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UFS·UV
PREDATION MANAGEMENT
CENTRE (PMC)

Mobile applications (Apps) for recording predation management information

Predation is a serious problem faced by some livestock farmers and wildlife ranchers. ♦*But exactly how big is the problem?* ♦*Which areas in the country are experiencing the most damage?* ♦*Why do some farmers and ranchers seem to experience much more damage than others in the same area?* ♦*How effective are the different methods of predation management really when it comes to reducing predation on livestock farms or wildlife ranches?*

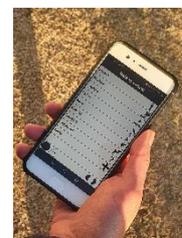
These are just some of the questions we have been asking for many years and although research has tried to answer these questions, a single research project – or even a set of research projects, for that matter – cannot answer all these questions at once...at least not over the entire country.

♦ *Why not?*

Because each research project has its limits: time, money, labour, equipment, etc. Different research projects also generally make use of different methods and approaches, meaning that the results of the different studies can't always be compared. These are just some of the things that have been identified as hampering attempts to address the negative impact of predation.

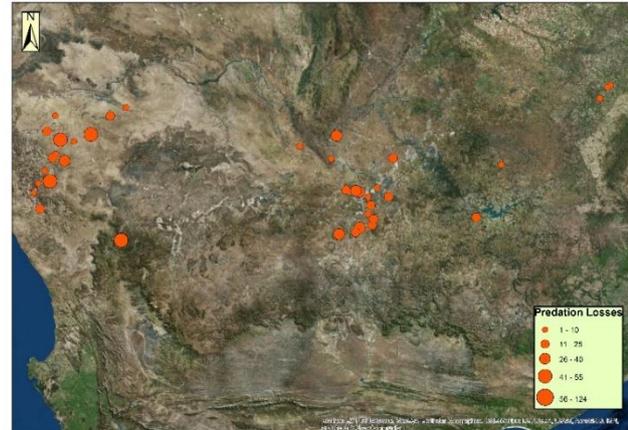
A good management plan is based on information, and the more information available, the better. But, to date, the information available on predation, predation management and the predators implicated in the damage has not been able to inform the development of practical, responsible management practices for different scenarios. To have information is good, but a large set of information that covers a large geographical area (for example the country or a province) and long continuous periods is more useful than having many small datasets covering small areas and short periods of time. There are also still many information gaps between different areas and periods.

We identified the need for a method to collect detailed, standardised data (one format so that results of different studies are comparable) on predation management on a large scale and over long periods to bridge these gaps. With the help (and patience) of CyberTracker software developers and a few dedicated individuals, two databases have been created with the aid of software designed specifically to collect data via mobile applications (cell phone apps). The purpose of the apps is to address the lack of information regarding the extent (*how much*) and distribution (*where*) of predation and the effects (*reduction or mitigation*) of implementing predation management strategies. This will generate large databases from which studies can be conducted, covering the range of aspects involved in predation and predation management. The collection of information over long periods of time allows the monitoring of predation and how predation management strategies in different areas affect the recurrence of predation. Eventually, best practices for predation



management can be formulated, based on information directly from the experts in the field - the farmer and the predation management specialist.

◆ *Why is this much information necessary?* Put quite simply: it will give us a better picture of predation across the country; not just in certain isolated areas. In other words, the current situation regarding predation on livestock farms and wildlife ranches can be evaluated. If you take a look at the bigger picture, areas with higher predation vs. lower predation can be identified.



From there, certain areas can be “zoomed in to” to investigate why some areas/farmers experience more predation, or which methods or combinations of methods of predation management work better, and under which circumstances.

With long-term data, the situation can be monitored. Eventually, with data collected over a number of seasons or years, patterns can be identified and predictions made regarding possible future predation so that better preventive (precautionary) measures can be taken.

Predation takes place every day and predation management activities are performed every day, but information is difficult to obtain.

◆ *So how will the apps help to collect this type of information?*

Most of us have a cell phone, and we carry it with us wherever we go.

So:

Cause of loss	
Theft	
Predator	
Drought	
Disease	
Cold	
Poisonous plant	
Snake bite	
Unknown	

☑ Whenever you are out and about on your farm and happen upon the carcass of one of your livestock or other farm animals or realise that some animals are missing, simply take out your phone, open the **Stock Losses** app, tap to select a few options (for example: is it a sheep, cow or goat; what you think the cause of death or disappearance was; take a photograph in the case of an animal killed by a predator; and some other details about the animals – if you so choose) and tap on the “save and send button”.

☑ If you conduct predator control on your farm, or if you are a specialist conducting control on someone else's property, open the Predator Control app. With this app, information on the predator species, the method of control and some other details about the animal (optional) is recorded. The information is sent directly to a central database and is then ready for analysis.

Method used
Shoot
Cage trap
Leghold trap
Hunting hounds
Poison collar
Other
<input type="text"/>

The applications are compatible with any mobile device (cell phones, tablets and PDA's – Android as well as Apple).

Anyone interested in using this tool to record predation losses on their farms/in their area, can contact the Predation Management Centre at 051 401 2210 or PredationMC@ufs.ac.za