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Political borders should not hamper wildlife

Given the lack of global legislation, nations should work hard to establish cross-border protections for vulnerable species, says Aaron M. Ellison.

The Republic of Crimea looks set to become the latest new nation state to emerge from ethnic division and geopolitical gamesmanship. Political action and human bloodshed may subside after the dust has settled, but many constituents will lack representation. Those are the millions of non-human species that occupy the fragmenting territories. Who speaks for them, and what protections do they have at existing borders or when borders change?

Put simply, new, unstable countries do not protect biodiversity and habitat as well as nations that have strong governance structures. Only laws and statutes protect biodiversity, and these differ on either side of nearly every border.

Ukraine has been part of the Pan-European Biological and Landscape Diversity Strategy since the programme's inception, but the Russian Federation's participation has varied widely. There (and in the Commonwealth of Independent States), protection of biodiversity is overseen by the Russian Ministry of Natural Resources and Environment, and relies on listings in the *Red Data Book of the Russian Federation*, which is nearly two decades old. So, as Crimea severs its links with Ukraine and forges new ones with Russia, what will happen to the endangered plants and animals in the Kara Dag Nature Reserve on the Crimean coast, or the endemic species of the Askania-Nova Biosphere Reserve on the border between Ukraine and Crimea?

There are many examples of steep declines in species populations after political division. The range and population size of the endangered Kashmir markhor (*Capra falconeri falconeri*) in India have contracted by 60% since the 1947 partition that formed Pakistan — not least because of the 500-kilometre fence that India erected to mark the de facto border.

In other cases it is hard even to keep track. When Yugoslavia dissolved in 1992 into Serbia, Montenegro, Slovenia, Macedonia, Croatia and Bosnia-Herzegovina, planning for the conservation and management of Yugoslavia's fragmented population of regionally threatened or endangered brown bears (*Ursus arctos arctos*) was taken over by agencies in six countries, each of which had different species-protection acts. Borders, language barriers and political constraints mean that data on population size and species status are now collected only by country, not across the entire range of the bear. Such fragmented data will not help those charged with ensuring the survival of the species. And without reliable data, conservation is likely to continue to be cast as the enemy of economic development.

Of course, these same issues arise across borders that have been stable for some time. When a grizzly bear (*Ursus arctos horribilis*) in Waterton Glacier International Peace Park wanders from

Montana to Alberta, it loses its protection under the US Endangered Species Act. The United States considers the grizzly to be regionally threatened, but Canada lists it only as a species of special concern.

Such cross-border transits are becoming increasingly difficult: the proliferation of fences between countries not only prevents illegal immigration but also slices in two the habitats of many species and prevents migrations. Populations of the globally endangered Arroyo toad (*Anaxyrus californicus*) and black-spotted newt (*Notophthalmus meridionalis*), for example, have been split into potentially unsustainable subpopulations by the fence between the United States and Mexico. Similarly, Arabian gazelles (*Gazella arabica*), striped hyenas (*Hyaena hyaena*) and sand cats (*Felis margarita*) find their historic ranges and migration routes blocked by border walls in the Middle East.

Civil wars (and the creation of new nation states) have become much more frequent since the Second World War, and they not only cause immediate environmental damage, but also lead to long-lasting differences in cross-border conservation programmes. Peaceful transitions may minimize the immediate impacts, but challenges will remain in the long term. In the United Kingdom, for example, many rare or endangered butterflies, birds and plants are moving from England into Scotland as the climate warms. If Scotland votes for independence, will these species retain their current levels of protection?

Conservation biologists have repeatedly called for global, or at least cross-border, systems of protected areas. Long-standing international treaties, such as the Convention on Biological

Diversity (CBD), make similar pronouncements. But although the CBD has guidelines and suggestions for the conservation of biological diversity, it provides no legal protection for threatened or endangered species. And even if the CBD could be given regulatory power, every time a new country is formed, treaties have to be reopened, renegotiated and re-ratified; history suggests that the result tends to be new treaties or laws with more exceptions and weaker protections.

Still, the concept of transboundary protected areas, or Peace Parks, has strong appeal. Peace parks, such as the La Amistad International Park established on the border between Costa Rica and Panama in 1988, not only protect biodiversity but also help to defuse border tensions and conflicts. Such reserves can be set up bilaterally, without complex multinational agreements. If Crimea and Ukraine do end up parting ways, then they must set up a similar cross-boundary haven for wildlife. ■

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WHAT PROTECTIONS DO SPECIES HAVE AT EXISTING BORDERS OR WHEN BORDERS CHANGE?

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