Report:
Livestock &
Predation Management

MONITOR FARMS TO ASSESS MANAGEMENT TOOLS IN SUPPORT OF PREDATION MANAGEMENT TRAINING IN SOUTH AFRICA

March 2023

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Foreword

The importance to understand the statement “to protect and preserve” must now, more than ever before, not be underestimated.

This involves all human beings, but especially those that work and operate within nature, including farmers (commercial, emerging and communal). Understanding the importance of a well-balanced and healthy biodiversity is crucial for all life and is the future for everyone sharing the available natural resources.

The demand for space has added pressure on everyone - including wildlife - to survive. Inevitably, conflict will be unavoidable. Human-wildlife conflict (HWC) and co-existence remain a concern and challenge for the world we live in today.

Protecting, assisting and training all farmers, livestock managers and farmworkers standing in the frontline when it involves conflict with wildlife, is the most important and contributes significantly towards food security and the survival of the daily increasing human population.

This report (the longest continuous predator research and monitored project in South Africa’s history) will give feedback on the findings and results formulated over the past year, also reflecting the fifteen years of work already completed since 2008.

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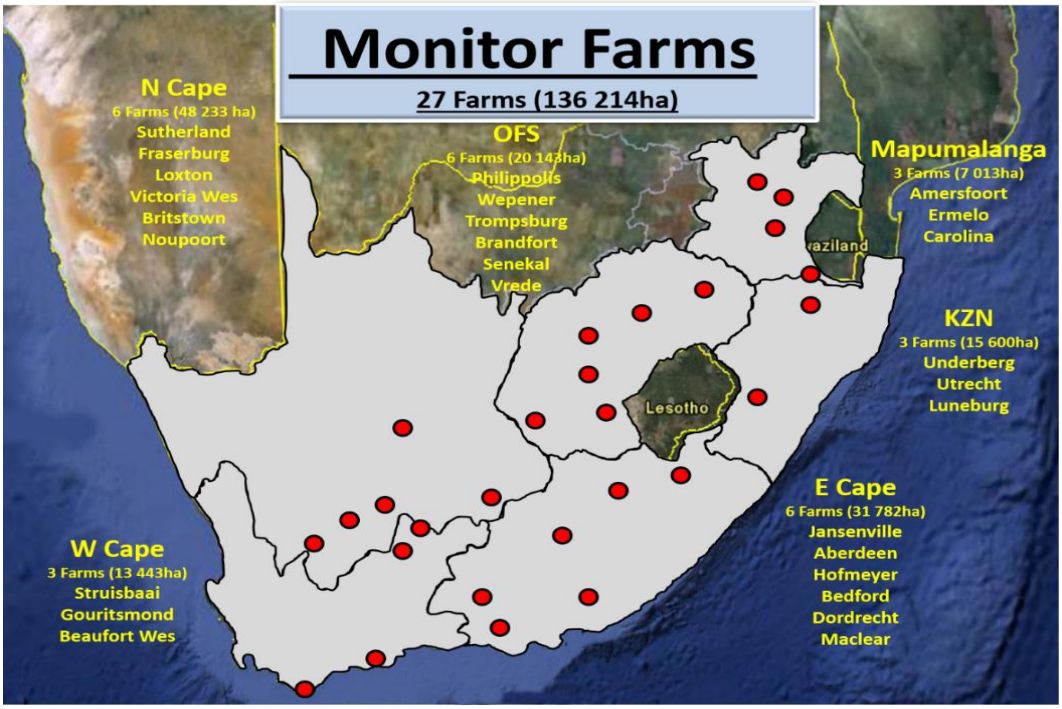
Monitor Farms

In South Africa the total land use for commercial agriculture is approximately 46.4 million hectares, which represents 37,9% of the total land area of our country. In 2008 a total area of 136 214 hectares (27 farms) were identified to represent the actual evaluation and testing of methods to select adaptive management strategies which are sustainable and workable for the unique South African farming conditions.

The monitor farms represent areas with different rainfall, vegetation and ecosystems, thus a widely representative platform for initiating and experimenting with sustainable management strategies for the livestock- as well as wildlife industries.



Provincial Results

Livestock management seems to be a fairly constant management plan throughout South Africa, but it varies a lot within each province. When assessing management on each individual farm, the differences between farms becomes far more understandable. To generalize a management plan blanketing the whole country for livestock would be very irresponsible. Basics could always be a guideline, but reality reveals the truth, therefore successful management develops from inside each individual farm.

As for the immense variations in livestock management between monitor farms, the same goes for predators and predation management.

What is meant by “from the inside out”, and what determines the parameters? The following provides the framework:

- Rainfall
- Temperature
- Humidity
- Topography
- Vegetation

These parameters differ between ecosystems, formulating the level of biodiversity and setting the foundation for building management strategies.

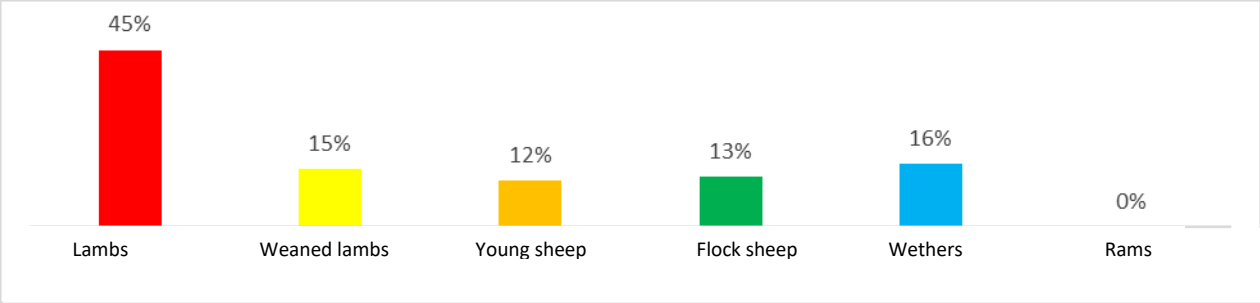
Graphic comparisons are used to demonstrate the differences between the 27 monitor farms under the following categories:

- Distribution of livestock losses
- Impact of integrated livestock-management programme on livestock
- Financial implications

Distribution of Livestock Losses

(Representing the age and weight differences of livestock been killed by predators)

KwaZulu-Natal (Fig.1)



- Summer rainfall (Late November through December extending into January
- Lambing season - September/October – March/April
- Livestock management – Lambing pens/camps
- Predator management – Human herding/call & shoot/Trapping cages/Leghold devices

Summary:

In total 55% of predation losses were recorded on younger and smaller livestock, thus livestock management plays a crucial role. Keeping sheep in more protected areas and avoiding areas that are less protected (i.e., mountainous areas) will have a remarkable positive impact.

For a black backed jackal with an average bodyweight of about 9kg, taking down an animal weighing 50-60kg will take some effort. Although these losses do occur, it generally only happens where two or more jackal hunt together.

The size of the livestock and the number killed by predators on an annual basis, reveals predator adaptive hunting skills (hunting as a pack), as well as the presence of an above normal predator population. Combining these incredible adaptive strategies contributes towards this generally lower ranked scavenger becoming the apex predator, responsible for attacks and kills on bigger livestock like calves and cows, but also bigger game like blesbok and impala.

Western Cape (Fig.2)

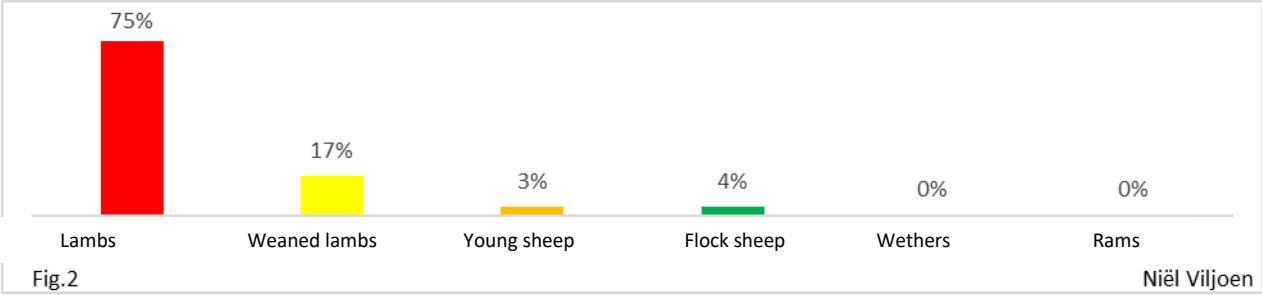


Fig.2 Niël Viljoen

- Winter rainfall (May to August)
- Lambing season - September/October – March/April
- Livestock management – Kraal at night/lambing camps
- Predator management – Human herding/call & shoot/Alpaca guarding animals/Trapping cages/Leghold devices

Summary:

Livestock losses due to predation are mainly recorded on lambs from new-born up to weaning. This indicates that predator numbers are maintained at a year-round controllable number. Predator attacks on livestock do occur when prey is vulnerable and readily available.

Orange Free State (Fig.3)

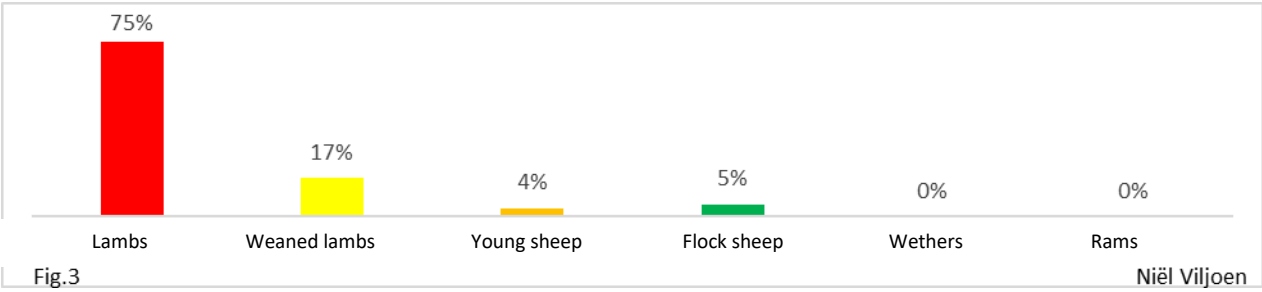


Fig.3 Niël Viljoen

- Summer rainfall (October to April)
- Lambing season - September/October – March/April
- Livestock Management – Lambing pens/lambing camps
- Predator management – Call & shoot/Jackal proof fencing/Electric fencing/Trapping cages/Leghold devices

Summary:

As in the Western Cape, the Orange Free state is an almost exact version of the livestock losses recorded on new-born to weaner lambs (75% young lambs and 17% weaned lambs).

Northern Cape (Fig. 4)

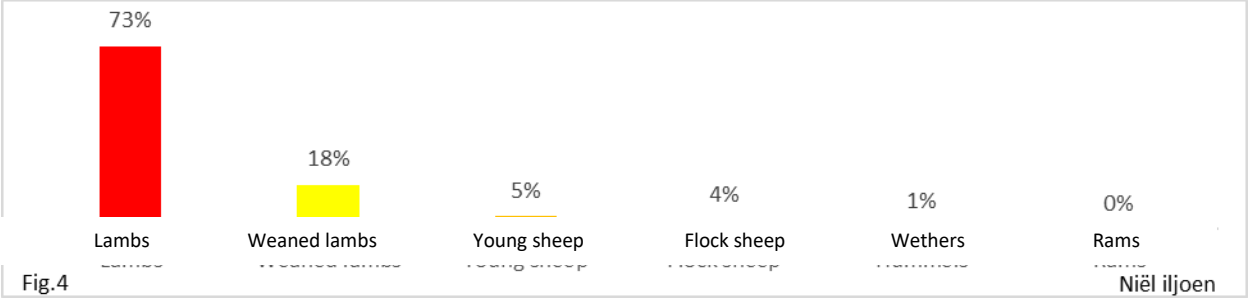


Fig.4 Niël iljoen

- Summer rainfall (November to April)
- Lambing season - September/October – March/April
- Livestock Management – Lambing pens/camps/extensive lambing
- Predator management – Call & shoot/Jackal proof fencing/Electric fencing/Trapping cages/Leghold devices

Summary:

Predation again mainly recorded on livestock ranging from new-born to weaning. Predator numbers are controlled by means of call and shoot. Due to this area predominantly being semi-arid and extensive farming area, lambing in natural pasture camps is the main practice.

Eastern Cape (Fig. 5)

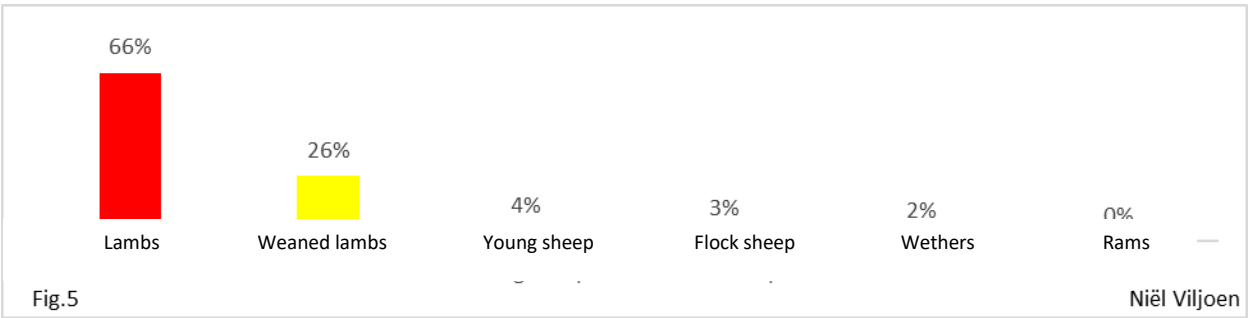


Fig.5 Niël Viljoen

- Rainfall distributed evenly throughout the year
- Lambing season- September/October – March/April
- Livestock Management – Lambing pens/camps/extensive lambing
- Predator management – Call & shoot/Jackal proof fencing/Electric fencing/Anatolian herding dogs/Trapping cages/Leg hold devices

Summary:

Predation mainly recorded during the first few months after birth up to weaning. Differences in topography have a major impact on control methods, and predation tends to be less by black backed jackal and more because of caracal.

Mpumalanga

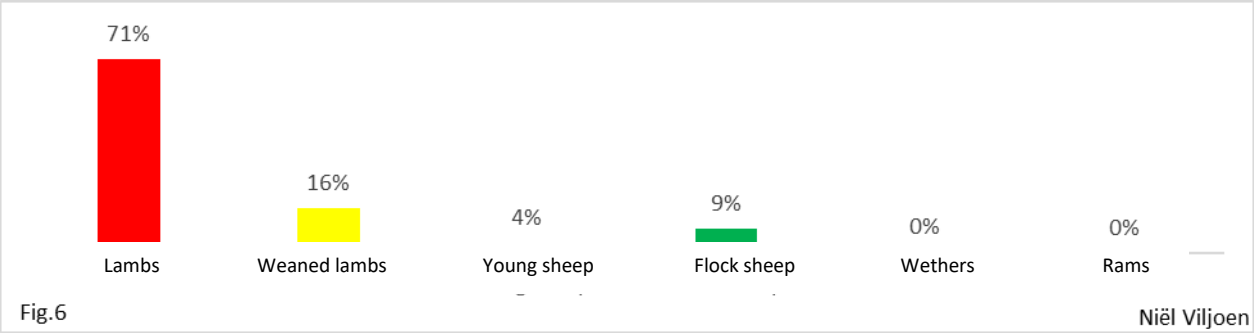


Fig.6 Niël Viljoen

- Rainfall season (October to March)
- Lambing season- September/October – March/April
- Livestock Management - Lambing pens and lambing camps
- Predator management – Call & shoot/Jackal proof fencing/Electric fencing/Trapping cages/Leg hold devices

Summary:

Livestock management by means of lambing pens and lambing camps had a positive effect on protecting livestock from predators. Notable is the slight increase in losses recorded for fully grown sheep. Breeding ewes often fall prey to the Black backed jackal.

The numbers of these predators, together with population density, are responsible for almost the same adaptive behaviour as in KwaZulu Natal where these predators operate as a united pack, bringing down prey much larger than the normal expected prey of these predators.

Impact of integrated livestock-predation management programme on livestock

(The effect of a management programme for both livestock and predators and the actual number of livestock losses on an annual basis).

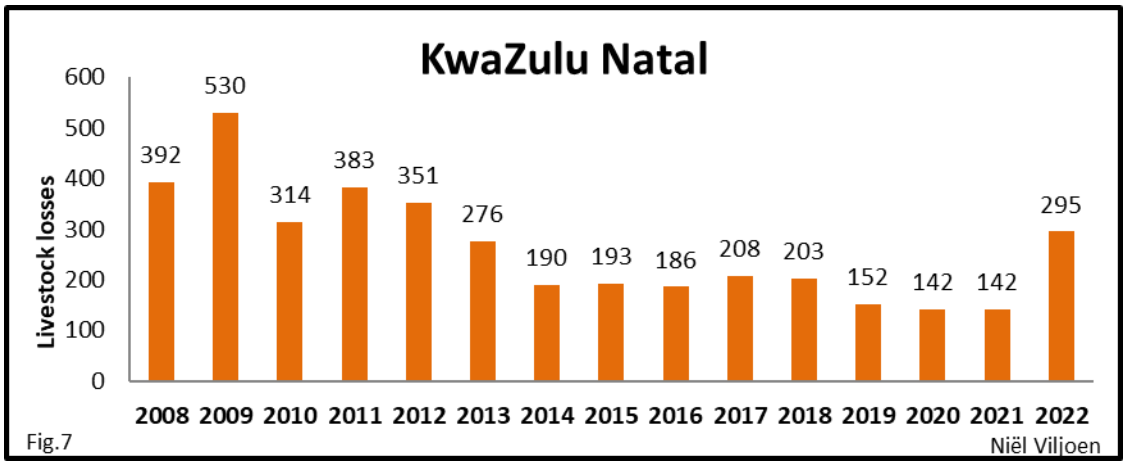
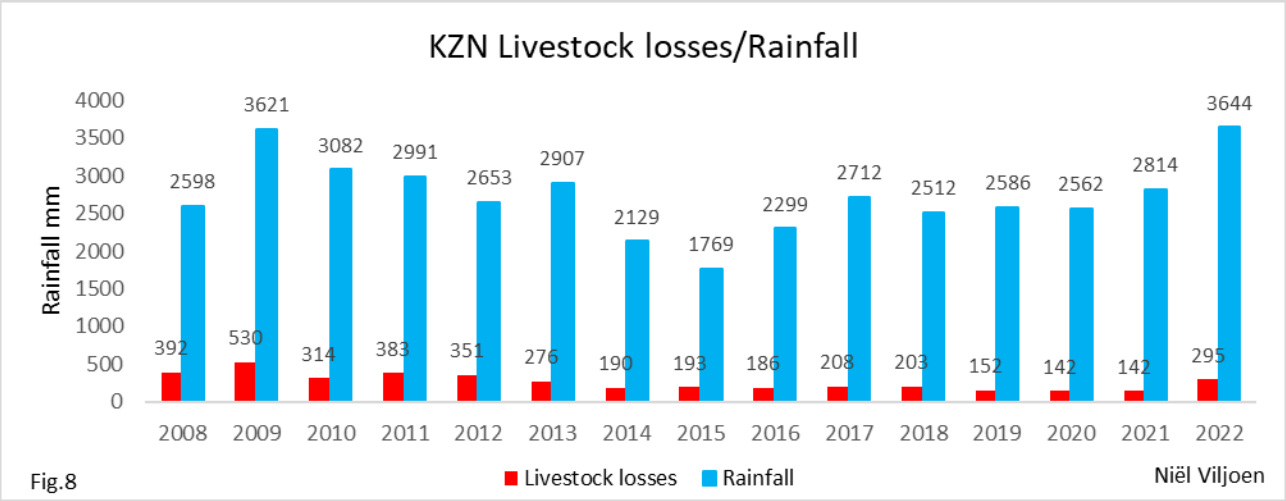


Figure 7 indicates the actual number of livestock lost to black backed jackal and caracal on an annual basis. The effect of sound management practices over the fifteen-year period resulted in a constant decline in the number of livestock that farmers have lost due to predation.

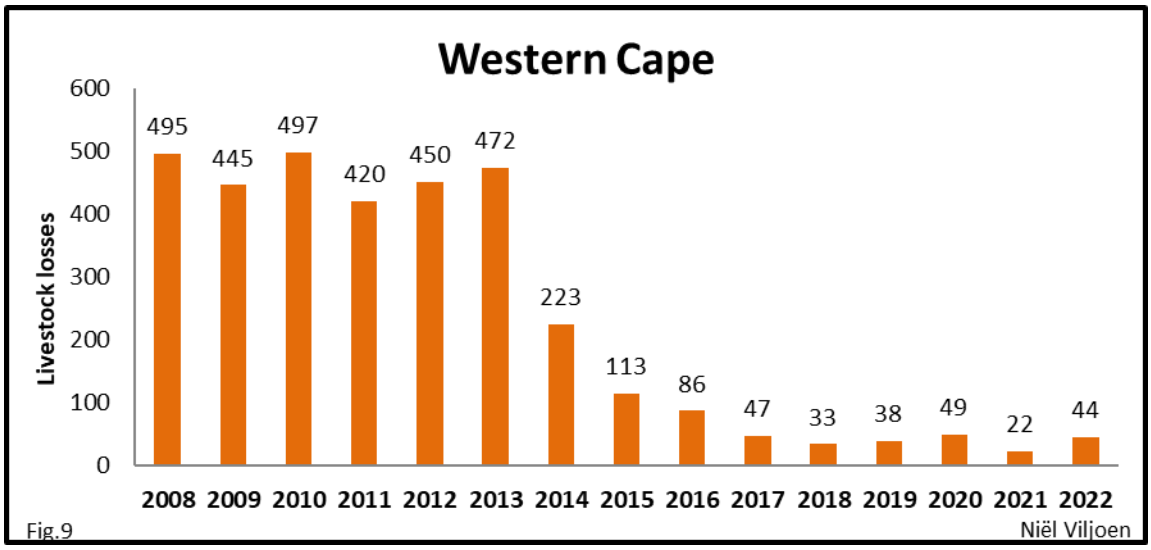
The decline in livestock losses had a sudden and remarkable change during 2022, as livestock losses more than doubled. Livestock management was basically the same as in previous years, with the only change being a deviation in predator management.

Control methods i.e., leg holding devices, trapping cages and call and shoot could not be implemented as a result of far above-normal rainfall figures. For the fifteen-year research period on these monitor farms, the highest rainfall ever of 3644mm was recorded. In 2009, a similar rainfall figure of 3621mm was recorded.

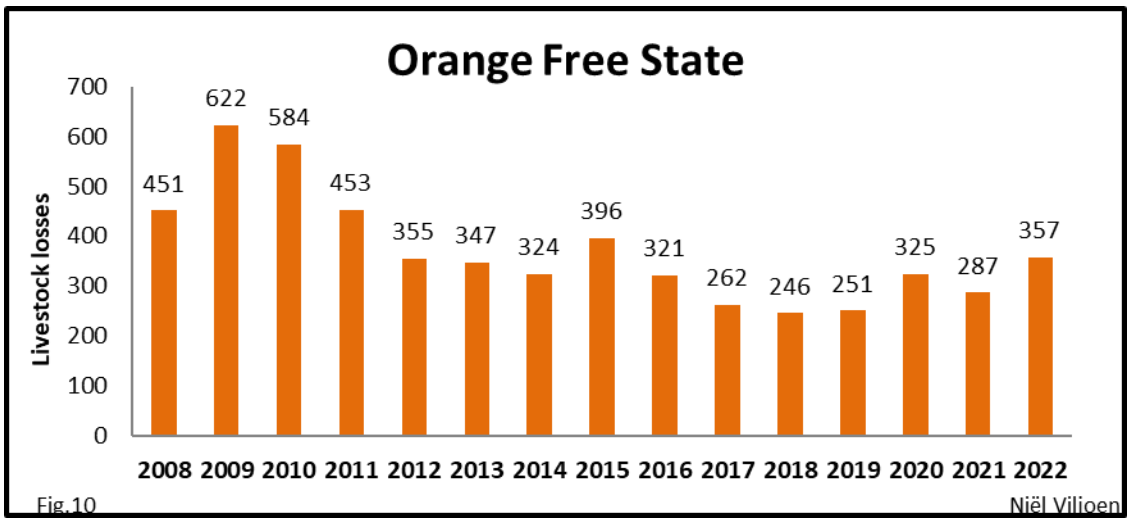
An explanation for the sudden changes in livestock losses underlines the fact that farmers remain very dependent on responsible lethal control methods. Higher than normal rainfall and wet conditions made the use of lethal control methods like trapping cages and leg hold devices almost impossible, as setting up the equipment needs proper camouflage, which is generally destroyed by floods and soil.



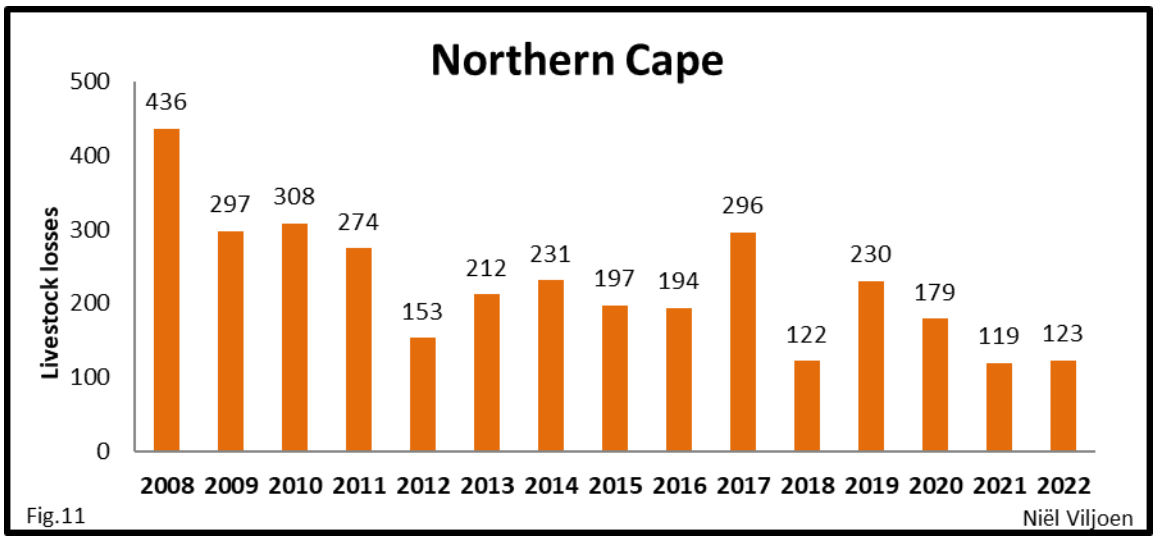
The most trustworthy and widely used lethal control method, call and shoot, was also limited on most farms. Conditions due to extensive rain and flooding made the accessibility of hunting vehicles and hunters where predators were causing havoc, almost impossible.



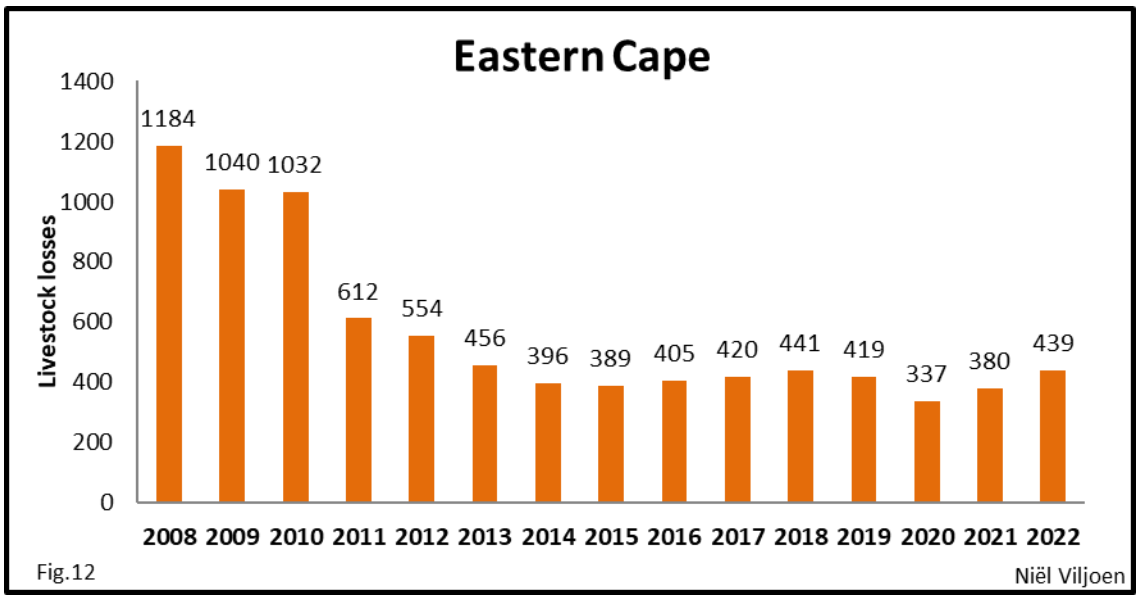
Livestock losses in the Western Cape (Fig.9) were fairly acceptable and continued on an overall good average over the past six years. Although a year with less rainfall than previously, relative success in livestock- and predator management was recorded.



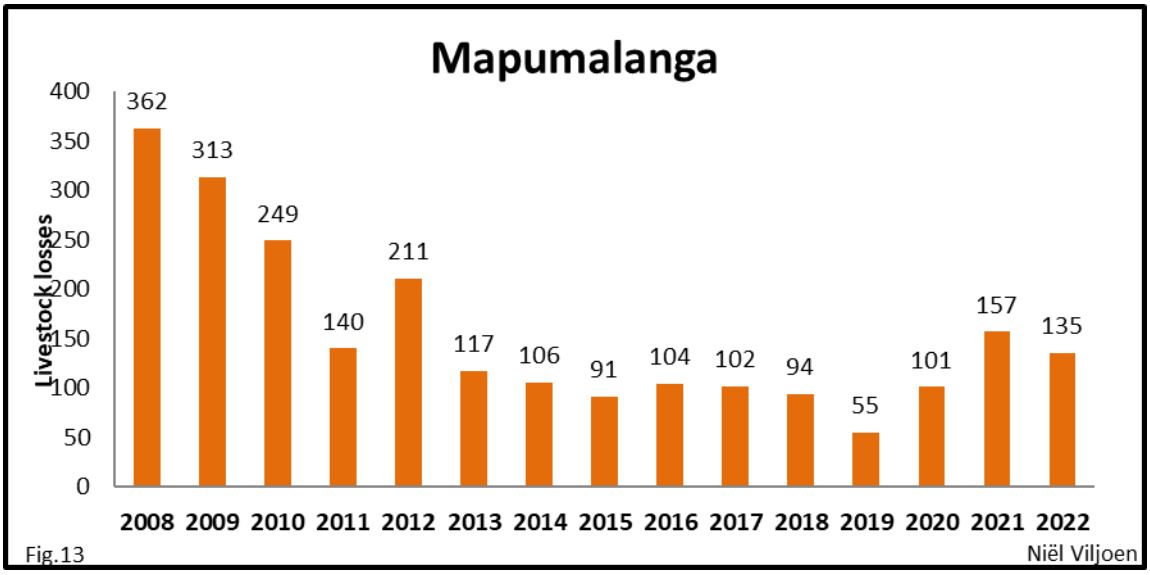
Livestock losses in the Orange Free state (Fig. 10) also indicated a slight increase, again due to high rainfall and restrictions to control predators by means of responsible hunting methods. The Orange Free state has also recorded its third highest rainfall since the start of the project in 2008.



The Northern Cape (Fig.11) experienced a fairly normal year and the existing livestock- and predation management strategies ensured continued success.

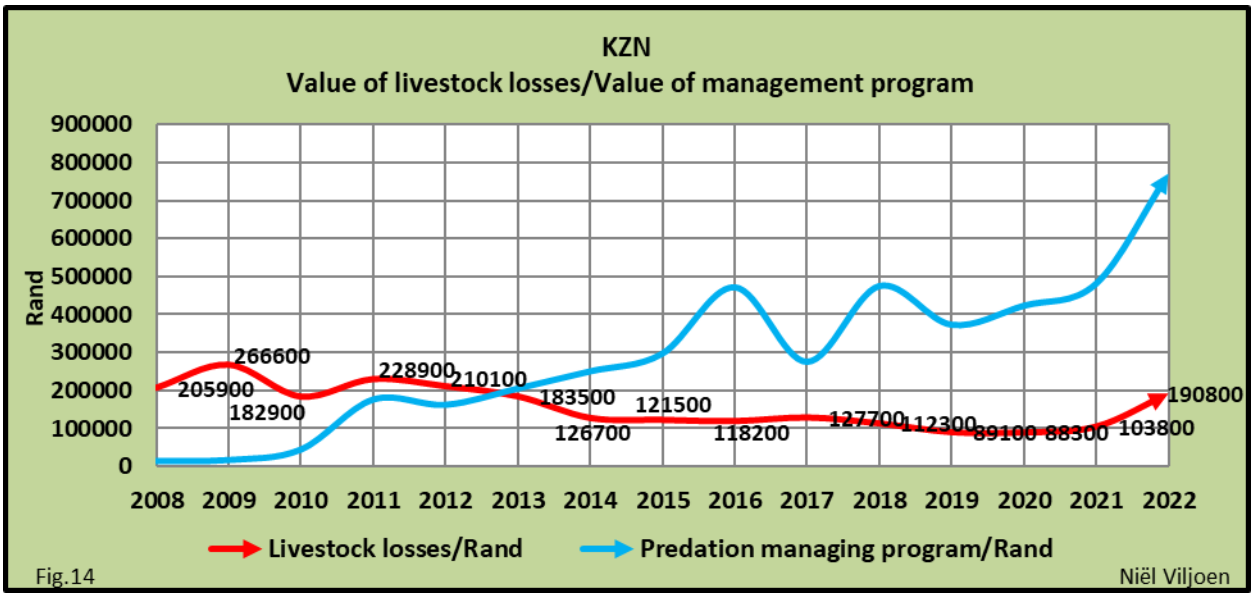


The Eastern Cape (Fig.12) experienced a small increase in livestock losses for 2022 and again because lethal control (call and shoot) was difficult to manage. The Eastern Cape also recorded the highest rainfall for the fifteen-year period.



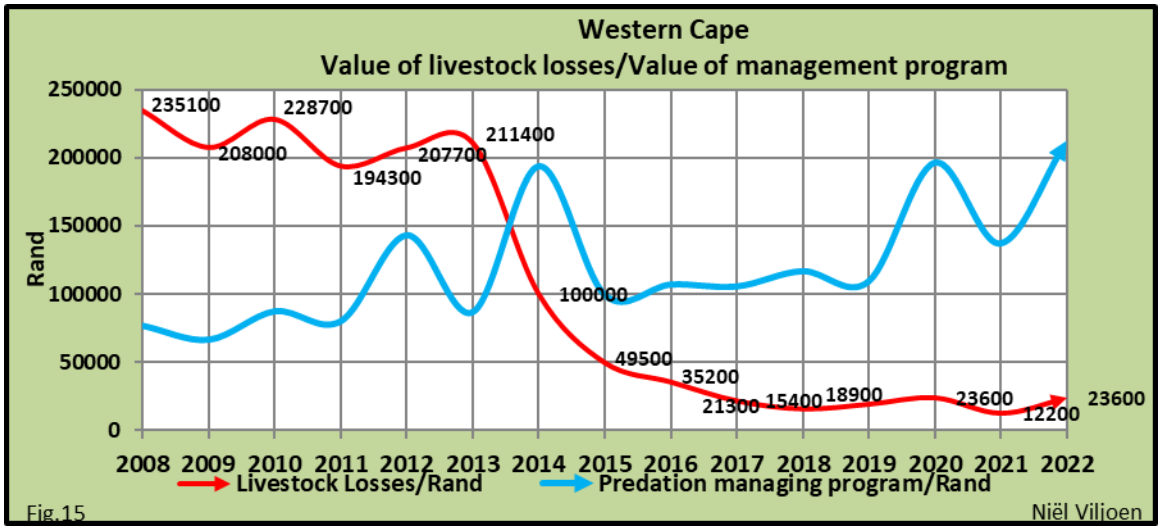
In Mpumalanga (Fig.13) livestock losses decreased slightly, with workable and acceptable livestock- and predation management practices ensuring a decline in livestock losses.

Comparison in value of livestock losses to cost of the management programme.

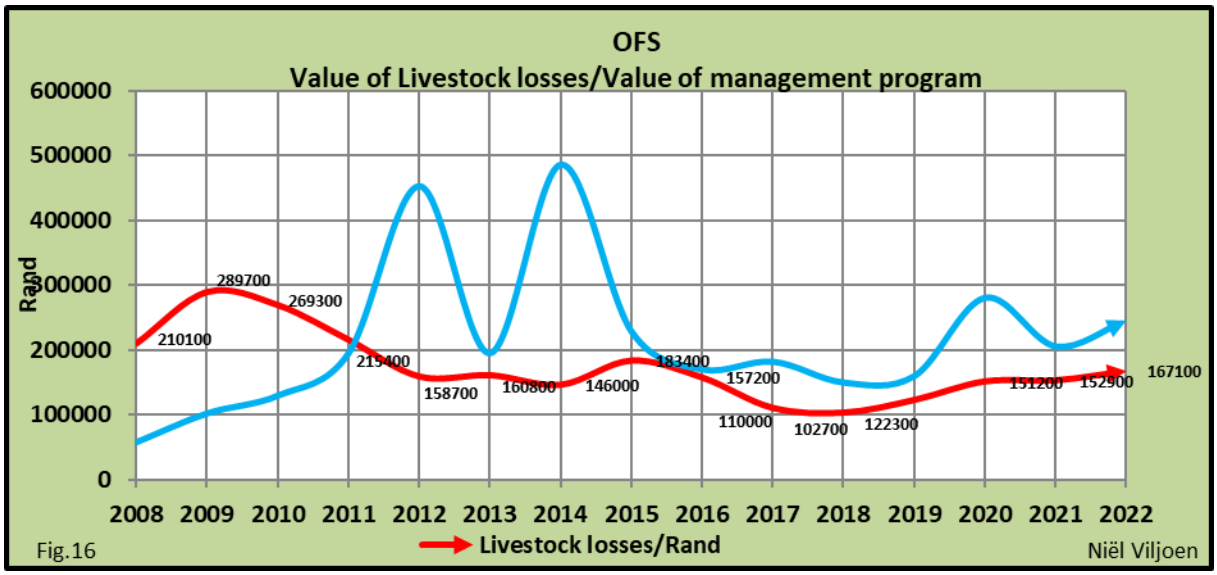


(Fig.14) The level of financial losses since 2014 up to 2021 (2022 the exception with the high rainfall and not being able to use trustworthy and responsible lethal control methods) indicates that responsible predation management could be implemented successfully.

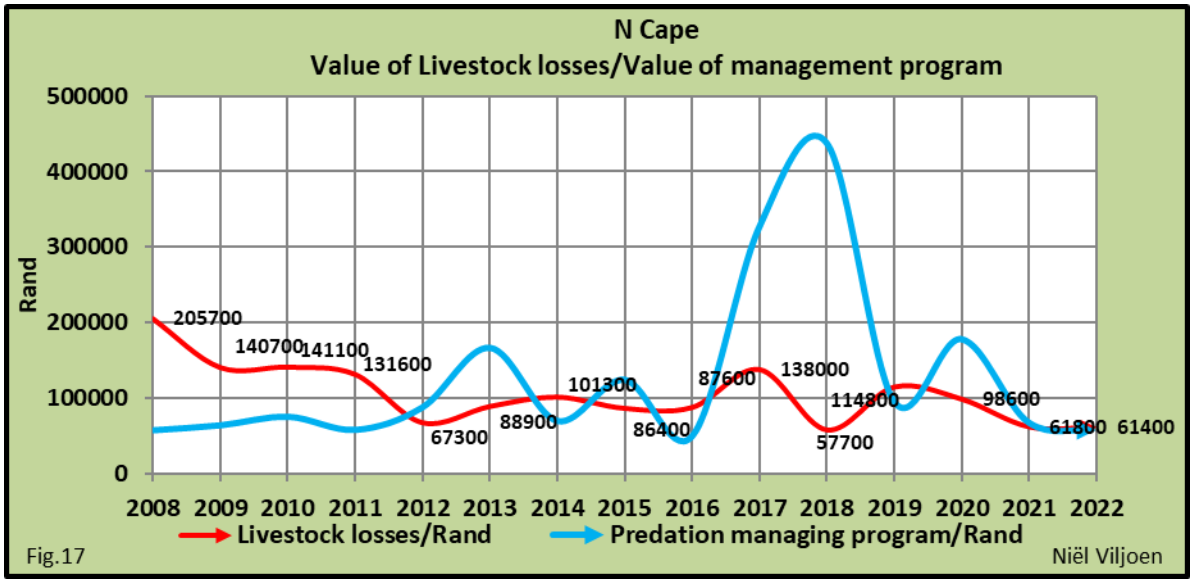
The concern on the other hand, is the huge increase in expenditure to maintain stability in losses during the past seven years. The main contributor to this significant financial increase was the implementation of a non-lethal control method, namely livestock guards/herdsmen at night to protect livestock. Unfortunately, this method's cost is directly linked to minimum wages, an annual increase determined by government. This is having a major negative impact on the implementation of this control method. The gap between the value of livestock losses and the financial obligation for wages becomes a bigger challenge every year.



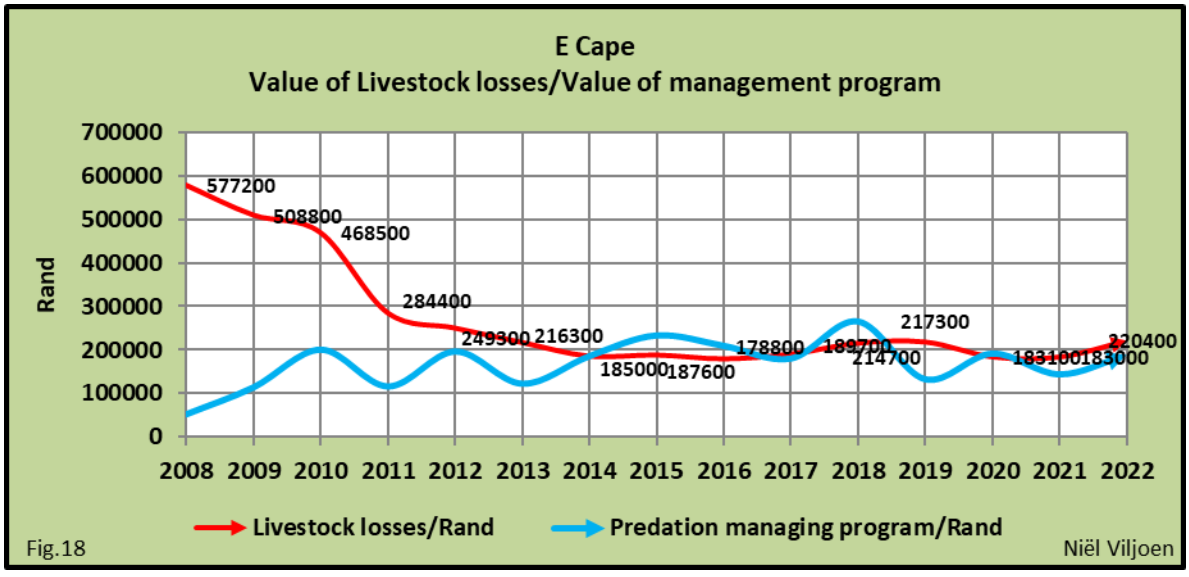
(Fig.15) This is the province with the most outstanding results for managing livestock and predators. This includes protection during the day (Alpaca) and night (Kraal) and the elimination of persistent predators by means of call and shoot. Costs related to predation management is, however a concern and will be monitored.



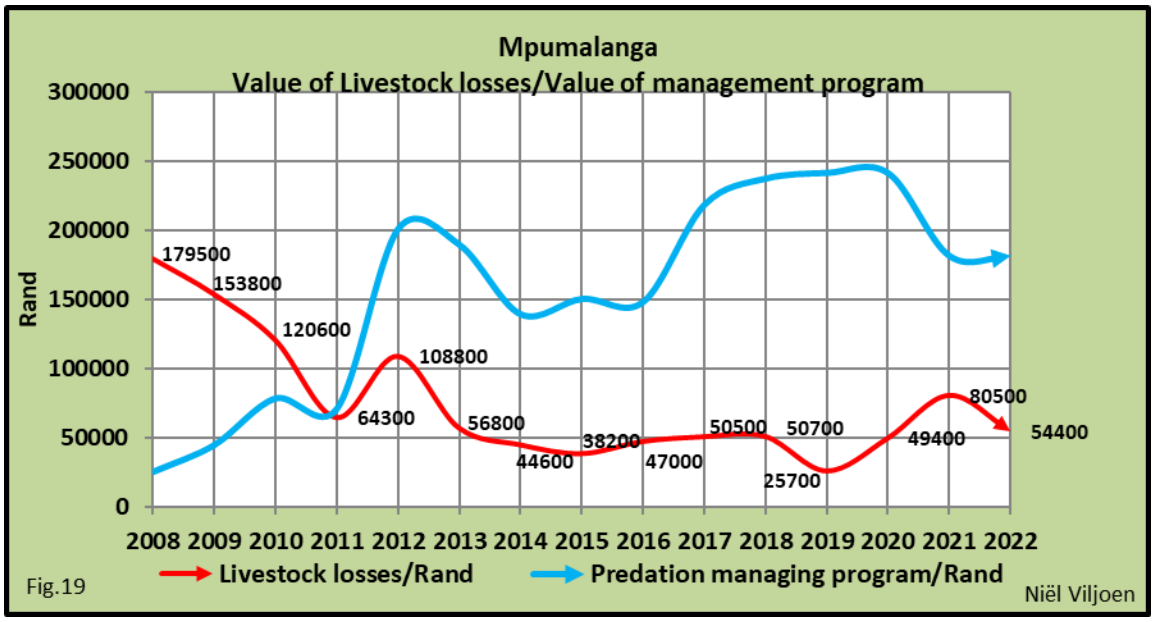
(Fig.16) For the Orange Free state, constant adaptive management strategies are of continued importance in securing minimal financial losses.



(Fig.17) The stability between losses and cost over the past ten years, the learning experiences and proactive management strategies resulted in the Northern Cape being one of the best examples of successful livestock and predation management.



(Fig.18) Running neck to neck with the Western Cape, the Eastern Cape is one of the provinces with the most outstanding and sustainable results.



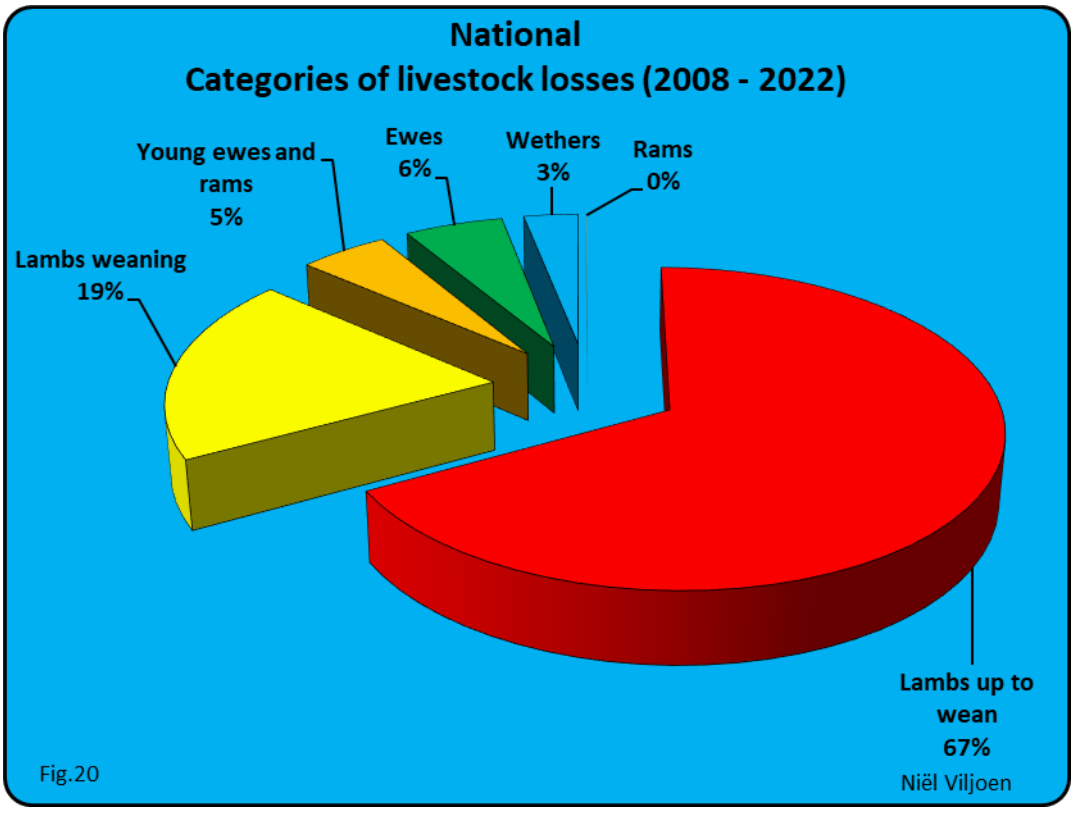
(Fig.19) The average financial investment to keep livestock losses down and as stable as possible is clearly visible. The sustainability of these adaptive management strategies secure workable solutions for this province, but at a cost.

National Results

Summarizing the provincial results will give a clear indication of the improvement made on a national level regarding livestock- and predation management approaches.

Considering varying conditions in the respective provinces with different rainfall seasons, different lambing seasons and a huge variation in vegetation and topography, all these factors have a significant influence on management strategies.

In the diagram below (Fig.20) the prey categories of livestock for the two main damage-causing predators, black backed jackal and caracal in South Africa, is clearly indicated.



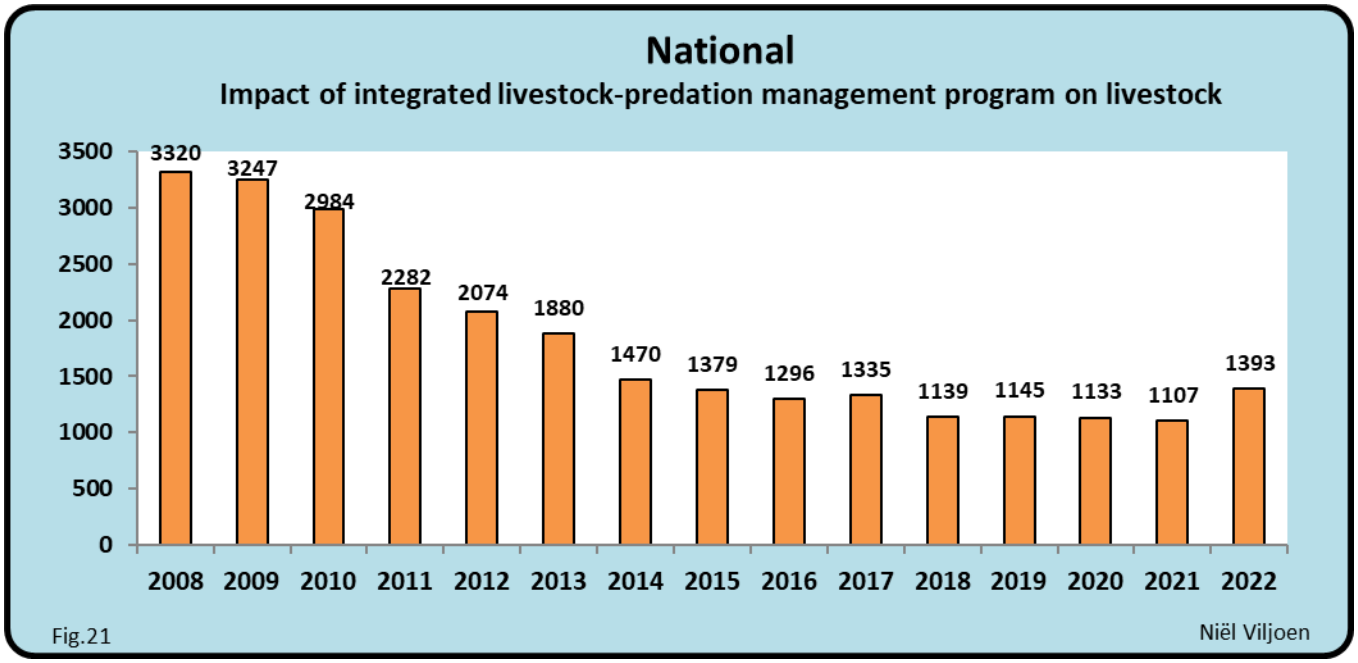
New-born lambs up to a weight of approximately thirty-five kilograms are the preferred prey for these predators. Indicated in the figure above is that 67% of all livestock losses fall in this category. As lambs grow bigger and heavier, the tendency to fall prey to jackal and caracal decreases, although weaners do stand second in line with 19% losses due to predators. It is important to mention that predator numbers do play a significant role, specifically highlighting the black backed jackal in this case. Responsible control methods to manage predator numbers remains an important consideration.

Charts will be used to explain the following on a national level in more detail:

- Livestock losses
- Predators
- Livestock losses comparing to predators eliminated
- Balance between different unwanted predators eliminated
- Predation percentage
- Financial implications

Livestock Losses

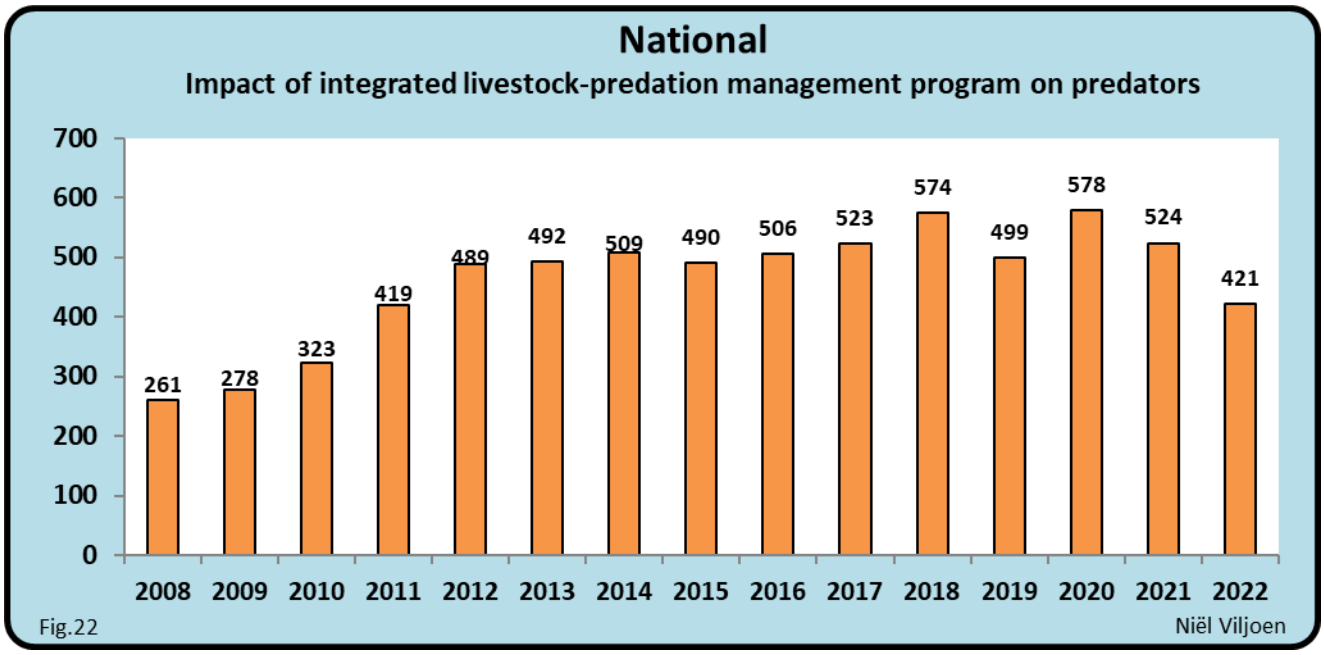
In the diagram below (Fig.21), the results of livestock losses over the past fifteen years of intensive livestock predation management is clearly visible, indicating that losses due to predators were drastically reduced. In 2008 the total number of losses on all monitor farms was 3320. This number of losses was reduced over the fifteen-year period to 1393 in 2022. This indicates a decline of 1927 less livestock losses or an improvement of 58%.



Notable is the number of livestock losses for the four years (2018 to 2021), where management strategies seemed to have had a constant positive outcome. Then followed the increase in livestock losses during 2022 due to extreme weather conditions with more than average rainfall influencing the effectiveness of certain control methods. This involved especially lethal control by means of trapping cages, leg hold devices and the most trustworthy and widely used, call and shoot.

Predators

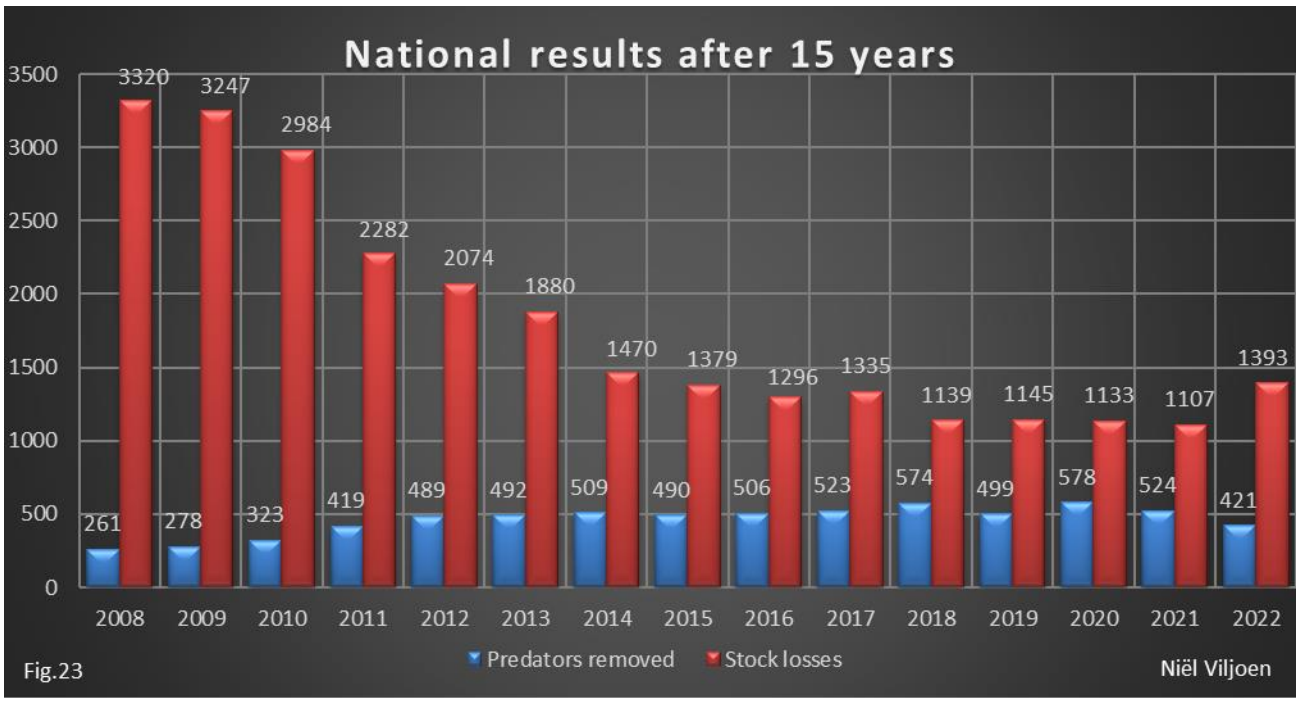
Fig. 22 reflects the numbers of predators eliminated through responsible control management to reduce their impact on livestock losses.



The sudden drop in 2022 in the elimination of unwanted predators, is directly linked to extreme weather conditions year-round, making it impossible for professional hunters and farmers to track down these predators in the wet conditions.

Livestock losses compared to problem causing predators eliminated.

The graph (Fig.23) below compares the two previous graphs (Fig.21) and (Fig.22) to better understand and provide a clear perspective on the implementation, duration and outcome of the management programme for the fifteen-year period.



Interesting about this graph (Fig. 23) is the outcome for the previous four years (2018 – 2021).

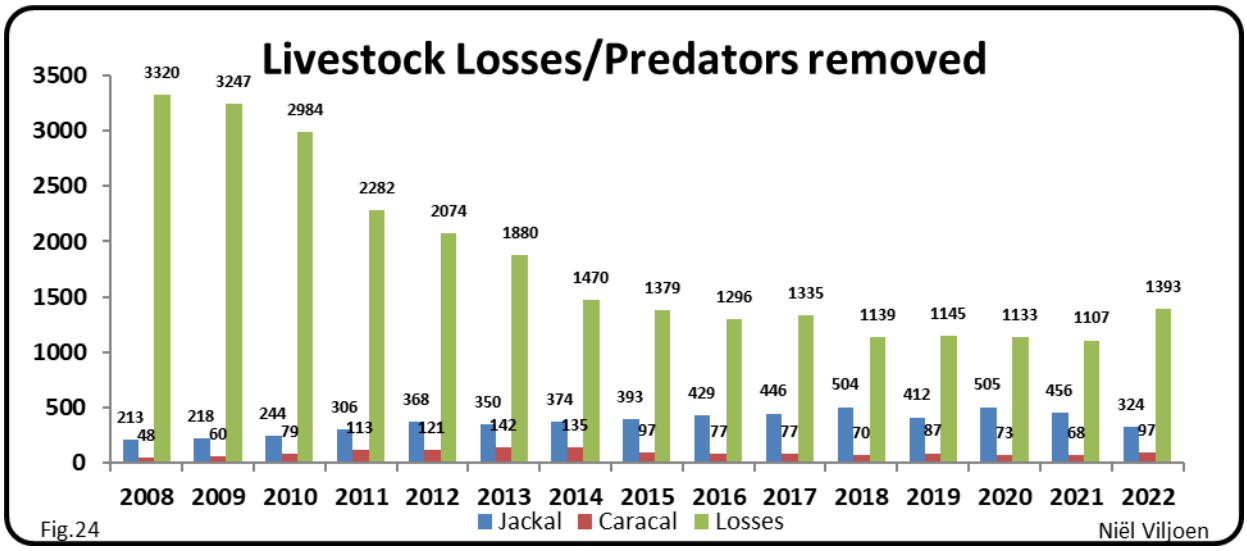
Average livestock losses: 1131

Average number of predators eliminated: 544

For the duration of four ongoing years the percentage of predators eliminated tends to be around 50% of the number of livestock losses. A very interesting four-year window.

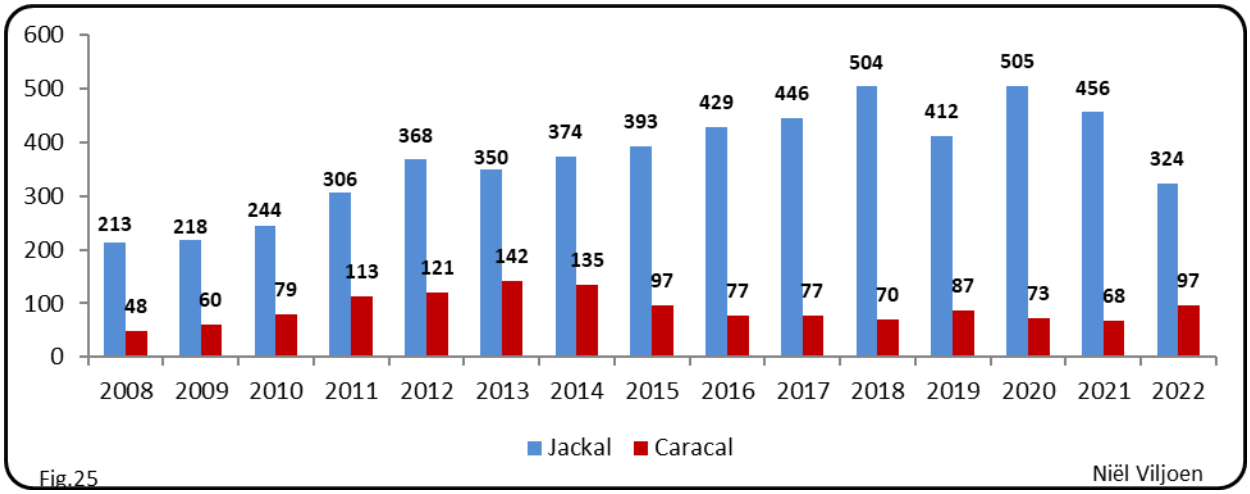
Relation between different damage causing predators eliminated

The graph below (Fig.24) reveals annual livestock losses in relation to black backed jackal and caracal numbers eliminated/removed.



Notable is the big change in all three the chart entries for 2022

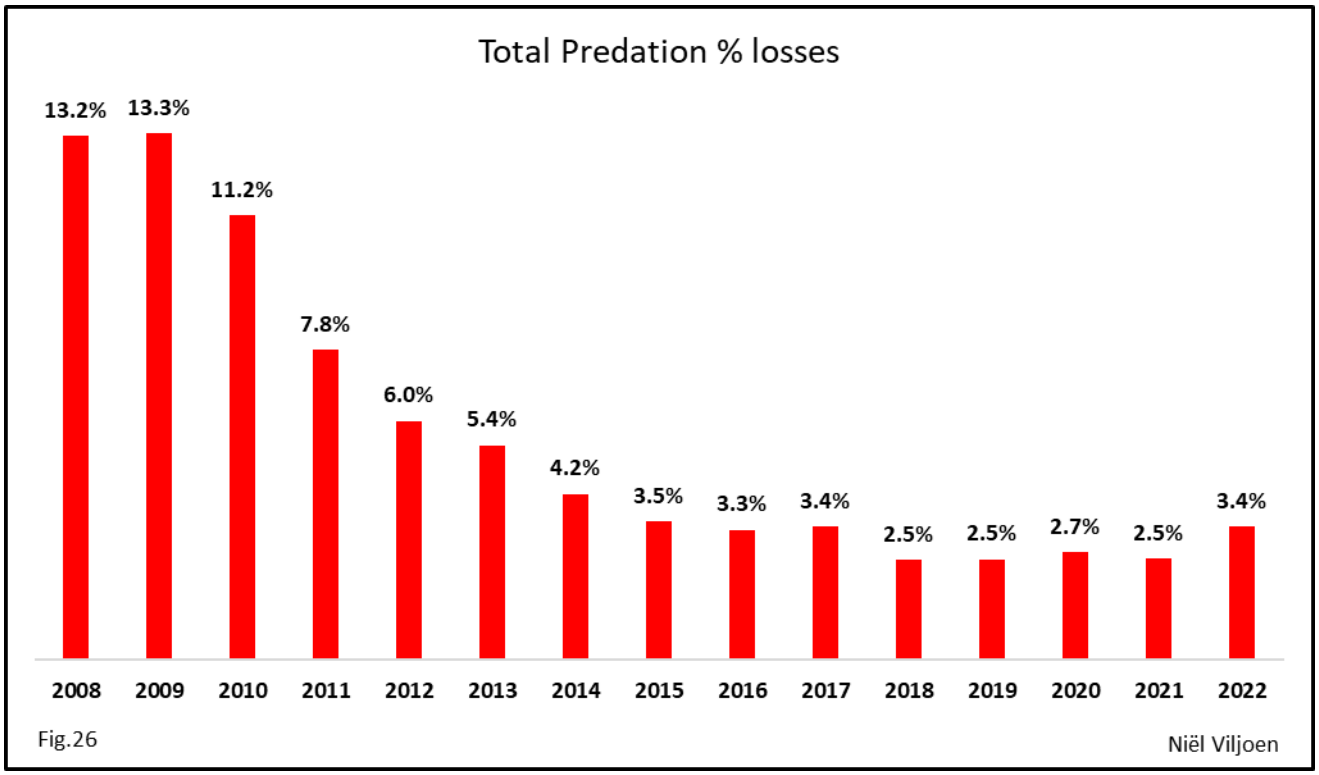
The graph below (Fig.25) shows the number of jackal removed compared to caracal since 2008.



This outcome is directly related to the primary predator responsible for the biggest number of livestock losses in South Africa, the Black backed jackal.

Predation Percentage

The diagram below (Fig.26) represents the percentage of livestock losses due to predation since the project was initiated in 2008 and how livestock losses were reduced annually.



With a total national average of livestock losses at 13.2% in 2008, results show how responsible livestock predation management programness have impacted positively on these losses, assisting farmers in minimizing losses to 3.4% in 2022.

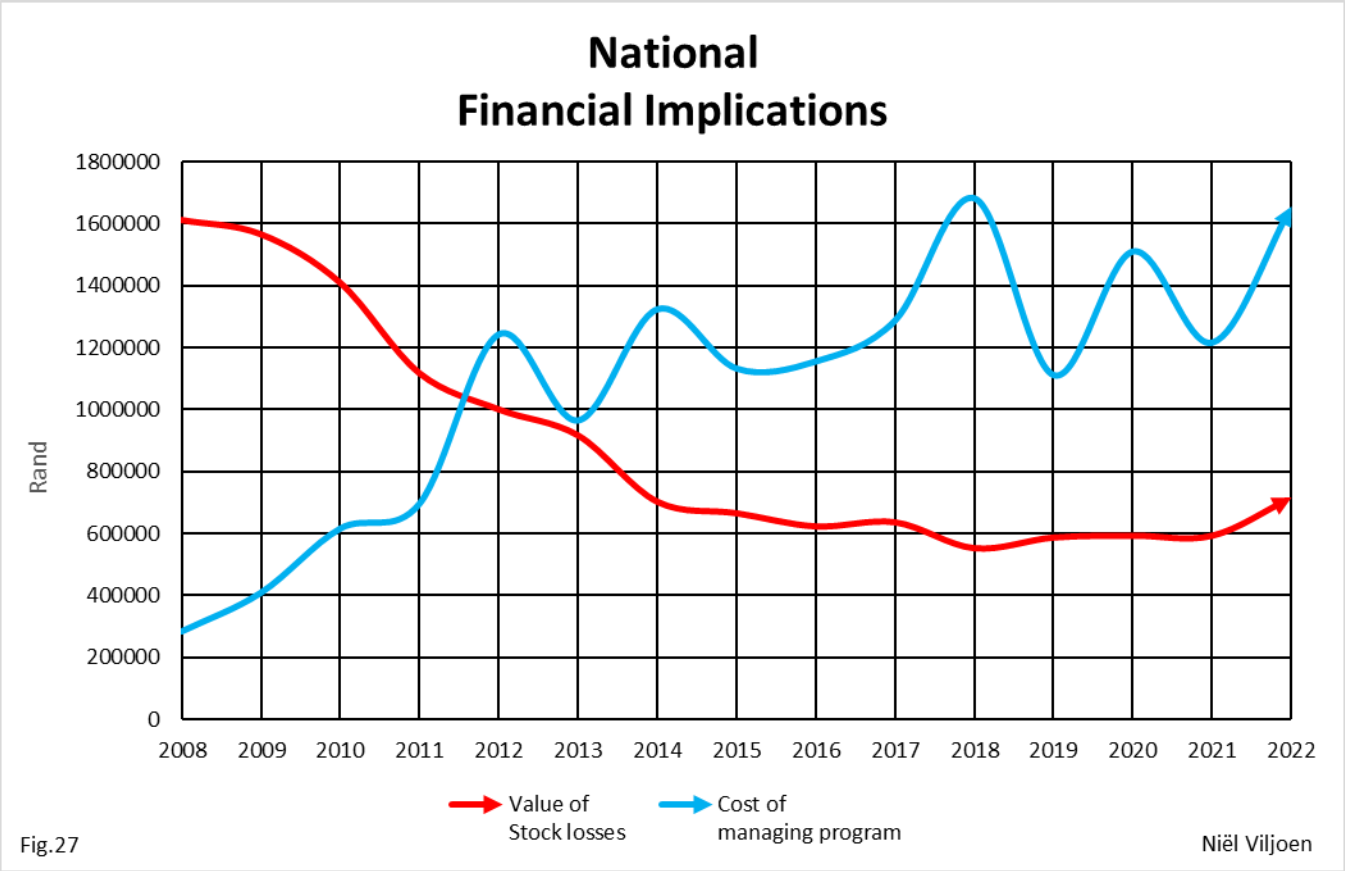
This diagram (Fig.26) is of critical importance and forms the backbone of the research and studies over the past decades, indicating that predators and predation are certainly manageable.

Knowledge regarding predator behaviour, correct implementation of control methods, continuous training, updated skills and an open headed adaptive management outlook are key to almost guaranteed success.

13.2% Livestock losses is unacceptable, but most livestock farmers will agree that 3.4% livestock losses due to predators is far more acceptable.

Financial Implications

The graph below (Fig.27) indicates the annual value of the livestock losses recorded due to predators in relation to the amount of money invested to implement a workable livestock predation management program.



In the figure above (Fig.27) the decline in the value of livestock losses due to predation from 2008 is clearly visible, with the value being the highest in 2008 in the amount of just over R1,6million/annum. This amount declined to a reasonably stable amount of around R0.6million/annum over the last eight years.

The stability in livestock losses over the past six years is clearly visible, whilst on the other hand the graph for expenses to implement the predation management programme shows some very volatile ups and downs. This indicates once-off investments to control predators, where the main investment was made in jackal proof fencing, reaping long-term positive results.

Communal Farms

The positive results from commercial farms over the past fifteen years indicated that, through thorough planning and careful experimentation, a well-constructed livestock predation management plan is achievable.

The challenge to extend support, experience and knowledge to other farming communities has become increasingly important. Communal farming has settled over the years as a well organised farming business, integrated with different farmers in the same community sharing the same land and sheep shearing infrastructure. Discipline, trust and working together have strengthened the arm of these farmers, thus caring for their families and creating job opportunities. This forms a well-balanced platform, ensuring stability in the community and respected by all involved, and not only contributing to their own community by means of daily living expenses, but also contributing to one of South Africa's largest export products - wool. This fibre has united the communal farming fraternity with great optimism to increase productivity, to improve quality, to create a platform for stability and to deliver a quality product for export.

During 2022 the opportunity of establishing a monitor farm on the same principles as a commercial monitor farm, was identified by the NWGA (National Woolgrowers Association of South Africa). This was eventually tabled, discussed and approved by Predation Management South Africa (PMSA), which paved the way to design and establish South Africa's first communal monitor farm.

A new phase, a new opportunity, a new challenge, great optimism from industries, farmers and guiding instructors will show the way to hopefully yet another success story.

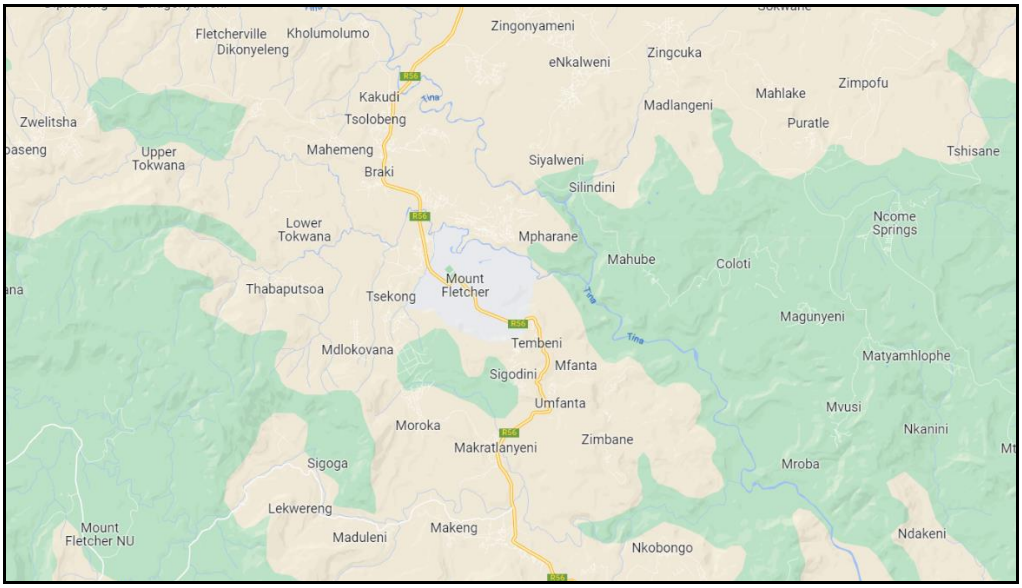
The first and most important step was identifying the source of information, which is to form the baseline for the research and the design towards a solid information plan to assist and improve the communal farming industry with a predation management approach and implementation plan.

The process of identifying the source from where to start the initiative was quite a long and prolonged process. This involved visiting various NWGA shearing sheds, many discussions, interaction and explaining the process in order to identify and nominate the shearing shed communities that would lead.

This information needs to be:

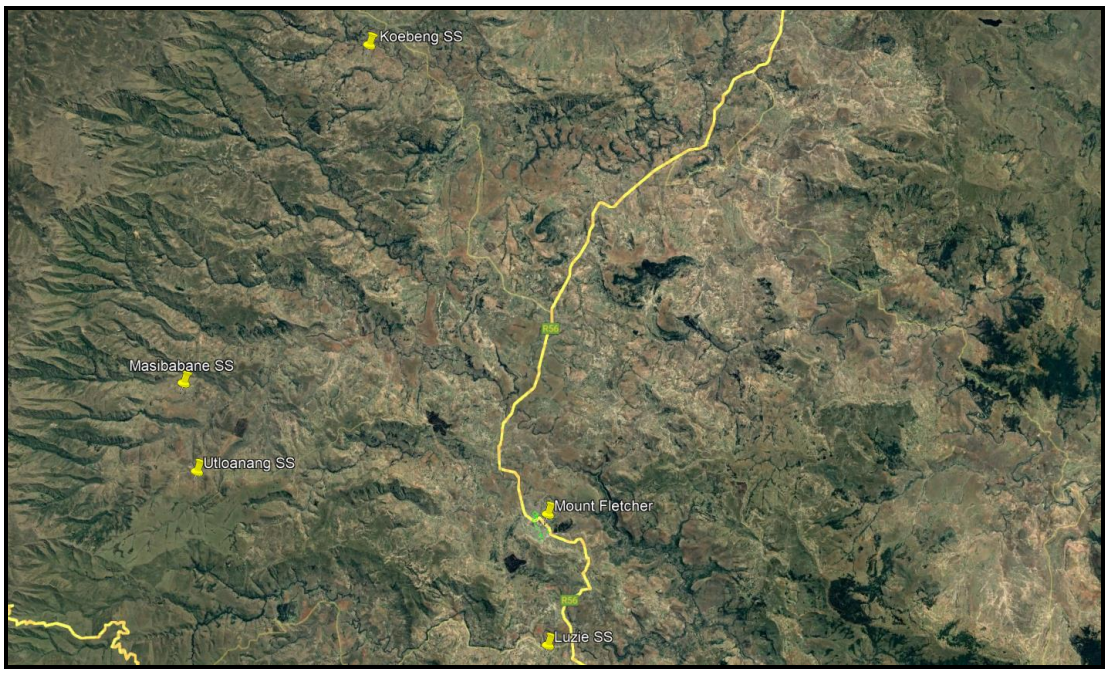
1. Trustworthy
2. Reliable
3. Continuous

The search finally indicated the best possible research area, namely Mount Fletcher / Eastern Cape / Joe Gqabi District Municipality



Four sheering sheds were identified:

1. Luzie Shearing shed
2. Utloanang Shearing shed
3. Masibambane Shearing shed
4. Kuebeng Shearing shed



Interacting with these farmers to gain as much information as possible resulted in tabling the following statistics:

Shearing Shed name	No. of producers	No. Sheep
Luzie	145	7 472
Utloanang	20	2 201
Masibambane	62	5 400
Kuebeng	61	2 081
Total	**288**	**17 154**

In total four shearing sheds, with 288 farmers, farming with a total flock size of 17 154 sheep were selected. The numbers indicate the scope of availability, a great source from which to gain information and to design the way forward for training and co-operation.

It is important to take into consideration that the flock size is the total number of sheep present and not an indication of the number of breeding ewes. Flocks include ewes, lambs, rams and wethers.

For the implementation process on these monitor farms, it was decided to narrow down the initial starting number of farmers to only two farmers per shearing shed responsible for data collection.

A Monitor farms' main objective will be to protect and preserve biodiversity, and to invest in the best solutions for livestock and predation management. This includes training farmers on management strategies, understanding existing situations and seeking future solutions.

Mount Fletcher Monitor farm:

Livestock management:

- Unorganized grazing patterns, utilising grazing opportunities to what seems best
- No definite mating seasons
- No fences

Predation management:

- Human herding
- Deterrent bells on livestock
- Stray dogs – main conflict

To better understand the situation and after more interaction with the farmers, it was decided to conduct a training programme, involving a number of shearing sheds, and to gather more information from the farmers attending.

The table below shows the venues and attendance numbers. Detailed attendance registers have already been submitted to AgriSETA.

Date	Region	Area	Shearing shed	Farmers attend
7 February 2023	24	Mount Fletcher	Castle Rocks	
8 February 2023	24	Mount Fletcher	Utloanang	12
9 February 2023	24	Flagstaff		20
21 February 2023	25	Sterkspruit	Rockcliff	48
22 February 2023	20	Tsolo	Tikitiki	23
23 February 2023	23	Lady Frere	Percy	32
24 February 2023	21	Middledrift	Ndindwa	16

These training and information days were welcomed by all the shearing sheds and a better understanding of existing farming conditions could be formulated. Interaction between trainers and farmers was overwhelming and the hunger for more information and assistance was clearly visible.

One of the requirements for any farmer is a reliable stock register and bookkeeping system. An information day with the Mount Fletcher monitor farm was organized whereby farmers participated in an open discussion, underlining the importance of good record keeping. Farmers gratefully agreed to the importance of such a system and during the meeting a practical, workable information sheet for record keeping was developed. The newly formulated record system was accepted, and farmers were spurred to complete the stock register on a monthly basis and send it to the researcher responsible.

To continue the flow of information a “WhatsApp” group was formed between farmers and trainers. This was necessary to immediately assist with questions around livestock casualties and identification of predation related issues. Language issues were addressed through a well-organized translation platform.

The first month of data collection for this communal monitor farm was collected on 31 December 2022.

Understanding that this is only a short-term indication of the current situation, but background information gathered shows a picture that never existed before.

The data has been analysed and a few examples will be explained by means of graphs.

1. **Outline of livestock losses**
2. **Predation distribution for different livestock categories**
3. **Predators involved**

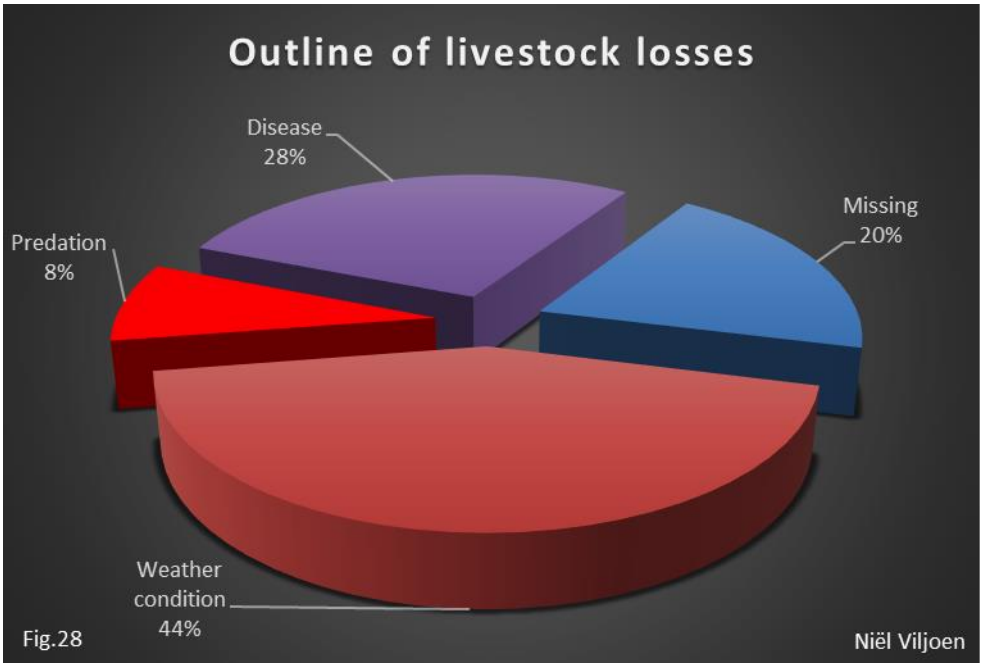
Outline of Livestock Losses:

As with all farming enterprises it is important to understand the causes of mortality, as predators have so often been unfairly blamed for livestock losses, generally an easy reason for farmers to put forward when losses or missing animals are recorded, whilst poor record-keeping and a lack of knowledge regarding predator behaviour and -biology is actually the guilty party.

For the Mount Fletcher monitor farm, the following categories of losses have been identified:

- Weather conditions (Cold, snow and rain)
- Disease
- Missing animals
- Predation

The figure (Fig.28) below indicates and summarizes the outline of the different categories of livestock losses.



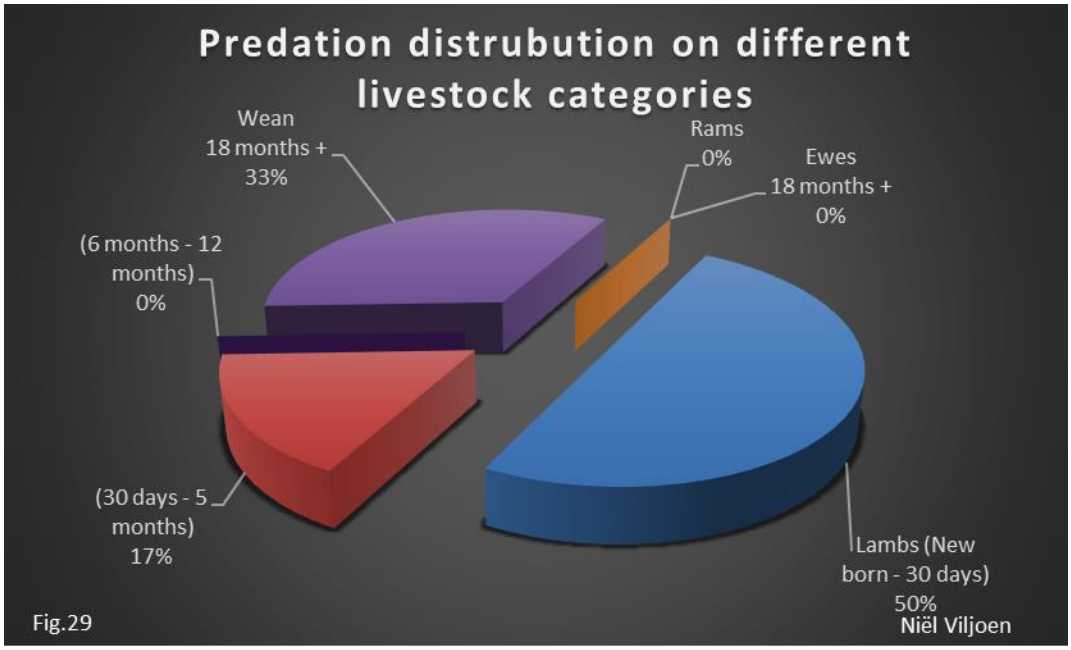
From all the categories, predation seems to be the lowest, but as mentioned before, information gathering was done over a short period. This is at least some indication of the situation. Clearly there are many workable categories where expertise, assistance and information can contribute towards better results.

Predation distribution for different livestock categories:

The size and weight of the prey (livestock) tells a complete story about predator presence and numbers.

The different livestock categories were agreed to as follows:

- Lambs (New-born – 30 days)
- Lambs (30 days – 5 months)
- Lambs (6 months – 12 months)
- Wean (18 months +)
- Ewes (18 months +)
- Rams



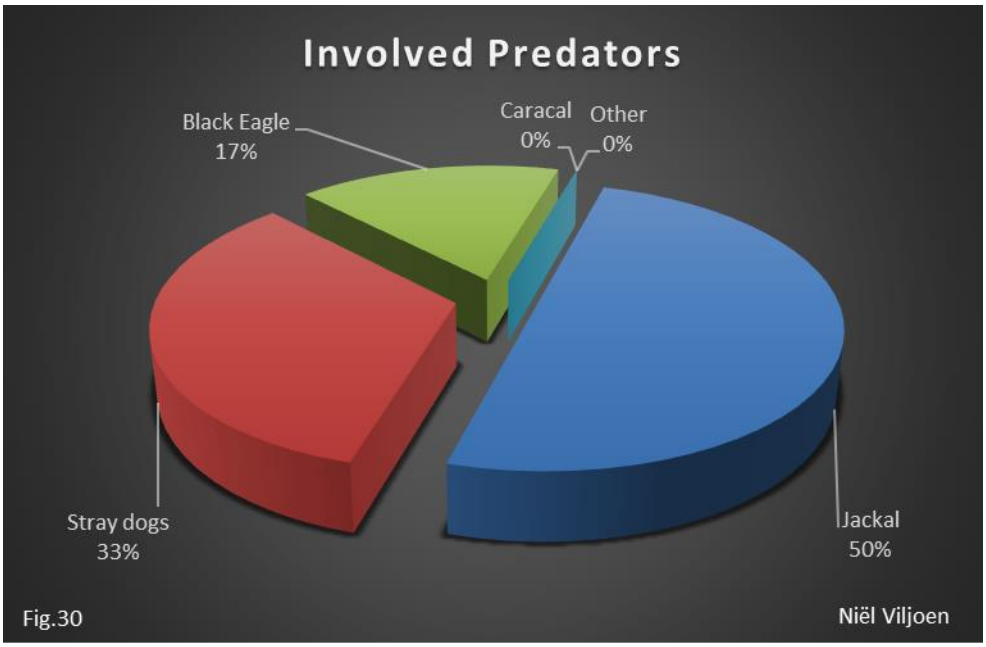
In the figure above (Fig.29) it is clearly visible that the smaller lambs seem to be the favourite prey for predators. As the lambs grow bigger, the intensity of losses decreased a little, but still persist. Interesting, is the heavy predation on weaners.

Involved Predators

The importance of identifying the correct predator responsible for losses, is crucial. Wrong analyses could have huge financial implications and lead to the implementation of the incorrect predator management plan. Identification of the predator responsible for livestock losses will ensure fast and effective control methods.

Communication with farmers will lead to the identification of five different categories of potential predators:

- Black backed jackal
- Caracal
- Black eagle
- Stray dogs
- Other



The figure above (Fig.30) indicates that the black backed jackal is still the main culprit when it comes to livestock losses. Only two other definite predators could be identified at this stage, namely stray dogs and then very interesting - black eagles. According to farmers the black eagle is the main reason for the huge number of losses from birth to 30 days.

Conclusion:

The Mount Fletcher communal farm is a truly new challenge in more ways than one.. Dedicated farmers who are anxious to learn, with a warm, friendly community have embraced the opportunity to improve their knowledge.

Training

The following table reflects the number of learners that participated in the training. Attendance registers have already been submitted to AgriSETA.

Province	Town	Instructor	Course date	No of Learners
Eastern Cape	Cradock	Niel Viljoen	29-Sep-22	13
Eastern Cape	Aliwal North	Niel Viljoen	20-Oct-22	17
Eastern Cape	Cradock	Niel Viljoen	26-Sep-22	13
Eastern Cape	Aliwal North	Niel Viljoen	20-Oct-22	24
Northern Cape	Garries	Niel Viljoen	17-Aug-22	59
Northern Cape	Richmond	Niel Viljoen	30-Aug-22	74
Free State	Jacobsdal	Jan Louis Venter	29-Jul-22	30
Northern Cape	Britstown	David Botha	13-Jan-23	10
Western Cape	Dasberg	Jannie Fourie	08-Feb-23	9
Western Cape	Roodebloem	Jannie Fourie	20-Sep-22	76
Western Cape	Warmoeskraal	Jannie Fourie	12-Oct-22	10
Western Cape	Boland Landbou	Jannie Fourie	14-Feb-23	49
Northern Cape	Wepener	Niel Viljoen	21-Oct-22	24
Western Cape	Middelpos / Sutherland	Niel Viljoen	13-Oct-22	17
Eastern Cape	Mpofu	Kobus Grobler	20-Feb-23	19
Eastern Cape	Mpofu	Kobus Grobler	21-Feb-23	18
Eastern Cape	Aliwal North	Kobus Grobler	22-Feb-23	21
Eastern Cape	Jansenville	Juan Venter	23-Feb-23	40
Eastern Cape	Lady Frere	Kobus Grobler	24-Feb-23	18
Total Commercial Trainees				**541**

Region	Town	Instructor	Course date	No of Learners
24	Mount Fletcher	Niel Viljoen	08-Feb-23	12
24	Flagstaff	Niel Viljoen	09-Feb-23	20
20	Tsolo	Niel Viljoen	22-Feb-23	23
25	Sterkspruit	Niel Viljoen	21-Feb-23	48
23	Lady Frere	Niel Viljoen	23-Feb-23	32
21	Middledrift	Niel Viljoen	24-Feb-23	16
Total Communal Trainees				151
Total Trainees for project				692

Summary

The past fifteen years have been a very exciting journey, involving farmers, livestock, predators, the broader society and the quest to strive to an even better co-existence for all. The bigger picture will always be that whatever experiments and results we invest in, biodiversity must always be respected and promoted.

The importance of adaptive management skills is supported by a toolbox of available methods. Call and shoot of damage causing predators was directly influenced by above-average wet conditions, as was experienced during 2022. This again confirms the importance of every single control method, lethal and non-lethal, underlining the fact that all methods have a legitimate and valuable place in the toolbox of management approaches.

The first communal monitor farm established in 2022 brings a new challenge, with new opportunities to broaden the knowledge base and improve management strategies.

Long-term results recorded on monitor farms is a very important source to inform and update predation management training provided to livestock managers, -owners and -farmworkers. Training and improving the skills and knowledge of those participating in the programme involving responsible predation management also supports sustainable production practices.

These practices are audited and certified as required conditions contained in the Sustainable Cape Wool Standard (SCWS). Certified wool from these farms is recognised internationally and improves the demand for wool produced in SA under this certification, also resulting in higher wool prices for the producer.

NWGA has submitted a new application to AgriSETA to continue with this program in 2023 and trusts that this application will receive your favourable consideration.

Acknowledgements

- **The financial support from AgriSETA to this programme needs special mention. This support significantly contributes towards improving the knowledge base on responsible predation management, as well as the skills and knowledge of livestock managers and -owners participating in the training initiative. Monitor farms were selected to represent the most important extensive farming areas in South Africa where livestock losses are a serious threat to rural livelihoods, also threatening food security. It is estimated that livestock losses in SA is valued at more than R2,0 billion per annum.**

- All twenty-seven monitor farms, farmers, managers as well as their co-workers.

- Communal monitor farm at Mount Fletcher

- Red Meat Producers' Organisation of South Africa (RPO)

- National Wool Growers' Association of South Africa (Eastern Cape & Communal Branches)

- Predation Management South Africa (PMSA)

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Signed at Port Elizabeth on 3 March 2023.

Niel Viljoen
Predation Management Specialst