These wildlife overpasses open corridors for animals.
PHOTO: iStock

Protecting Nature's Pathways:

THE IMPORTANCE OF WILDLIFE CORRIDORS IN A CHANGING WORLD

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In a time where the natural world is being forced to adjust to a landscape drastically altered by human-caused impacts such as development and climate change, wildlife corridors can increase species resilience to these changes.

Through development and industrialization, many natural wildlife habitats have been lost and turned into cities and croplands to meet human needs. The remaining areas of suitable habitat are often isolated from each other due to obstacles such as urban areas, dams, roads or other developments. This fragmentation prevents animals and plants from freely passing between habitats to find essential resources like food, water or mates, posing a strong threat to the survival of many species.

Wildlife corridors are one important conservation method in combating this habitat fragmentation. These corridors are connections between habitats; this may mean that larger habitats are linked by protected passages between them, or that 'wildlife crossings' are built to provide animals a safe passage across obstacles like roads or dams dividing the habitat areas.

Wildlife corridors are important in maintaining biodiversity and increasing species resilience in a changing world. They allow animals to travel across the landscape to access essential resources and for species to maintain **migration routes**. These corridors also allow animals to access mates beyond the limits of a small habitat area and therefore help to maintain genetic diversity and resilience

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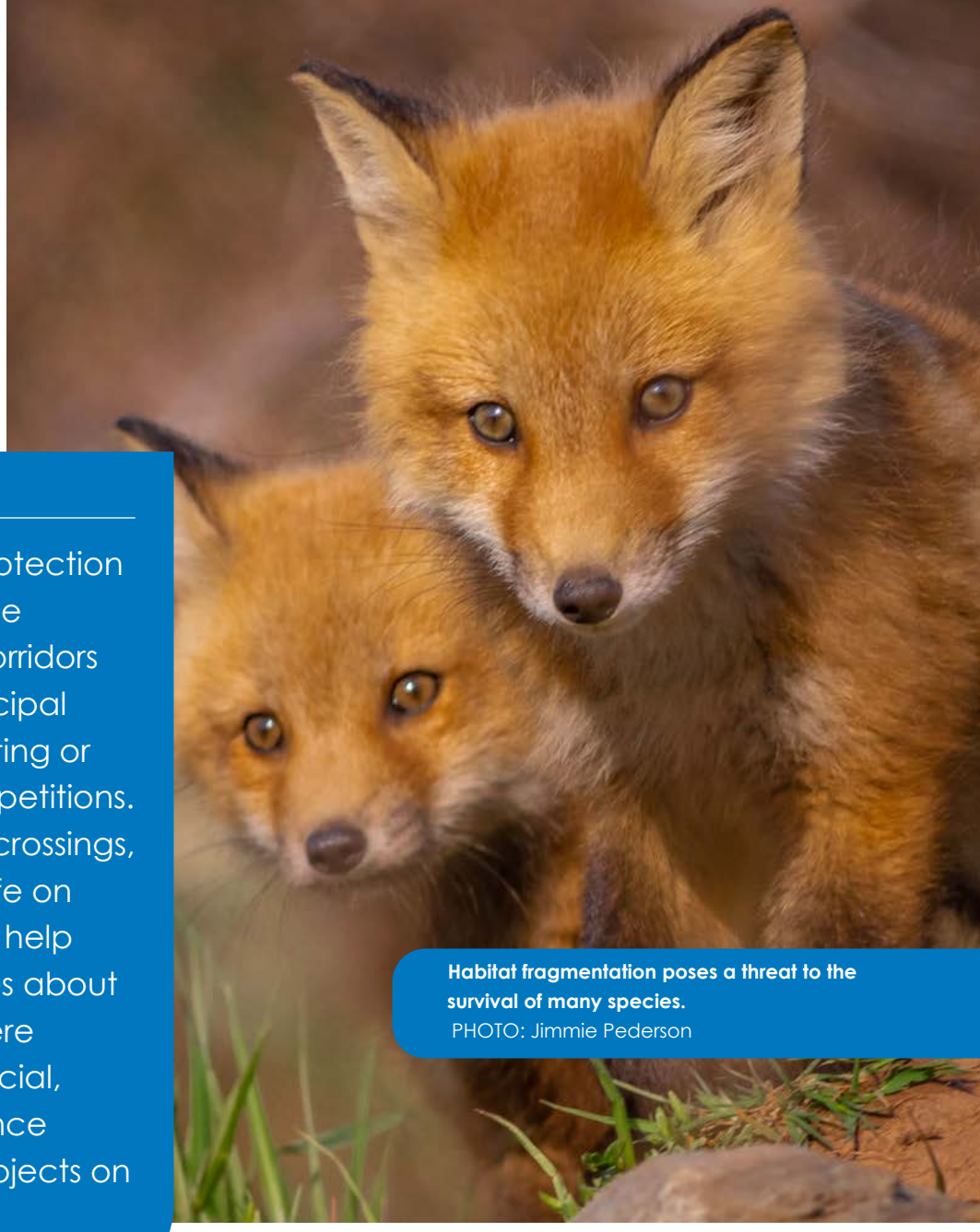
TAKE ACTION

Advocate for both the protection of existing habitats and the conservation of wildlife corridors through contacting municipal representatives and creating or supporting initiatives and petitions. On roads without wildlife crossings, keep an eye out for wildlife on and around the roads. To help develop knowledge bases about wildlife locations and where corridors would be beneficial, participate in citizen science biodiversity monitoring projects on apps such as iNaturalist.



Habitat fragmentation poses a threat to the survival of many species.
PHOTO: Jimmie Pederson

in the population. Wildlife corridors are also important in the face of climate change. Increased temperatures may push species to shift their distribution ranges to stay in areas with suitable temperature conditions, which is only possible if these plants and animals are able to move between different habitats.

When done right, wildlife corridors have been shown to help species to persist in the face of human-caused changes. **Banff National Park** is one example of this; the habitat is fragmented by the Trans-Canada Highway, and local species were facing high road mortality rates. Wildlife corridors were developed in the forms of both open overpasses, preferred by deer and grizzlies, and more sheltered underpasses, preferred by black bears and mountain lions. Fencing along the highways is used to direct animals to these passes, as opposed to crossing on the road. These crossings decreased road mortality by 80 per cent and help to maintain genetically healthy populations through **strengthened mating and gene flow** between animals on either side of the highway.

As we navigate the challenges of increased development and climate change, it is essential that we integrate wildlife corridors into our planning to better support natural ecosystems. While wildlife corridors can be very effective in helping species to survive, there is still room for improvement. The Nova Scotia Crown Share Land Legacy Trust supported local knowledge holders in developing a **report** identifying corridors that could enhance habitat connectivity around Kjipuktuk/Halifax. However, without action to protect these corridors, ongoing development may continue to erode these connections. Even in Canada's protected land areas, only **21 per cent** of these habitats have protected connections to other habitats, a critical gap in our conservation strategy. In the face of so many human-caused changes, it's essential that we adapt our developments to prioritize ecological connectivity. Doing so will not only improve species resilience but also preserve and expand greenspaces, enhancing both our enjoyment of nature and the survival of wildlife.