareness and concern for such issues – essentially leaving the study field without a specific identity.
- Explanations as to why conservation crime persists are severely lacking in the literature, giving rise to an inadequate understanding of the conservation crime quandary, and subsequently also the formulation of effective intervention, suppression and/or mitigation strategies.
- Inadequate conservation compliance/policing capacity, mandates and protocols (guardianship), compounded by a fragmented, inconsistent and incomplete legislative environment, hamper attempts to regulate the burgeoning illegal reptile trade phenomenon and address its scope in a holistic, focussed and integrated manner.
- Apathetical societal attitudes towards reptiles and their conservation/perpetuation, essentially due to their bête noire status, reinforced and adulterated by a general decline in the rule of law in South Africa, exacerbate the illegal trade in all its facets.
- The Western Cape province, due to its unique and diverse habitats and concomitant assortment of specialised, atypical, indigenous and endemic (attractive) species, is a focal point for reptile related deviance.
It is, furthermore, assumed that through focussed criminological research, the underlying dynamics and interrelationships between strategic variables can be exposed, by providing an accurate and lasting interpretation of the relevant data and facts, realising timeous, effective, sustained and well co-ordinated intervention initiatives.

1.5 RESEARCH DESIGN

As briefly alluded to previously, the purpose of this research study is essentially exploratory in nature, but also somewhat bilateral, in the sense that subtle elements of explanation are tactfully included. The research design is chiefly exploratory since the field of herpetological deviance is one that has seldom, if ever, been examined meticulously and/or written about. The researcher will, therefore, endeavour to ascertain its dimensions and dynamics, so as to formulate more precise questions, hopefully directing future research. The explanatory dimension is incorporated, because, although crime categories and crime causation theories/perspectives have been well developed to classify and explain conventional crime, they have never really been directed at addressing conservation deviance and/or at answering the question of why it persists. Relevant existing perspectives will, therefore, be addressed in an explanatory fashion so as to evaluate their applicability in relation to the clarification of herpetological deviance.

Neuman (1997:19-21), although stating that one purpose is usually dominant in research studies, recognises such a fusion and that studies can, therefore, have multi-purposes and, furthermore, that explanatory research to a large extent builds on and complements exploratory research by searching for causes and reasons. Leedy (1997:122) augments this sentiment by stating that, although research designs traverse different terrains, they all converge on the same destination, namely the enlargement of human knowledge and the discovery of new truth. Palys (1997:77), whilst essentially corroborating both the preceding sentiments, goes even further by stating that any distinctions between research objectives are bound to be arbitrary, and
divisions between them frequently ambiguous; not every textbook drawing the boundaries in exactly the same way.

Neuman (1997:20-21) epigrammatically identifies the following goals of exploratory (also referred to by Palys (1997:77) as formulative research) and explanatory research (interjected with the researcher’s contextualisations), all of which will, to a greater or lesser extent, be addressed in the course of this thesis:

- **Goals of exploratory research**

  - Become familiar with the basic facts, people and concerns involved, or as Palys (1997:81) asserts, to achieve new insights – nature of organisms involved, value (attractiveness), availability, compliance entities/initiatives (guardianship), typology of criminals, etc.
  - Develop a well-grounded mental picture of what is occurring – *modus operandi*, crime scenes, determine catalyst/s and interrelatedness of variables, etc.
  - Generate many ideas and develop tentative theories and conjectures – critically evaluate existing theoretical framework, propose realistic improvements to elevate status of conservation criminology.
  - Determine the feasibility of doing additional research – impediments and hurdles should be compartmentalised and addressed in order of priority and practicality.
  - Formulate questions and refine issues for more systematic enquiry – identify critical areas where more focussed intervention is required - formulate holistic and structured strategy.
  - Develop techniques and a sense of direction for future research – make informed and valid suggestions for future intercession by criminological scholars.
Goals of explanatory research

- Determine the accuracy of a principle or theory, or according to Palys (1997:81), to derive causal assertions and/or allow causal inference – assess existing perspectives and applicability to conservation crime field.
- Find out which competing explanation is better – evaluate perspectives and determine most appropriate approach, whether integrated or unrelated.
- Advance knowledge about an underlying process – elaborate on the reasoning behind theoretical manipulations and the genesis and concatenation of any new theoretical propositions generated.
- Link different issues or topics under a common general statement – conceptualise variables skilfully.
- Build and elaborate a theory so that it becomes more complete – formulate unambiguous perspectives based on sound reasoning and facts.
- Extend a theory or principle into new areas or issues – apply in the herpetological crime context.
- Provide evidence to support or refute an explanation or prediction – ensure ample and relevant empirical data to support propositions and any inferences made.

1.6 DATA GATHERING

- Quantitative and qualitative data collection

While exploratory (and explanatory) researchers often make sole use of qualitative data, due to its collection techniques being less wedded to a specific theory or research question (Neuman 1997:19), it was felt that in order to best approach this particular research challenge to employ an overriding qualitative approach tempered somewhat with quantitative
undertones, and in so doing to avoid a meticulous allegiance to methodological regimen. Focus was, therefore, placed on the best approach for reaching the objectives of this study, avoiding the rigid and generic stances generally propagated, and/or the canonisation of any one approach. Subsequently both techniques, essentially quantitative and qualitative interviewing, have to a certain extent been integrated in order to apply a unified approach realising the most believable, valid and reliable results.

The style of research employed in this thesis is resultantly centred on the research problem itself, rather than based on a specific epistemological position per se, as no exclusive (formal) data gathering protocol, it is submitted, should be allowed to overshadow the most prudent collection mechanism/s, which naturally, subscribe to scientific codes/methodology. Mouton and Marais (1989:174) amplify this, and the other sentiments expounded upon in this monograph, by asserting the following:

‘[D]at die verskynsels wat in die geesteswetenskappe nagevors word so verweefd is dat ’n eenvoudige benadering die mens nie in sy volle kompleksiteit kan omvat nie. Dit lyk dus onvrugbaar om as’t ware een benadering te kanoniseer en ander te ekskommunikeer – deur ’n standpunt van konvergensie en komplementariteit (moontlik interparadigmatisie oorvleuling) sal ons uiteindelik moontlik meer van die mens kan begryp’.

According to Neuman (1997:328-329), qualitative research reports often contain empirical data such as rich description, colourful detail and unusual characters instead of a formal, neutral tone with [quantitative] statistics – they give the reader the feel for particular people and events in concrete social settings. Neuman supra goes on to state that qualitative research can be highly effective for creating a feeling for the whole, for grasping subtle shades of meaning, for pulling together divergent information, and for switching perspectives – it is not an excuse for doing poor quality research, and it has its own discipline and rigour.
Mark (1996:212-214) states further in this regard that qualitative research is flexible and intuitive and the results rich and complex, allowing the researcher to get close to the perspectives of the persons [and/or phenomena] being studied. Quantitative data generated in the course of this study were, therefore, essentially used to harmonize and augment qualitative findings. Mouton and Marais (1989:157) appositely sum up the above-mentioned sentiments by stating that quantitative data gathering is more formalised and controlled with a precisely determined width that is reminiscent of the approaches utilised in the natural sciences, whilst qualitative data gathering procedures are not nearly as formal/strict/rigid, and the width thereof is more borderless and philosophically applied.\footnote{Translated from Afrikaans.}

- **Instrumental case study**

In order to most appropriately realise the goals of the research design detailed previously, and to effectively unite and merge the quantitative and qualitative research strategies/methodologies, the researcher has employed what De Vos, Strydom, Fouché and Delport (2002:276) term, an instrumental case study. Such a case study De Vos et al. (2002:276) moot, allows the researcher to elaborate on a theory, or more appropriately in the context of this particular study, acquire a better understanding of a [particular] social issue, the case study merely serving the purpose of facilitating the researcher’s gaining of knowledge about the social issue.

- **Interviewing techniques**

During the course of this thesis empirical data was essentially acquired through the application of two types of one-to-one interviewing techniques, namely guided interviews with a structured format - interviews where a basic checklist is formulated to ensure that all relevant topics are covered (fundamentally possessing a quantitative flavour), and, what Flick
(1998:91-92) refers to as expert interviews - interviews with a semi-structured format (essentially qualitative in nature).

These specific interviewing methods were utilised in order to facilitate the collection of experiential and relevant information from knowledgeable functionaries/individuals, thereby gaining the necessary insight and understanding of the dynamics and complexities pertaining to the issues at hand.

According to De Vos et al. (2002:302), researchers generally use semi-structured interviews to gain a detailed picture of a participant’s beliefs about, or perceptions or accounts of, a particular topic. De Vos supra goes on to state that such an approach allows the researcher and participant quite some flexibility and, furthermore, permits the researcher/interviewer to follow up interesting avenues that emerge in the interview, and additionally allowing the interviewee to provide a more comprehensive representation. Semi-structured interviews are by their very nature composed of a number of pre-determined, and in the main, open-ended questions in the form of what is generically known as an interview schedule.

The purpose of the schedule is, however, to guide the interview rather than dictate its progression with military precision. During the course of such an interview the participant will be able to introduce and/or raise issues that the researcher might not have thought of, allowing other relevant and complementary avenues to be explored. In this regard Smith et al. (in De Vos et al. 2002:302) maintain that in such a relationship the interviewee can be perceived as an expert on the subject and should, therefore, be allowed maximum opportunity to tell his/her story.

- **Expert interview**

In this thesis the expert interview, as a specific form of the semi-structured interview was, due to its appropriateness, extensively applied.
Contrary to many other types of interview, the interviewee in the expert interview is of less interest as a (whole) person than in his/her capacity of being an expert for a certain field of activity – he/she is integrated into the study not as a single case, but as representing a specific group of experts (Flick 1998:92). Since the range of potentially relevant information provided by the interviewee is restricted much more than in other interviews, the interview guide can be anticipated to play a more significant role in terms of directing/focussing the interaction, and also with regard to excluding unproductive topics. The success of such an interview, according to Meuser and Nagel (in Flick 1998:92), largely depends on the degree to which the researcher manages to restrict and determine the interview and the interviewee to the expertise of interest, and includes being weary of the following potential shortcomings:

- Experts blocking the interview in its course because he/she proves not to be an expert on the topic as previously assumed.
- Experts trying to involve the researcher in ongoing conflicts in the field and/or talking about internal matters and intrigues in his/her work milieu, instead of focussing on the topic at hand.
- Experts changing between the roles of expert and private person so that more information is produced about him/her as a private person than about his/her expert knowledge.
- The expert gives a lecture regarding his/her knowledge rather than joining the question and answer game of the interview. Such lectures, if they hit the topic may, nevertheless, prove to be useful.

- The interview schedule

The interview schedule is, in its simplest form, according to Holstein and Gubrium (in De Vos et al. 2002:302), a questionnaire written to guide the researcher, essentially providing him/her with a set of pre-determined questions that might be used as an appropriate instrument to engage the participant and designate the narrative terrain. De Vos et al. (2002:302)
maintain that producing a schedule prior to engaging the interviewee not only forces the researcher to deliberate explicitly about what he/she hopes the interview might cover, but also about what difficulties might be encountered, ensuring, according to Flick (1998:92), that the researcher does not present him or herself as an incompetent interlocutor. This author goes on to state that having determined the overall issue to be tackled in the interview the researcher has to think about the broad range of themes or question areas to be covered in the interview and arrange these in the most appropriate sequence.

To this end the researcher has endeavoured to carefully formulate an interview schedule (see appendix 1) that would most effectively comply with the directives detailed above. To facilitate optimum interaction as well as the flow and capture of information relevant to the illegal exploitation of reptiles in the Western Cape province, questions were strategically grouped and structured, depending on the field of expertise of the specialist being interviewed, within the following four subsections:

- Biological, ecological, spatial and conservation issues.
- Legislation, control measures & organisational capacity.
- The illegal trade in reptiles.
- Effect/implications of the illegal trade.

Questions were, in order to allow the interviewee an opportunity to acclimatise to the interview and build rapport, framed from undemanding/simple to more complex within each of the various subsections, and, where possible, bearing in mind that perceptions of these concepts will differ from individual to individual, simultaneously from broad to more specific/focussed.

As prescribed by De Vos et al. (2002:302) the utmost care was taken to formulate an interview schedule that followed a logical sequence containing the optimum amount of questions needed to cover the topic thoroughly.
Where possible questions were so formulated to retain a neutral flavour, although slavish adherence to this guideline could, due to the nature of the phenomenon being studied, not be maintained in all cases. Biased, value laden, prejudicial and/or judgemental questions were, as far as possible, and to the best of the researcher’s knowledge avoided in their totality. All questions framed were of an open-ended nature, permitting, even encouraging to a large extent, interviewees to extemporise and express themselves freely and openly.

• **Conducting the semi-structured expert interview**

Continuously mindful of the inherent pitfalls associated with expert interviewing mentioned elsewhere in this section, all expert interviews were conducted in the following fashion. Interviewees were consulted/engaged within their own comfort zone, made to feel comfortable in terms of the impending question answer session, unambiguously informed of the purpose of the interview, and that answers, in part or as a whole, would be used for scientific research and the compilation of a thesis addressing the illegal reptile trade in the Western Cape province.

All interviewees were also requested to answer truthfully. Interviews generally lasted between three to four hours each, with all answers and significant peripheral interaction being recorded in writing by the researcher. Such an interactive open approach, without exception, promoted the early establishment of rapport and co-operation with the various experts and facilitated dialogue on the issues at hand, allowing the researcher to retrieve unique, rich and vivid information, as well as endorse the acceptance of probing techniques, similar to those often employed by researchers collecting data through in-depth interviews.

Morrison (1995:23) maintains that rapport is the principal method for obtaining good information, to motivate spontaneity and reveal important personal data. Generic probing techniques employed (in order to obtain
clarification to ambiguous answers, complete incomplete answers and/or elicit relevant responses) included, but were not restricted to, the following:

- Nonverbal communication such as eye contact, tactical raising of the eyebrows, head tilting etc.
- Question repetition and/or strategic pausing.
- The posing of neutral illumination questions, for example, “Could you please elaborate on that point?”

Expert interviews, in a fashion similar to what Kahn and Cannell (in Marshall & Rossman 1989:82), in relation to in-depth interviewing, describe as ‘a conversation with a purpose’, were noticeably the most valuable method to obtain the bulk of the practical/operational information required. Although expert interviews were essentially open-ended and guided only by the semi-structured interview schedule, the interviews were, as mentioned previously, structured around certain key themes so as to keep the interaction focussed and stimulate responses directed at the realisation of the interviewing goal. Through an informal, friendly, yet professional approach, devoid of any pre-conceived ideas as to how interviews might unfurl, underlying issues were revealed and new topics generated for discussion, emphasising the researcher’s commitment to unbiased exploration into this particular phenomenon.

The application of such a qualitative (humanistic) approach, which Leedy (1997:155) and Neuman (1997:69-70) term an interpretive technique, was conducted with the chosen target group in order to learn what is meaningful or relevant to the respondents, and to be able to share their feelings and interpretations, basically seeing things through their eyes, and in essence forming an empathetic relationship with them so as to gain a vantage point that would otherwise not have been possible through more inflexible techniques. By consummately applying the above-mentioned flexible approach to the illegal reptile trade phenomenon in the Western Cape province a style of research was utilised which incorporated the overall context of respondent’s perceptions, facilitating the retrieval of
holistic information regarding the phenomenon and not merely seeking answers to static predetermined questions.

Individuals chosen for qualitative (expert) interviewing were selected specifically due to their intimate knowledge of, and expertise in, their particular vocation/field. From within the study area (Western Cape province) these individuals included, but were not necessarily restricted to the following:

- Provincial nature conservation scientists, investigative/law enforcement/compliance managers/officers, and administrative and support personnel;
- Nature conservation investigative/law enforcement and park management officials affiliated to South African National Parks (formerly National Parks Board);
- Officials from the local government sphere – nature conservation, administration and environmental health departments;
- Representatives from the private herpetological sector/industry;
- Members of the South African Police Service’s endangered species protection unit and certain members allocated to individual police stations; and
- Environmental compliance officers attached to the provincial Department of Environmental Affairs and Development Planning.

**Quantitative guided interview**

Quantitative data gathering techniques utilised in this study were basically restricted to the application of personal [one-to-one] guided and structured interviews, which were essentially undertaken to obtain peripheral support and verification data. These guided structured interviews were felt to be the ideal vehicle with which to, although the structure of the topic was known, gather information about the specific issue at hand in a standardised, comprehensive and comparable manner.
Specific personal quantitative interviews were, depending on the information required, location of the respondent, and/or the interview method, far more fluctuating in nature, and of an intermittent duration.

Quantitative one-to-one guided and structured interviews, consisting of primarily closed-ended questions, were executed on a personal/individual and/or telephonic basis. Guided interviews were the preferred method to assimilate these quantitative data due to this mechanism’s ability to facilitate both verbal and non-verbal communication between the researcher and respondent as well as to give the researcher (and the respondent) the opportunity to qualify his/her responses. It additionally allowed the researcher to clarify questions and answers by way of explanation and/or enquiry.

Standardised interview schedules, consisting of a number of pre-recorded, closed-ended and structured questions, served as the basis of the interview and assisted the researcher to not only retain the focus on key issues, but also to a large extent to standardise the interviews within the various disciplines, facilitating, in a qualitative sense, comparison and, therefore, also the identification and retrieval of corresponding relationships and themes within the data.

During the initial stages of the study, information was garnered on the biological and ecological characteristics of the relevant species in order to place the illegal reptile trade phenomenon in clear perspective and to assist the reader to better envision the concept of, and rationale for, this form of natural resource crime. Peripheral information required for this study was obtained from literature searches, newspaper reports, discussions, and a perusal of relevant (typically official) reports, prosecution statistics, press releases and other forms of unpublished and often in-house and privileged information.
1.7 DATA PROCESSING AND CONSTRUAL

According to Miles and Huberman (1994:9) and Neuman (1997:419, 427), analysis entails the sorting and sifting through data to distinguish similar (recurrent) phrases, relationships between variables, patterns, themes, conspicuous differences between subgroups, and mutual sequences. Mouton and Marais (1995:102-103) have the following to say about analysis:

‘Analise is dus die uiteenstelling van die samestellende dele van ‘n geheel met die oog op kennis – deur analise word die konstitutiewe veranderlikes of faktore wat relevant is vir die verstaan van ‘n verskynsel of gebeurtenis geïsoleer’.

The qualitative and, to a certain extent, quantitative data generated through the collection techniques detailed elsewhere in this thesis were analysed by coding and placing data in consequential and manageable categories (synthesis) on the basis of themes, concepts, or similar features.

Coding, in the context of this thesis, proceeded by the identification of prominent themes transpiring from the riposte and then reducing and separating them into relevant categories. Any dross generated through the data gathering process was logically discarded as irrelevant. According to Neuman (1997:422), through the process of coding the researcher imposes order on the data allowing him/her to quickly retrieve parts of it. Rejoinder corroborating and/or supplementing/contradicting each other were recorded and through the process of systematising the data arranged to present a coherent, consistent picture.

Quantitative results, once edited and grouped, were, using essentially qualitative analysis techniques, employed to cross-reference, verify and even better understand themes and sentiments produced through qualitative means, serving, amongst others, to promote research integrity and authenticity. Great care was taken to maintain the context and chronological flow of data throughout so as to underline how, and to what extent, the variables engage and affect each other.
The researcher was also constantly on the look out for what Neuman (1997:435) terms, negative evidence – the non-appearance of important data, for example the misrepresentation of events or facts by respondents to protect themselves, a third party, and/or their organisation. The presence of such negative data, as in the case of outlier response, in essence strengthened already identified themes serving to enrich these data as well as enhance the credibility of the research. Unlike with quantitative data analysis, which only begins after all the data has been collected and reduced to numbers (Neuman 1997:420), patterns and/or relationships were continuously being identified as the research project evolved and data were being accumulated, in essence guiding subsequent data collection endeavours. Neuman (1997:420) states in this regard that qualitative analysis is, therefore, less a distinct final phase of research than a dimension of research that stretches across all stages. Through this process of [continuous] data analysis, an attempt was made to colour in evidence demonstrating that the assumptions, theory, interpretation, and generalisations developed and/or proposed are credible.

1.8 VALIDITY AND RELIABILITY

Reliability, according to Groenewald (1986:20-21); Lindlof (1995:237-238); Neuman (1997:138), and Sarantakos (1998:83), refers to the degree of consistency, dependability and/or replication of a research study, while validity refers to the truth of observations, i.e., whether the research instrument is accurately reporting on the social situation/object of interest to which it applies.

Qualitative data has, due to its flexibility and potential for researcher bias, often been criticized for not being as valid or reliable as quantitative data, but qualitative researchers regard these selfsame features as strengths of the method – the involvement and naturalness of the observers reducing their disruption of the setting or the group under study (Dooley 2001:249). Lamnek (in Sarantakos 1998:83) in fact argues that qualitative studies achieve higher validity [than quantitative research] for the following reasons:
• In qualitative research the data are closer to the research field than in quantitative research.
• The collection of information is not determined by research screens and directives.
• The data are closer to reality than in quantitative research.
• In qualitative research, the opinions and views of the researched are considered.
• The methods are more open and flexible than in quantitative research.
• In qualitative studies, there is a communicative basis that is not available in quantitative research.
• A successive expansion of data is possible.

Abovementioned authors go on to state that, in contrast to quantitative researchers who check reliability by creating artificial situations, qualitative researchers strive for rigour, credibility and applicability, and instead of talking about reliability speak of auditability; objectivity essentially being replaced by confirmability.

During both quantitative and qualitative data gathering sessions all answers and peripheral observations were contemporaneously recorded in writing by the researcher and a thorough synopsis drawn up within a maximum of twenty-four hours after completion of the interview. Through recording and data documentation consistency, reliance on the accuracy of the data, it is submitted, has substantially been increased. Although some researchers advocate the use of a tape recorder during qualitative interviewing, it was felt that the essence of the interview could best be captured and the interest of the respondent best be maintained and prolonged by the use of written notes and abridged summaries. All respondents were unambiguously informed of the purpose of the interviews and that the information acquired would in all probability be included in the final thesis.

During all interviews the researcher was continuously mindful of signs of non-verbal communication, but at the same time vigilant not to attach embellished
interpretations to insignificant reactions. All information gathered, but specifically with regard to qualitative data, was unremittingly inspected for confirming evidence and internal consistency as well as for extreme cases/deviations (outlier response) and negative data. Although few such cases were exposed, those that were (chiefly omissions), could, ironically, be utilised to strengthen the research findings by complementing the more common, generic responses extracted from the broader study group.

Care was, furthermore, taken to ensure that those respondents approached for interviews (both quantitative and qualitative) were credible and had authentic knowledge of the phenomenon under consideration, negating to a large extent the need for respondents to exaggerate and/or be untruthful, and thereby also considerably increasing the validity and reliability of the research findings. In an attempt to promote research fidelity the researcher constantly endeavoured to maintain and promote, what Leedy (1997:169) terms, ‘a strong chain of evidence’. By persistently demonstrating the interrelatedness of issues and variables, as well as their embedded and causal nexus, the researcher has attempted to inspire confidence in the reader and allow him/her to follow and understand the researcher’s logic, thereby personally determining if the submissions/conclusions offered are judicious or not.

According to Dooley (2001:249), the validity of qualitative research is also enhanced through the process of triangulation, i.e., the comparison of different interviews and perceptions of the same subject or behaviour. Leedy (1997:168-169), Lindlof (1995:238-239) and Neuman (1997:151) moot that the basic idea of triangulation is that measurement improves when diverse indicators are used - confidence in measurement grows and greater validity results. Huysamen (1996:113) concurs by mentioning that through the use of several measures a high, but not necessarily perfect, correlation between indicators can be expected and, therefore, recommends the use of multiple indicators. The researcher has, in essence, by examining the same phenomenon through the use of multiple indicators, i.e., qualitative and quantitative interviewing of diverse role-players, perusal of relevant literature and official documents/statistics and ad hoc enrichment
interviews/discussions, as well as field observations overcome weaknesses in specific techniques and ensured the convergence of data into one consistent picture. Through this process the researcher has significantly enhanced, it is submitted, the validity and reliability of the study and the interpretations/generalisations produced.

1.9 DEFINITION OF KEY CONCEPTS

- **Illegal reptile trade**

  The illegal reptile trade refers to any manner of unlawful reptile exploitation and/or manipulation, whether on an organised or ad hoc basis, and/or large or small scale.

- **Herpetological crime**

  Herpetological crime refers to any act (wilful or negligent) violating the prescriptions of any legislation promulgated to ensure the preservation of herpetological resources within the Western Cape province.

- **Herpetological resources (herpetofauna)**

  Herpetological resources, although often understood to include amphibians, is restricted in the context of this thesis to reptiles, namely, snakes, lizards, tortoises/terrapins/turtles, and because of their scarcity in the Western Cape province, to a lesser extent crocodiles.

- **Conservation crime/criminology**

  Conservation crime/criminology refers to a new/innovative and viable crime category within the post-modern criminological discourse
developed in this thesis to unambiguously delineate the gamut of natural resource crime and to consolidate and embrace all forms of such deviance within a mutually exclusive crime category possessing its own unique identity. Conservation crime is considered the vanguard to conservation criminology.

- **Western Cape province**

  The illegal reptile trade phenomenon was researched within the political boundaries of the Western Cape province due to its unique, diverse, specialised and spatially remote habitats and concomitant attractive and valuable herpetofaunal resources.

### 1.10 Layout of Chapters

In this research thesis, the illegal reptile trade quandary is approached in a chronological and structured manner so as to systematically expose the reader to the complex issues and dynamics faced in this arena. Simultaneously, however, the reader is, through a strategic sensitising and orientation process, capacitated to follow the researcher’s reasoning (along both ecological and criminological lines) throughout in typical qualitative fashion, promoting insight and allowing the phenomenon to be addressed in an integrated, holistic and credible manner.

- **Chapter one:** This preliminary chapter firmly ensconses the research orientation, background and methodology and unequivocally outlines the mechanisms whereby the research will proceed and develop. It succinctly encompasses the following: research rationale, research design, assumptions, aim of the study, data gathering, data processing and construal techniques, validity and reliability issues, definition of key concepts and a layout of the chapters comprising the thesis proper.
- **Chapter two:** Chapter two deals chiefly with natural resource crime semantic and syntactical issues. A strong argument is presented for the formation of an unambiguous, clearly delineated and viable, essentially mutually exclusive, conservation crime category as a vanguard to conservation criminology. Critique of previous work in this regard is detailed and an innovative, parsimonious and unpretentious conservation crime schematic presented. Through the establishment of such a category the researcher argues that this phenomenon will be recognised as a formal derivative of mainstream criminological treatise, consolidate research efforts, and promote interest in this field.

- **Chapter three:** This third chapter deals almost exclusively with the natural resource itself. An exposition is given of representative organisms, introducing the reader to the ecological and biological complexities as well as the habitat, feeding and reproductive regimes and geographical distribution of the various organisms. An indication is also provided as to the attractiveness (value) and targetability (accessibility) of the species under discussion assisting the reader to better envision and place in perspective crime in the herpetological demesne.

- **Chapter four:** In this fourth chapter the *modus operandi* and crime scene interface are synchronously and comprehensively examined. An offender typology is developed and an offender specific exploitation methodology exposed. Illegal exploitation techniques pertaining to both the harvesting and further dissemination of contraband organisms are examined and evaluated. The chapter is concluded with a schematic representation of the associations and interrelations of the overarching *modus operandi* /crime scene interface within a largely incessant crime scene environment.
Chapter five: Chapter five strategically chronicles the motivational and contributory dynamics pertaining to herpetological crime. The criminological relationship embedded in the illegal trade dynamic is thus further developed in this chapter by introducing the multi-faceted motivational/contributory constituent into the broader criminological discourse. The research material is presented (and to a certain extent revivified) within the framework of the routine activities theory, which essentially subsumes the following three categories (i) motivated offenders, (ii) presence of suitable targets and (iii) the absence of capable guardians.

Chapter six: This chapter, which, in tandem with chapter two, can for all intents and purposes be viewed as the primary focus of this thesis, addresses the aetiology of herpetological crime and, hence, embraces the development of a theoretical explanation (as opposed to an explanatory theory) of this phenomenon. An attempt is made to, based on the salient features of herpetological crime, and with due regard to existing criminological dogma, develop an integrated theoretical model which adequately explicates herpetological, and hopefully also other conservation related, deviance. The explanation developed is, however, not submitted as a panacea and is by no means intended to be monistic in nature, but rather a foundation on which to build than a definitive statement regarding herpetological crime.

Chapter 7: As the penultimate constituent of this thesis, chapter seven considers the incidence, effect and implications of herpetological crime and deviance. Specific scrutiny is directed at the pro-active and reactive policing endeavours of the key role players involved in herpetological suppression, as well as their compliance capacity and degree of inter/intra organisational coordination. The chapter is concluded with an exposition of the
ecological and biodiversity ramifications such crime realises, as well as the crime intensification and diversification potential inherent in this form of deviance.

- **Chapter 8:** This final chapter provides a lucid synopsis of the entire study under the headings summary, conclusion and recommendations. The conclusion, amongst others, subsumes the notion that conservation criminology strives to understand the dynamics and interrelationships present in natural resource perturbation so as to stimulate interest in conservation crime issues and pursue potential solutions through the criminological discipline. The researcher argues passionately that within the conservation sphere there exists a severe lack of capacity and focus that unfortunately culminate in the authorities having no clearly defined target/goal, a target/goal which is resultantly “hit” every time. Criminology should recognise, it is submitted in conclusion, the finite nature of the earth’s resources and the trends forthcoming there from which have profound implications for the social sciences. A criminology relevant to the next century, it is argued, should have the intellectual breadth and constitutional space to be able to embrace conservation (natural resource) and human rights (social) issues as related projects. Recommendations include those designed to mitigate/suppress herpetological deviance and also encompass suggestions for further research.

### 1.11 SUMMARY AND CONCLUSION

In this introductory chapter the orientation and background of the thesis is chronologically presented, so as to sensitize the reader to the herpetological crime phenomenon, as well as conservation and peripheral issues pertaining to the illegal manipulation of this natural resource in general. An exposition is provided of the methodology employed to compile the study, allowing the reader to pursue the researcher’s thought patterns along both ecological and
criminological lines as the research unfolds, lending credence to the study whilst simultaneously enhancing reliability and validity.

The parameters, dynamics and magnitude of the research problem are, furthermore, clearly delineated and the scene set for an investigation of the identified main themes, risks/threats and challenges. Finally, it is anticipated that through such research, conservation crime/criminology will be elevated to its rightful status - with its own unique identity, and recognised and acknowledged as a *bona fide* study field within the criminological discourse, in the final analysis contributing to the mitigation of the gratuitous manipulation and destruction of our fragile natural resources.