ruff stuff

MARK WOLTERS

Reducing the impact of domestic cats on native wildlife

Cats are often in the news for all the wrong reasons. Across every continent bar Antarctica, the estimated 600 million cats – both feral and domestic – have been shown to take vast numbers of native prey. Cape Town's approximately 300 000 domestic cats, for example, are calculated to take 27.5 million prey items per year, mainly reptiles but also about 450 000 birds. Across the United States this rises to 1.3–4.0 billion birds and 6.3–22.3 billion mammals taken annually. In China it is estimated to be even greater, with 27–55 billion birds and 36–98 billion mammals falling prey to cats each year. Over the years, this has led to the extinction of 63 bird, mammal and reptile species worldwide.

Many solutions to this unsustainable slaughter have been proposed, ranging from keeping domestic cats indoors to constructing an enclosed patio to allow them partial access to the outside. For feral cats, the Trap-Neuter-Release programme aims to increase the number of sterilised cats so that the population cannot breed and gradually decreases until it disappears. Unfortunately, this takes time to come into effect and is rarely successful, as for it to be viable more than 50 per cent of the population needs to be sterilised and this is seldom achieved.

So, what are the solutions? A study in Switzerland by Geiger et al looked at the effectiveness of making a cat more visible to potential prey by fixing a bright 'ruff' to its existing collar. Their research on 31 cats with and without the colourful collar found that the number of bird prey items returned to the home declined by about 37 per cent when the cats were wearing the bright collars. There was no difference to the number of mammals captured, but the addition of a bell to the ruffed cat collar did reduce that number by 54 per cent. This latter result with mammals was also found in New Zealand; Gordon et al found that with the addition of just a bell to a collar, there was a 50 per cent reduction in mammals caught, suggesting that bells are effective in reducing predation on mammals (but not birds).

The Swiss study was not the first to test the bright collars idea. In the USA, Wilson et al studied 54 cats in autumn and 19 cats in spring wearing these collars. They found a dramatic 19-fold decrease in bird prey returned to the home in autumn and a 3.4-fold decrease in spring. Like the Swiss study, the effect on predation on mammals was less pronounced; collared cats caught half as many mammals in one season as did the uncollared cats, but equal numbers in the other season.

Reptile and amphibian prey were not studied in the Americas, but the Swiss study showed that the number of reptiles caught was reduced by 55 per cent for cats wearing the bright ruffs.

Given the effectiveness of the colourful collar, at least for birds, how likely are cat owners to use it? In the Swiss study, 72 per cent of participating owners said that they would continue to make use of it, while 22 per cent said they would not because their cats did not accept the collar. This makes the colourful collar (with a bell) a viable and cheap way of reducing predation on birds and mammals for responsible cat owners. While not discussed in the published papers, one way in which cat owners could ensure their cats accept the collar would be to introduce it at a very young age, first with a normal break-away collar and then the coloured collar.

Despite the success of the coloured collars, cat owners should always bear in mind that it is better to keep their cats in, especially in an African setting. Why? Because domestic cats are very susceptible to the three Cs: cars, caracals and contagions. Cats are often hit and killed by cars as they cross roads; the Urban Caracal Project at the University of Cape Town shows that cats regularly feature in the diet of caracals; and, lastly, cats are known to carry toxoplasmosis, a parasite-borne disease that can have adverse effects on humans. These are three good reasons to limit cat wanderings, over and above the ecological ones. But if you do decide to let your cat out, pop a colourful collar (with a bell) on it to limit the damage it wreaks on wildlife.

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To buy a Birdy Bib from BirdLife South Africa, visit https://shop.birdlife.org.za/product/birdy-bibs/

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BLACK HARRIERS NEED HELP

Black Harriers are in deep trouble. Fewer than 1300 adult birds now remain and models suggest the population is declining by 2.3 per cent annually. They are now one of southern Africa's most Endangered raptors.

After working on the species for several years, in 2012 I founded the Overberg Renosterveld Conservation Trust (*www.overbergrenosterveld.org.za*). Our work centres on securing remnants of the Critically Endangered renosterveld in the Overberg wheat-belt, thus protecting habitats for harriers and a myriad other species.

Sadly, harriers in this landscape now face a new threat – the entire Overberg wheat-belt has been identified as a Renewable Energy Development Zone, meaning that it is a hotspot for future wind farm developments. To date, existing wind farms in South Africa have killed at least eight Black Harriers. If this trend continues, we could see the collapse of this species within our children's lifetimes.

We need to study Black Harriers' foraging habits and patterns closely in order to improve our ability to provide guidance on future wind farm applications, as well as identify critical areas for the species' conservation. We have satellite-tagged six renosterveld harriers and we are now raising funds to buy additional satellite tags. Please visit *www.backabuddy.co.za/champion/project/saving-black-harriers* to contribute to this important research.

ODETTE CURTIS-SCOTT

Read more about the plight facing Black Harriers on pages 24–29.

opposite *Domestic cats exact a huge toll on birdlife. The use of bright, ruffed collars can help reduce predation.*