The incessant beeping of the Rover Unit sounded, persistent and not to be ignored. The time, 02:04! Oh no! Allu stumbled out of his bedroll and pushed the “Acknowledge” button on the rover unit. The message was clear;

17/05/2022 02:04:05 : Auto Tx
EVT938 (Zone: PurosGanamub) Orutjadja Geofence (ACTIVE) : XPL140 AT 5.7 KM NW : XPL140 17 MAY 04H03 18.857S 13.4573E
Msg Rx Confirmed by Rover : 2022-05-17 02:04:00
Msg Acknowledged by User (ACK) : 2022-05-17

XPL140, an adult female, with her sister presumably, on the prowl in the badlands again. Pack the bedroll and gear! Allu and three community rangers packed quietly and quickly. Quick equipment check, fireworks, spotlight, binoculars. Punch in a go-to request on the Rover Unit,

17/05/2022 02:15:45 : Auto Tx
GOTO Coords : 18.85312S 13.43887E
Msg Rx Confirmed by Rover : 2022-05-17 02:15:50
Msg Acknowledged by User (ACK) : 2022-05-17 02:16:33

At approximately 03:30, The team arrives at the farming settlement, alerts the farmers and residents to their presence and to the presence of the lions. A flurry of quick questions;

- Are all the cattle in the kraals?
- Are all the goats in the kraals?
- Has any farmer shifted kraals during the last day or so?

Not all cattle have been kraaled, there is a shortage of predator-proof kraals in this area, as the lions have only recently ventured into this region. Uncle Joshua had an emergency and has apparently had to go by donkey to Sesfontein, his sheep and cattle are still out in the river!

A Team meeting and strategies are considered. It is decided to first run a quick patrol to see if the lions have moved and where exactly they are right now. After only several hundred meters the large eyes reflect in the spotlight. The Team returns to the farmstead and starts activities. A set of fireworks, crackers and rockets is set off, clearly making the area unpleasant for the lions. Voices are loud and people move around creating disturbance. The Team again deploys by vehicle to check the lions. Success, or a temporary reprieve, they have moved a few kilometers. A fire is lit and the Team settle down near the farmstead for the remainder of the night. The next morning they head to the river to look for and heard Uncle Joshua’s cattle to safety. A morning message on the Rover Unit confirms that the lions are in the mountains and in a relatively safe environment.

Prolonged drought in Kunene has led to a dramatic decline in prey species. This has had a major impact on lions (and other predators) and many have been forced to move to areas outside their standard territories. The same drought has killed many cattle and goats, making the loss of even one a serious event for a farmer. Although the 2021/22 rain season has been good, it will take a few years for the prey species numbers to recover. Already, significant foaling in Hartmann’s zebra and lambing in springbok has been seen in many areas. Promising, but it will be sometime before relief is felt by the lions. In response to the decline in prey numbers lion numbers have, as expected, decreased. However, the population remains genetically sound and viable.

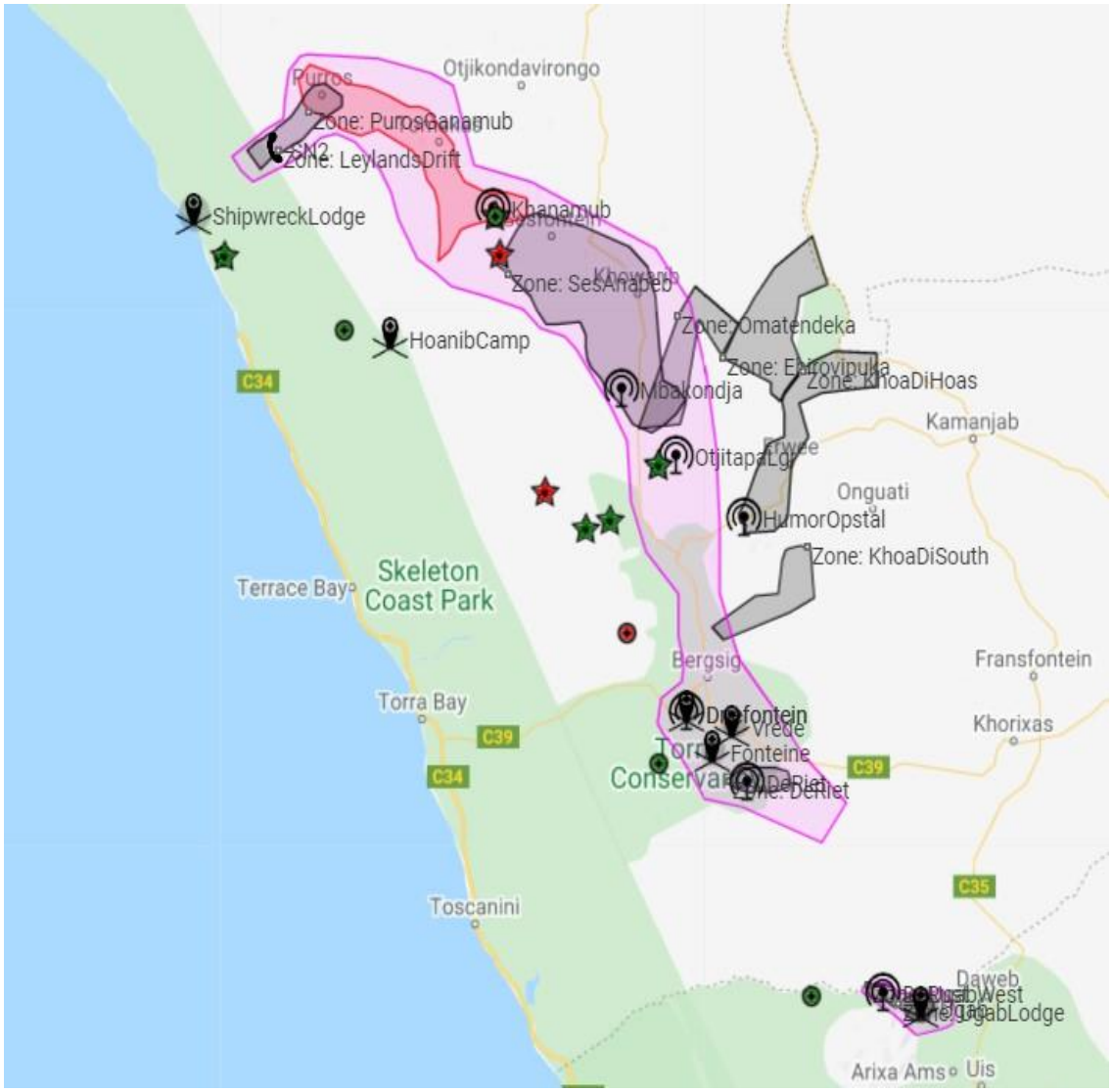
Cattle being herded and gathered out of danger area

The Early Warning System has become a really important tool in lion conservation. It was started or developed some five years ago and has evolved into a sophisticated tool for conservation practitioners. While having many components, it essentially two different segments;

- The first is a system of towers placed strategically at locations in hotspot areas. When a collar comes within 1 to 2 kms, it triggers the Tower which sets off a siren and a series of lights alerting the farmer to the direction and approximate distance of the collared animal. Further, a message is sent to the main server which then automatically sends sms messages to key community members and rangers.
- The second is a system of geofenced areas which report violations by satellite collars. Again, sms messages are forwarded to key community members and practitioners. Think of a geofence as a “virtual” fence, when this “line” is crossed, the system is activated.

The system has been designed to be flexible and be tweaked to changing situations. Towers can be moved to new hotspot areas in a matter of hours. Geofences can be redrawn or moved within a day. The Rover Units in the vehicles of those responding do not only serve as a GPS and alarm unit, but allows them to have two-way sms communication in even the most remote areas.

In the 8 months period from June 2021 to February 2022, there were 136 incidents generated or reported by the Early Warning System. Of these, 106 were physically responded to, a rate of 77%. The remainder were all monitored on the system to assess if they were actual incidents or were in danger of degenerating into serious problems. This is an extremely high rate of response.



Geofenced areas and EWS Tower distribution

Early Warning Tower being erected

The system and the response is expensive, it costs a great deal to keep it operational. But, can we attach an figure to such an iconic sub-population of lions? This population has become tremendously important to local tourism. It also remains important from an international conservation perspective. It is also surely a measure of the success of our conservation efforts and policies.

Russell Vinjevold