Wildlife Corridor

In a Nutshell

One solution to address the negative effects of natural habitat fragmentation for wildlife populations is the creation of wildlife corridors within urban areas. A critical problem associated with the loss of inter-connected habitats is the loss of population migrations, which leads to inbreeding and a loss of biodiversity. Another issue is human/animal collisions which results in a considerable lost of life. A Wildlife Cooridor alleviates these problems by connecting existing habitats, which aids in animal migration and the protection of wild animals and humans alike.

The “How To”

Penn State University offers a general introduction to wildlife corridors that explains the rationale and ecosystem need. One of the most frequently cited examples of wildlife corridors and wildlife crossings is the Banff National Park in the Canadian Rockies. A similar project was established in 2010 in Florida, the Florida Wildlife Corridor. Examples of corridors under study, consideration, and public policy debate are found in the Western U.S. States as well as Pennsylvania. A relevant local example is the Middle Mississippi River National Wildlife Refuge, which incorporates aspects of a wildlife refuge/preserve, a riparian corridor, and a wildlife corridor.

Typically these corridors are on a very large regional scope. A single individual municipality would not likely undertake the establishment of a wildlife corridor, however, one locally specific element is the use of wildlife crossings. Transportation and other urban corridor projects must consider the environment even if the project is on a small scale.

Planning & Zoning

The Western Governor's Association also presents a workable regional partnership framework that can be modeled within St. Louis to pursue large-scale wildlife corridors. The Indiana Division of Fish & Wildlife also provides a brief fact sheet on strategies to implement such corridors.

A partnership between the Transportation Research Board, U.S. Geological Survey, and Utah State University created Wildlife & Roads, which presents a PowerPoint overview of the the Decision Guide, as well as the guide itself. The Decision Guide is intended to provide transportation and engineering considerations into planning for and building wildlife crossings. Furthermore, their website offers a database of existing crossings. In partnership with ten U.S. States and their departments of transportation, as well as the Federal Highway Administration, the National Park Service, U.S. Fish & Wildlife Service, and the USDA Forest Division, a non-profit named The Southern Rockies Ecosystem Project developed a thorough, comprehensive, and illustrative user's guide to developing safe highway crossings. Finally, and more broadly, the Federal Highway Administration offers web resources and manual on an ecosystem approach to designing infrastructure projects.

Dollars & Cents

Cost Benefits

The Arizona Department of Transportation produced a Wildlife Linkages Assessment that more than 200 people die and nearly 30,000 are injured every year due to highway vehicle collisions with animals. These accidents cause more than $1 billion in related property damage. Most people consider the damage and impact to the vehicle, the driver, their passengers, and related costs. However, the impact often includes major delays related to lane closures and the dispatching of public safety responders such as the state highway patrol and emergency evacuation helicopters - such collisions impact the transportation corridor as a whole. Furthermore, the Western Transportation Institute, housed at Montana State University, conducted research and published a study that demonstrated the substantial economic and cost benefit impacts associated with reducing highway collisions.

Implementation Costs to Local Government

As wildlife corridors are essentially projects of land conservation and even civic infrastructure construction (i.e. crossings over interstates), they will typically be expensive, even stretching into the millions of dollars. That said, as noted within this tool, wildlife corridors are not projects for an individual municipality. Furthermore, they are most effective when blended into existing and planned transportation and land use decision-making. As projects and construction moves forward, cities and counties can work regionally to ensure wildlife corridors are a part of those larger projects.

Measuring Success

To fully assess the success of a wildlife corridor, an analysis of the area would need to include reductions in vehicle accidents, as well as increased animal population migration. These studies tend to be complex scientific investigations. One such review was conducted in partnership with nearly a dozen federal, state, university, and non-profit agencies titled Washington Landscapes Connected Project: Statewide Analysis. An executive summary is also available.

Discover More

The African Wildlife Foundation provides information on corridor protection in Africa, for a different geographic perspective on the topic. Also National Geographic provides materials on the topic. The World Wildlife Foundation also provides information on animal migration corridors.