Combatting the spread of rabies from the air with the help of the Bateleurs

Posted on December 06, 2022



In South Africa the World Heritage Site of the Cradle of Humankind in Gauteng Province, is a wild area of some 175 km² and whilst not a game reserve as such, it is a wilderness area and home to numerous wild animals. Among the inhabitants are black backed jackals and honey badgers, where a rabies outbreak is determined to have occurred.

Rabies needs no introduction, as a terrible and debilitating disease when contracted by humans or by animals. This latest outbreak was brought into sharp focus when a rabid badger entered a rural home on the outskirts of the Cradle and bit several occupants in the home, with the old Gran of the family very sadly succumbing to the disease. In suburbia rabies clinics are held, sometimes with free inoculation for all pets brought along, however how does one broadcast to the wild animals that it is now inoculation time and then least of all have the animals adhere to the call, in other words how then does one deal with the spread of this disease in such circumstances?

Enter Prof Katja Koeppel, veterinary wildlife specialist and Professor of Wildlife Health in the University of Pretoria's Faculty of Veterinary Science and their smart plan of bait dropping. Quite simply a bait with a base ingredient of fishmeal (nice and smelly/attractive for the scavengers) is laced with rabies vaccine and then air dropped in the region. This bait provides inoculation for up to a year and if there were any animals (and there certainly are) currently infected with rabies, then those will perish within this year of coverage and with the surviving remainder being inoculated, the problem is hopefully solved.

Prof Katja approached The Bateleurs – who else other than the 'Environmental Air force' and the planning process was started. We had some testy hoops to jump through. As with most countries of the world, air dropping of anything is not allowed, but in the interests of public safety/health and animal welfare, the local authorities authorised the applications for a special amendment and for the

flight to occur in what is also the immediate airspace of Lanseria Airport, one of our busier international airports.

Thanks goes to the SA Civil Aviation Authority and to ATNS's Central Airspace Management Unit, in particular Akashnee van Vuuren, for their superb civil cooperation in this much needed task.



Prof Katja Koeppel (left) enjoying a rather different day at the office with Thomas Marrow, the pilot from The Bateleurs who conducted the flight.

Thomas Marrow, one of the Bataleurs' Green Cap (top) pilots was then set to conduct the flight. Thomas went the extra mile by plotting the transects to be flown for Prof Katja and had determined, at their suitable and permitted max flying height, how far apart the transects should be, plus the rate of forward speed/discharge, in order to accomplish Prof Katja's required bait dispersal. Thomas plotted his grid pattern and determined a flow rate of one bait every four seconds.

With the planning task of flight plans filed and the aircraft pre-flight prep done, Thomas flew from home base and uplifted Prof Katja at Wonderboom Airport in Pretoria not far from the Faculty, then flew to the Cradle and directly into their transects. Their delivery was so well planned and executed that part way along their last transect line, they ran out of baits. With Prof Katja then disembarked back at Wonderboom, Thomas got back to base late in the day.

Due to terrain and coverage considerations, this vital and innovative task would not have been accomplished without aviation intervention and The Bateleurs' delivery. We are very proud, through the superb skills of Thomas Marrow, to have accomplished yet another meaningful and important mission, of aviation support to the environment. Thank you to Thomas and to our anchor supporters The Tusk Trust, the Rufford Foundation and all of our Bats Associate supporters.

Professor Koeppel and the University will undertake ongoing monitoring of the region, including testing of any encountered animals. They have promised to share the long term outcome of this mission and we are holding thumbs and looking forward to reporting an 'all clear' during 2023.

For more info about The Bateleurs: <u>https://youtu.be/txX9TglubZsb</u>

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