

Biodiversity VS Habitat Fragmentation and Loss

We hear concerns about the loss of species biodiversity as rain forests are replaced by agriculture and mining in far away places. We should be similarly concerned about the continued protection of local wildlife habitats like Cold Creek, Happy Valley, Dufferin Marsh and the Koffler Scientific Reserve.

The preservation of the number and variety of existing habitats increases biodiversity because more species and more individuals can live in those habitats. A habitat that sustains a species provides a physical, chemical and biotic environment for the species to forage and reproduce. Impacts on habitats can include diseases, invasion of competitors and predators, roads and trails, power lines, forest removal, or human activity. Reductions of habitat quality, quantity or changed boundaries will decrease biodiversity. Habitats, like amoebae, expand to fill voids or retract under stress.

Prior to 1842, when Adam Cairns and his family settled on lands now within Cold Creek Conservation Area, the property was covered in forest. Along with residents throughout King Township, the Cairns family cleared the forest for grain fields and raising livestock. The township was divided by a grid of concessions each with ten 100 acre lots. The front 60 acres were for agriculture and the "back 40" woodlot was for fuel and construction materials. In the blink of 50 years, forest was converted to farm fields and wildlife was replaced with livestock. Forest habitat was lost and fragmented; biodiversity decreased and some species disappeared from the area. Today we treasure our natural areas because so little is left from the 1800s.

The Toronto and Region Conservation Authority (TRCA) bought the farmlands of Cold Creek in the early 1960s to create a Conservation Area. Trees were planted, a public use area was created around the Cairn's historic barn and two education buildings were constructed. Trails crisscrossed the acreage for hiking, dog sled runs and cross-country skiing.

Camping, trap shooting and a rifle and archery range were supported. Cold Creek closed in 1990 due to limited finances and a natural recovery of the Conservation Area began. Trails were infiltrated by ground cover, berry canes, shrubs, and trees. Few people visited the site and the natural habitat, once fragmented by trails, re-connected.

The TRCA Cold Creek Management Plan, created in 2002, was designed to bring the Conservation Area back into community use with a new focus on education and nature preservation rather than the intensive recreation utilization of the 1960s and 1970s. Only the peripheral and three connecting trails were re-established. Biological surveys conducted by TRCA in 1997, 2001 and 2002 identified 47 plant community types; 341 floral species with 82 listed as "of regional concern"; 89 species of birds, mammals and amphibians resident in Cold Creek. By 2010 the Cold Creek Stewardship identified 121 birds, both resident and migrating, in Cold Creek.

During 2002 the Cold Creek Stewardship installed 55 song bird boxes in meadows, on forest edges, and 10 wood duck boxes in wetlands that are all monitored and cleaned each winter. As public use of the trails increased and King Township recreational and educational activities became more popular, the use of boxes by birds changed. Bluebirds that had frequented boxes in open central areas did not return; Hooded Mergansers no longer use nest boxes in the wetland; other species that started spring nests, abandoned eggs and chicks as summer visitor activities increased. The impact of increased human utilization of the Conservation Area is evident from reduced bird box occupancy and shows how bird habitat can change in a season.

Habitat loss and fragmentation is happening even now in our neighbourhood as well as in other places of the world. The challenge for Cold Creek, whose purpose is to conserve, preserve and educate, is how to achieve the first two objectives while meeting the third with minimum impact. The Cold Creek Management Plan and newly developed Strategic Plan represent an attempt to do just that. King Township and the Stewardship encourage visitors to respect the fragile side of habitat in Cold Creek by asking hikers to stay on trails and to keep dogs on leash and out of wildlife nesting and forage sites. Come visit this special place to see the different habitats that are encompassed within Cold Creek and visit ColdCreek.ca for more information on habitat fragmentation and loss. **M**



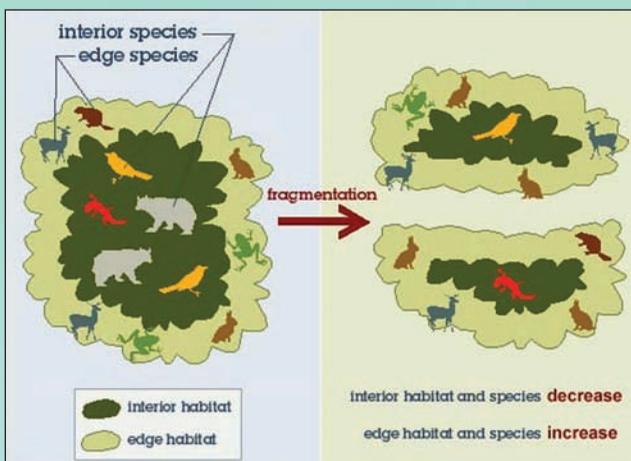
▲ Bird Box building 2006 with Cold Creek Stewardship and King City Secondary School Environmental Club.



The
**Cold Creek
Report**
by Gordon Craig

References:

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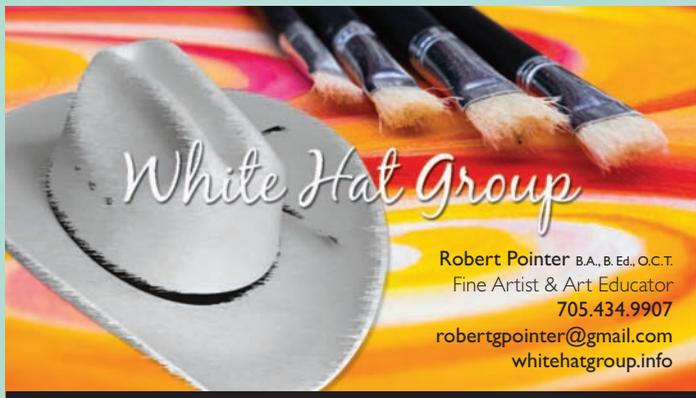


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