

Perspective

THE GRASS IS GREENER ON PREDATOR FRIENDLY FARMS

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Dairy cows with a guardian dog on a predator friendly dairy, Burruduc Farm, Australia. Photo: Elena Swegen.

For the past decade I have been researching the ecological role of Australia's top predator - the dingo. Travelling countless miles, I had failed to find a place where dingoes are free from poisons, traps and guns. Even national parks provide no safe haven, as they are regularly poison baited against foxes and dingoes. And so, with the support of a Churchill Fellowship

I set out to find places around the world where predators were left in peace.

Large predators are vital for the health of ecosystems. Biodiversity is richer in their presence because they limit herbivore prey animals and smaller predators. They are also some of the most persecuted and endangered animals, which has had devastating effects

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on other species and entire ecosystems (Ripple et al., 2014). In Australia, persecution of dingoes has caused a wave of mammalian extinctions, due to population irruptions of smaller predators (Wallach et al., 2010). In contrast, the reintroduction of wolves to Yellowstone National Park has triggered dramatic recovery of vegetation and animal communities, through their predation pressure on elk and other prey. Trees that had been unable to regenerate for decades are now thriving where wolves are returning. Even the courses of Yellowstone's rivers have been changed by this 'trophic cascade' (Beschta and Ripple, 2012).

Yellowstone National Park was therefore first on my list as a prime location to find out what a safe place for predators actually looks like. The reintroduction of wolves into the park in 1995, seventy years after extirpation, sparked a revolution in our understanding of ecology and inspired a new vision of our relationship with nature. Indeed, during the first few years, wolves received legal protection both in and out of the park. But I had arrived too late to see it.

By 2012 wolves lost much of their brief protection under the Endangered Species Act, and wolf hunting began outside the park in several states. Yellowstone National Park became a small island of safety, with no way for the wolves to recognise the boundaries.

Inside the safety of the national park the wolves had regularly encountered people who eagerly watched them through scopes, but outside they suddenly came across people waiting with guns. It became clear that national parks and other protected areas cannot on their own provide the solution.

Predator Friendly Farming

The livestock industry has been leading the 'war' on predators for generations, driving them out of vast rangeland regions, even eradicating them from entire countries. Australia built the world's longest fence (over



Dingoes are persecuted across Australia, primarily with poison baiting (left panel), and they are also shot, displayed, and scalped for bounties (right panel). Boulia, Queensland. Photos: Arian Wallach.



Jackals and vultures gather at a feeding station in a predator friendly game reserve outside Pretoria, South Africa. Photo: Arian Wallach.

5,500 km long) just in order to eradicate dingoes from sheep-grazing regions. It is still common practice for government departments to offer bounties on dingoes, and to fund poison-baiting campaigns, even inside national parks. It is not unusual to find dead dingoes hanging from trees and posts across the Outback.

But a new kind of cowboy is quietly leading a revolution in humanity's relationship with the natural world (Johnson and Wallach, 2016). They are raising sheep, goats and cattle, even chickens, in environments shared by lions, tigers and bears, and providing safe havens for predators where none were found before. 'Predator friendly' farmers are demonstrating that killing predators for livestock production may be a dying practice.

Studies of livestock protection methods around the world are finding that nonlethal management is not only far more ethically and environmentally sound, it is also good for business. A 3-year study across the Eastern Cape Province, South Africa, showed that farmers were economically better off when they stopped killing leopards (McManus et al., 2015). Eleven participating farms were monitored during their transition from killing predators, and for two years of predator friendly farming. The farmers used a range of nonlethal meth-

ods, including guardian animals and protective collars on their sheep, but the results were consistent. Dr Jeanine McManus, lead author of the study, found a 70% decline in both predation losses and running costs per head on these farms.

Large predators exert strong pressures on each other through social interactions, such as territoriality and restrictions on breeding (Wallach et al., 2015). Killing predators fractures their social structures, which can lead to higher reproduction and immigration, and to higher attack rates on livestock. Studies in Australia, North America, Europe and South Africa, have all similarly found that killing predators can lead to higher predation rates on livestock (Allen, 2013; Wielgus and Peebles, 2014; Treves et al., 2016).

Rob Harrison, award-winning filmmaker and director of the South African based Wildlife Damage Research and Management, has been closely monitoring a protected population of black-backed jackals. South African sheep and game farmers regularly trap, shoot and poison jackals, but Harrison's research is showing that this is a mistake. "When left alone jackals become fiercely territorial", he explains. "If you kill jackals you'll end up with even more jackals and more predation because their social structure breaks down".

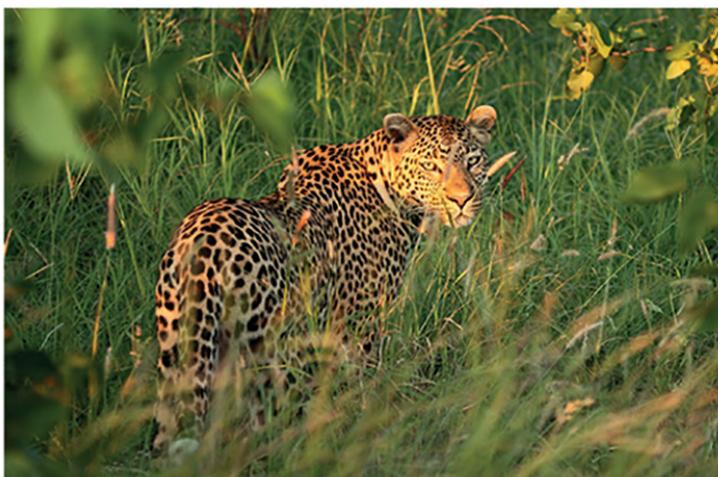
South African farmers that have committed to protecting predators on their land are now gaining an additional advantage, with a Fair Game certification scheme. The Landmark Foundation is successfully working with farmers to promote nonlethal alternatives to protecting livestock from leopards, jackals and caracal. The Foundation collaborates with certified farmers by providing information on the movement of radio-collared leopards in the region, assistance with improving non-lethal techniques, and provision of compensation for stock killed by predators. “The focus must shift from predator control to controlling and guarding your stock,” says Dr. Bool Smuts, founder of the NGO. “It is a paradigm shift”.

Farming of the Future

One of the earliest predator friendly certification brands originated in Montana, North America, in the 1980s. “Early producers that chose to protect predators received death threats from their neighbours”, says Julie Stein, Executive Director of Wildlife Friendly En-

terprise Network (WFEN). “Much has changed since then”. They provide Predator Friendly® certifications to producers around the globe. Last year, Stella McCartney Inc., led by the daughter of musician Sir Paul McCartney, became the first global fashion brand to commit to sourcing certified materials.

One of the earliest farmers to join the scheme was Becky Weed, owner of Thirteen Mile Wool and Lamb Company near Yellowstone National Park, who is successfully running her family business in an environment shared by wolves, coyotes, bears and cougars. Unlike neighbours who resent the return of wolves, Weed has been a vocal advocate for wolf recovery and has built her farming practice on a commitment to respecting the other creatures that share her land. “We all have to learn to farm as if nature matters,” she says. Abigail Breuer, Program Director of WFEN, is noticing the shift in attitudes. “Thanks to the example set by predator friendly farmers, slowly but surely Western ranches are increasingly adopting proactive measures to coexist with large carnivores”, she says.



Wolves are protected inside Yellowstone National Park (Photo: Kemble Widmer) and leopards are safe inside Kruger National Park, South Africa (Photo: Craig Jackson), but these areas are not enough. Predator friendly farmlands are providing safe spaces for predators outside protected areas. Certifications, such as Predator Friendly® and Fair Game are acknowledging and rewarding pioneers of 21st Century farming.



Herders walk with their mixed herd of cattle, sheep and goats during the day (left panel), and then enclose them in a protective kraal by night (right panel) in Dimbangombe, Zimbabwe. Photos: Arian Wallach.



All around the world farmers are developing ways to protect their herds without resorting to killing predators. Dimbangombe is a predator friendly ranch in Zimbabwe, run by the African Centre for Holistic Management, founded by Allan Savory. “We are successfully grazing a herd of cattle, sheep and goats in an environment rich with large predators, including lions, cheetahs, leopards, wild dogs and hyenas,” Savory explains. Indeed, on my visit to the ranch I find evidence of a thriving abundance of wildlife, including many tracks of large carnivores. “Lions were a major cause of mortality in our herd until we developed a ranching method that works,” explains training manager Elias Ncube.

Their 500 head of mixed livestock are kept together in a single herd that is guarded and cared for 24/7 by a team of herders and their trusted dogs. During the day the livestock are grazed across the 3,200 hectare

property, moving together like a herd of migrating wildebeest. At night the animals are brought into a protective kraal: thick sheeting that keeps the animals in a tight bundle and shields them from predators. A line of blinking lights surrounding the kraal acts as an additional lion repellent. The human and canine herders get a good night’s rest as they camp beside them. The resulting biodiversity and productivity I witnessed on the ranch makes many national parks look like wastelands in comparison.

Most livestock producers across Australia poison dingoes and other predators with 1080, a toxic banned in most countries because it is inhumane, kills non-target animals, and is dangerous to humans (Sherley, 2007). This toxic is never used on Burraduc Farm in New South Wales: a predator friendly dairy that employs guardian dogs to protect their herd of cattle and buffalo. “We strongly oppose the use of 1080 poison,

having observed the horrific effects on dogs and other animals,” says farm owner and Churchill Fellow Elena Swegen. “It is unethical, a wrong approach to the problem and a wrong tool for the task”. The offspring of their guardian dogs are now working with livestock across Australia. “Most reports we get on their performances are excellent,” she says. Scientists agree.

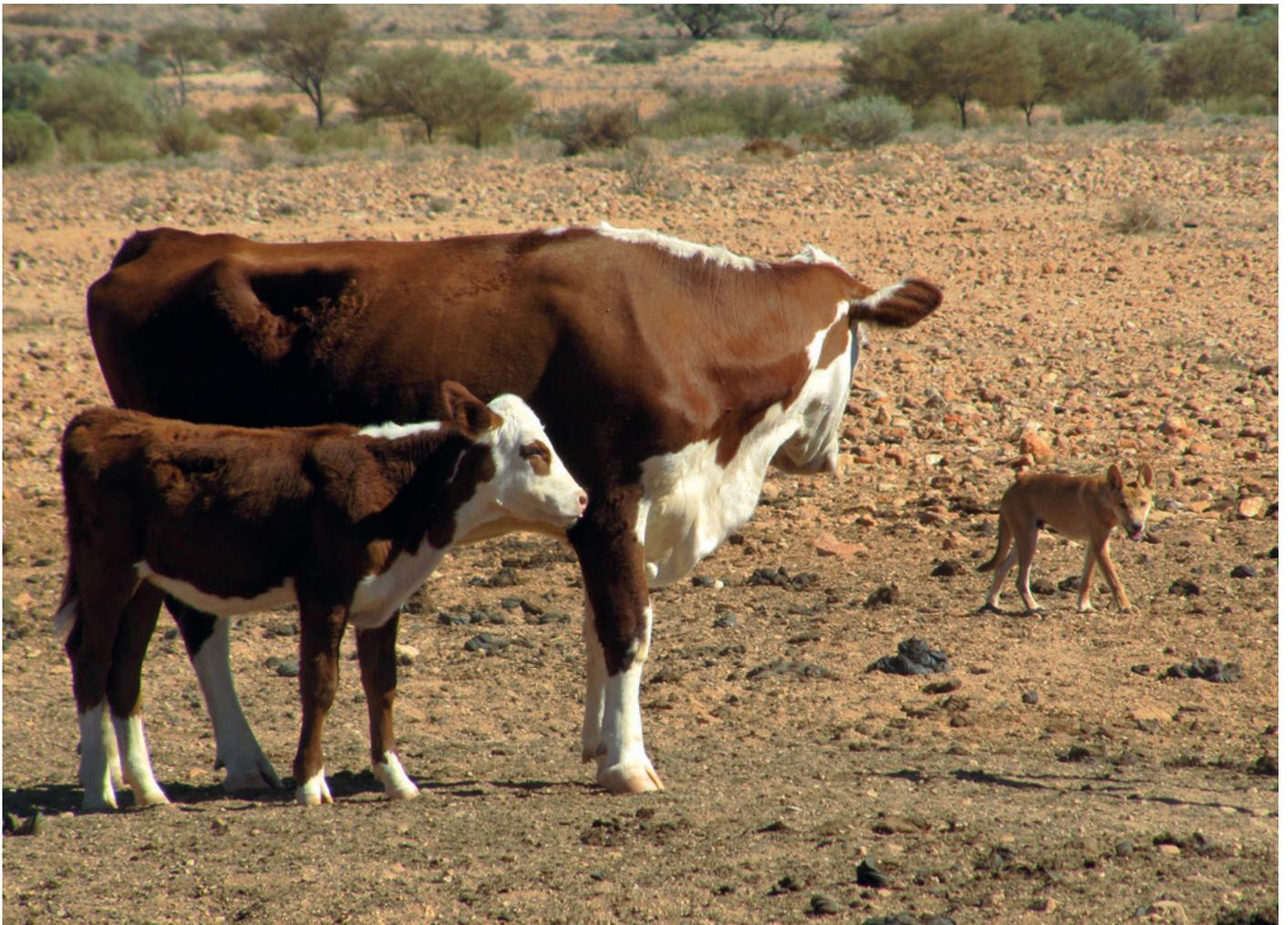
Livestock guardian dogs have been shown to provide a cost-effective alternative to conventional predator control across Australia. A study of 150 Australian predator friendly livestock producers that used guardian dogs, found that 66% of farmers reported that predation ceased after obtaining guardian dogs, and a further 30% reported a significant decrease of predation (van Bommel and Johnson, 2012).

In many cases even ‘doing nothing’ provides better outcomes for livestock than killing predators. Evelyn Downs is a 2,300 km² predator friendly station in northern South Australia, carrying around 1,200 head of cattle. Contrary to intentions, dingoes were contin-

ually getting shot and poisoned. On such large stations, poaching can be a common problem. In 2012 my partner Adam O’Neill and I assumed the management of Evelyn Downs and successfully ensured that dingoes were protected for two years. During our tenure we recorded 56 cattle deaths, most of which were caused by husbandry-related problems, and only eight calf losses were attributed to dingo predation. Six of the dingo-caused deaths occurred during our first 6 months, while the dingoes were still recovering from poaching (Wallach et al., 2017). It was not always easy to restrain the urge to turn to a gun when we caught dingoes feeding on a dead calf. But we found that the best way to ‘control’ dingoes is to let them sort things out for themselves.

Predator Friendly Network

Growing consumer awareness is enabling – and in some cases forcing – farmers to adapt their practices. Societal values are demanding ever higher ethical and welfare standards in farming practices, both in the





Protecting dingoes did not result in high or increasing predation rates, and most predation subsided after 6 months.
Left panel – dingo with cowboy (Photo: Arian Wallach),
right panel – dingo with cattle (Photo: Gerrit Schurimann),
on Evelyn Downs, a predator friendly station in South Australia.

treatment of livestock and the wild animals that live among them. Predator friendly certifications enable consumers to vote with their money, to ensure that their funds are not fuelling ongoing violence towards wildlife. In a world with a rapidly growing human population, and an increasing appetite for meat, we must find ways to coexist with wildlife outside protected areas.

Predator friendly farming is growing, but it is still a young and fragmented movement. It can be difficult to ‘come out of the closet’ when everyone around you turns to poisons and guns to solve problems. Many landholders who choose not to kill predators remain isolated and are under intense pressure from neigh-

bours and government to toe the lethal line. Many are also unaware that their management approach is widely supported by the public and by scientists, and that there are many others taking a similar path (Johnson and Wallach, 2016).

The Centre for Compassionate Conservation, University of Technology Sydney, in Australia, is establishing a Predator Friendly Network to provide a platform where progressive farmers can share experiences and support, and to make the certification schemes more accessible. In particular, we aim to enable a friendlier world both for predators and for the farmers that choose to coexist with wildlife. Predator friendly is the farming of the future. It is time to move on.

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Predator friendly links

African Centre for Holistic Management
www.africacentreforholisticmanagement.org

Centre for Compassionate Conservation
www.cfcc-uts.com

Dingo for Biodiversity Project
www.dingobiodiversity.com

Landmark Foundation

www.landmarkfoundation.org.za

Predator Friendly Network
www.facebook.com/groups/1714422825442170

Wildlife Friendly Enterprise Network
wildlifefriendly.org