



When small patches of habitat are what exist in an area, connecting them together with corridors of similar habitat is one way to help wildlife populations survive and move through an area.

On Course *With Nature*

The Corridor Connection

Suitable corridors connecting habitat patches can make the difference between survival and extinction.

BY LARRY WOOLBRIGHT

Many human activities convert wildlife habitat to other uses, like farming, housing, or recreation. In the process, habitat gets broken up into small patches, and wildlife can have a harder time surviving. When patches become too small, existing wildlife populations can go extinct.

This issue often is faced during new golf course development, but its ramifications last long after the course is open for play. Isolated “islands” of habitat that

remain post development often contain wildlife populations made up solely or predominantly of aged individuals with no or few young to keep the population going. These *living dead* populations give the impression that the species has survived post development, when, in fact, they have not sustained the capacity to reproduce in viable numbers.

The obvious solution to this pressing problem is to preserve large areas of habitat. Yet, when small patches of

habitat are all that exist, connecting them together with corridors of similar habitat is one way to help wildlife populations survive, despite growth and development.

A SAFER WAY TO GO

Scientific research shows that animals, even birds, prefer to travel along habitat corridors rather than cross clearings or other obstacles. In one study, songbirds chose wooded routes to travel between



Carts and wildlife are often a deadly combination. An attractive steel bridge carries a cart path high above a wildlife corridor at Coyote Moon Golf Course in Truckee, California.

forested patches, even when they were three times as long as cutting across a clearing.

It's not only forest animals — even species that live in open habitats use habitat corridors for travel. Butterflies, for example, use grassy corridors to move between open clearings surrounded by dense woodland, and their numbers are higher in patches connected by corridors than in isolated patches.

For that reason, in Audubon International's collaboration with the Tuscany project by WCI Communities, Inc., in south Florida, we recommended that golf course roughs and community gardens be planted with butterfly food plants and that all should be connected to a local power line easement to link together habitat patches. Power companies are often willing to work with local communities to provide butterfly plantings along their power lines.

Sometimes habitat corridors can be combined with other conservation



projects. Many of our members maintain vegetated buffer zones to protect the edges of streams, rivers, or other water bodies from runoff. These buffers often can be connected to nearby patches of habitat to serve as corridors. At The Old Collier Club in Naples, Florida, a Gold Audubon Signature Sanctuary, naturalized buffer zones along stream drainages connect habitat patches on the golf course to hundreds of acres of protected mangrove swamp.

HOW WIDE SHOULD THE CORRIDOR BE?

There are no simple rules about how wide or tall a naturalized area must be in order to serve as a corridor. One study found that only corridors more than 33 feet wide were used by the birds on that site, while another found that a vole used corridors only 1.5 feet wide. Each species of animal has its own requirements. We recommend that corridors be made as wide and tall as possible. Forested corridors must also include understory and ground cover vegetation.

Among the most common obstacles to good corridors are roads and cart paths. Not only do they cause gaps in the corridor, but cars cause a great deal of direct mortality to animals trying to cross roads. The best solution is not to have roads in wildlife habitat. The designers of WCI's Evergrene community in Florida moved two roads in response to these concerns. Placing a roadway on a bridge over the corridor can help, if the roadway cannot be moved. Coyote Moon Golf Course in California has an attractive steel bridge that carries the cart path high above the wildlife corridor, and Raptor Bay in south Florida has a cart path on a boardwalk that crosses an entire slough.

Most properties offer opportunities to provide corridors to connect patches of wildlife habitat. Every place serves as home to some sort of wildlife, if only insects or other very small animals. The goal is to connect the vegetated and naturalized areas of each property with corridors that are as wide, as much like the habitat being connected, and as continuous as possible. And keep in mind that prime habitat to connect with them might lie on neighboring property.

As director of research for Audubon International, LARRY WOOLBRIGHT, PH.D., conducts scientific research, carries out field surveys, and develops environmental design plans for Audubon Signature Program members.