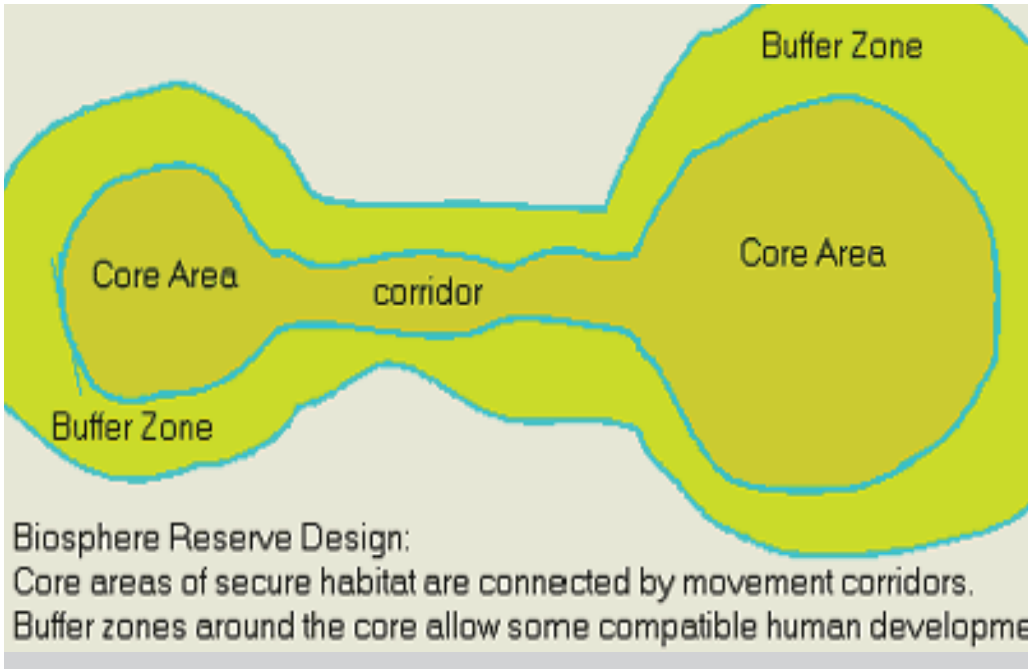


# Habitat Corridor

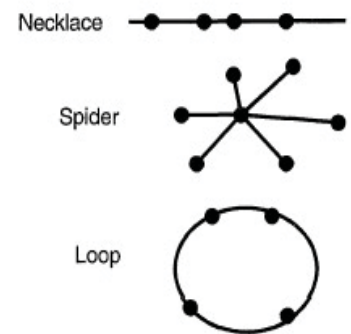
Tauschia Copeland

## Urban Habitat



A Typical example of a habitat corridor connecting two core habitats

[www.wildlands.org](http://www.wildlands.org)



The word “corridor” can be easily misused and improperly defined. Beier and Noss (1998) provide the definition of a habitat corridor as: a linear habitat, embedded in a dissimilar matrix, that connects two or more larger blocks of habitat and that is proposed for conservation on the grounds that it will enhance or maintain the viability of specific wildlife populations in the habitat blocks.

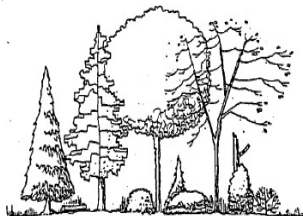
The importance of a habitat corridor can only come from the core habitat that it is connecting. Corridors rely on a matrix of existing but discontinuous natural areas to realize their full potential (dechant). In most urban areas, the wildlife habitat that does exist is rarely connected and therefore creates a dangerous environment for there are no opportunities for safe migration and little, if any biodiversity which is essential in creating any sustainable habitat.

The diagram above shows shape options for corridors. The dot represent patches or core habi- tate and the lines are the corridors. The most effective corridor is the spider or star- burst shaped corridor which makes it harder for the wildlife to get lost or outside of any livable habitat.

Pickett and Cadenesso  
1995

*“Projects in urban design, architecture, and landscape architecture that aren’t made with an understanding of flow and connectivity are destined to fail.” Kristina Hill*

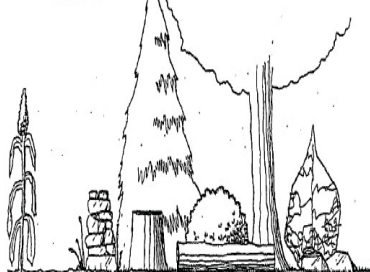
CRITICAL CORRIDOR ATTRIBUTES  
BIRDS



TWO OR MORE ROWS OF CONIFERS (FIR, PINE, LARCH, SPICE, REDCEDAR), ONE OR MORE SPECIES DECIDUOUS TREES (APPLE, BEECH, OAK, WILLOW), MULTIPLE ROWS OF SHRUBS (YUKI FLORA ROSE, SALICIA, DOGWOOD, HAWTHORN, BERRY BURNING), GRASSES OR SEDGES, HORIZONTAL LIMBS, SHADES 10-15' IN WIDTH 20-30' HIGH

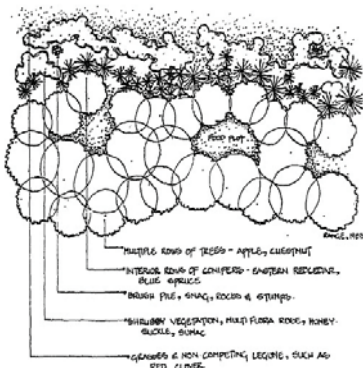
Birds

CRITICAL CORRIDOR ATTRIBUTES  
SMALL MAMMALS



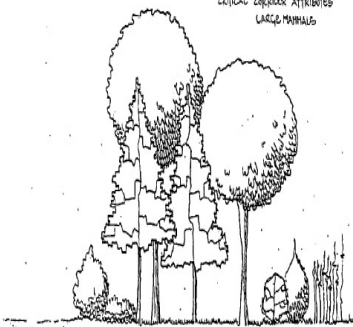
OPEN AND WIDE IN MIDDLE, WOOD BEHIND BECAUSE HAVE PREY, SOME WILDS, DIVERSITY MIXTURE OF TREES AND SHRUBS, TALLEST 10-15' AND 20-30'

Small Mammals



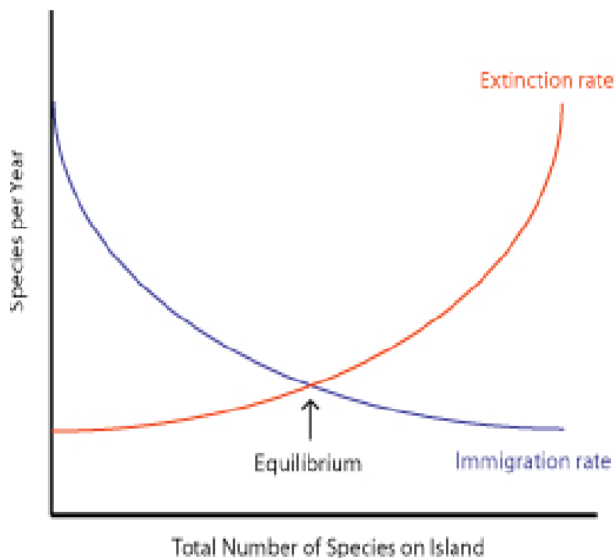
Medium Mammals

CRITICAL CORRIDOR ATTRIBUTES  
LARGE MAMMALS



Large Mammals

Corridors are essential to any species for every species is required to migrate for survival. This graph shows how when migration decreases, the extinction line increases. This graph was developed by Robert MacArthur and Edward O. Wilson as a tool to explain the importance of habitat corridors. Without corridors and diverse landscape available to species, extinction rates increase exponentially. With natural disasters such as flood and fires, wildlife need options if their current habitat is destroyed. Landscape is considered to be a sea of habitat islands and the only way to bring them together is through connectivity brought by corridors.



The drawings in the column are corridor structures developed by Fleury and Brown (1997). Width to length is more important than width alone, and design and quality can be just as important. The size and dimensions of corridors has not been determined as an exact science, but these drawings show what certain sizes and types of species require with a habitat corridor. Corridors are usually divided into two main categories: riparian ribbons as in rivers and streams, and on hard surface as in a hedgerow or road verge. Corridors have human function such as barriers for property lines and landscape elements. Tree lined sidewalks also create a safety environment for pedestrians and slows down traffic. Corridors are positive for humans directly with these previously stated reasons, and also indirectly by increasing biodiversity and helping wildlife survive.

Implementation is easy as long as there is support for connecting two areas of green space for corridors already exist within our urban systems, they just have to be converted into habitat corridors and supported by the public.

[www.de-chant.com](http://www.de-chant.com) (entire page)

## Essential Elements

Determine what can be connected in Seattle

Determine what types of species are migrating through the four counties of the Puget Sound Region and also within the Seattle area in order to create appropriate corridors.

Take these two elements and incorporate them into the urban landscape. Corridors are both beneficial to humans and wildlife for corridors create green space within an urban setting that connects two larger places giving people an opportunity to walk around their urban area for corridors can be made cleaner and safer than urban sidewalks.

## Case Study

This Park in Nashville has open space but it is sectioned off with wooded corridors that connect bigger wooded patches in the area. An even smaller scale is a line of shrubs along a sidewalk or road way which gives birds and small mammals cover to reach their next destination if needed. Finding who needs what where can be useful but wildlife is also very adaptable and what is pleasing to the human eye, such as street trees, will also be useful to a species if it offers them protection and a food source during their migration. Habitat corridors are an essential addition to any open space system and are versatile enough to be useful as boundaries within a system, as well as connecting habitat for urban wildlife.

Habitat corridors in an urban area can be any natural or wildlife strip that connects two core habitats. Without the core habitat there is no corridor for the corridor represents connectivity. A study done on how blue birds make use of habitat corridors conducted in Georgia showed that the birds were more likely to stop in core habitats that had a connected neighboring habitat than core habitats that stood alone.

This experiment was conducted by creating eight habitats, two connected by the third, one with two wings (discontinued corridors), and two others that stood alone. Feeders were set up and each habitat had dyed grains so that the birds could be tracked. With the birds using the three habitats that were connected as two core and one corridor habitats, the importance of connectivity is clearly brought forth.



Nashville



[www.kottke.org](http://www.kottke.org)





## Resources

### Internet

[www.de-chant.com](http://www.de-chant.com)  
[www.kottke.org](http://www.kottke.org)  
[www.math.dundee.ac.uk](http://www.math.dundee.ac.uk)  
[www.sciencemag.org](http://www.sciencemag.org)  
[www.wildlands.org](http://www.wildlands.org)

### Book

Fleury, A. M., and R. D. Brown. "A framework for the design of wildlife conservation corridors with specific application to southwestern Ontario." *Landscape and Urban Planning* 37:163-186: 1997.

MacArthur, Robert and Wilson, Edward O. *The Theory of Island Biogeography*. Princeton, N.J., Princeton University Press: 1967.

Pickett, S. T. A., and M. L. Cadenasso. "Landscape Ecology: Spatial Heterogeneity in Ecological Systems." *Science* 269:331-334: 1995.