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HABITAT MODELS FOR WATERBIRDS, WATERFOWL BROODS, AND AVIAN GUILDS IN FRAGMENTED WETLANDS, UPPER THAMES RIVER WATERSHED

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Abstract

We used remotely-sensed data, analyzed within a geo-information system, and log-linear analyses to investigate relationships between waterbirds and wetland area, shoreline length, isolation, and adjacent forest cover and roads in 19 wetlands in the Upper Thames River watershed within and adjacent to London. We identified 43 waterbird and waterfowl brood species using these wetlands between April and August. Waterbirds were grouped into 6 resource-based guilds. Most wetlands in the study area are small (10 wetlands are <2 ha). Three of the 19 wetlands have no adjacent forest and all but one have roads within 250 m of the shoreline. Wetland area, shoreline length, proximity to other wetlands, and adjacent forest cover were included in most of the habitat models. Species richness was higher in larger wetlands, although wetlands <2 ha supported as many as 28 species. Wetland area was the most important predictor variable for waterbirds, waterfowl broods, and divers. Shoreline length predicted species richness in all guilds, but was negatively related to divers. Adjacent forest predicted species richness in waterbirds in general and all guilds but waders and dabblers. Disturbance (roads within 250 m of a wetland) was negatively related to species in only the passerine guild. This research suggests that, in human-dominated landscapes, all wetlands are important to waterbirds and must be protected.

HERITAGE LANDSCAPE GUIDES: A VEHICLE FOR NATURAL AND CULTURAL HERITAGE CONSERVATION, APPRECIATION AND EDUCATION

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Abstract

A Heritage Landscape Guide tells the story of what humans and nature have done with the land. Parts of this story can be found in books and documents, or in the memories of people. Parts of it can be seen in historical maps and

photographs. Much of the story can be read on the land itself. The story is evident in the character of old buildings and other structures, in field patterns and the layout of the roads. It is also apparent in the shape and size of woods and natural areas, as well as in climate soils and waters. Because it takes considerable skill, knowledge and experience to read the land well, Heritage Landscape Guides integrate geology, biology, archaeology, history, geography, economics and other specialties to provide people with information that tells them the story of a Landscape on the ground, and makes it possible for them to create a comprehensive understanding of a place. Heritage Landscape Guides are intended to: help people understand how the land has evolved and what changes seem to be underway today and why; attempt to address the needs that citizens, professionals, and specialists of different kinds have for ways of integrating information about the environmental, social, economic changes that are going on around them; be a useful tool for education in schools, in training professionals and in interpreting protected areas and surrounding regions to concerned citizens; provide information that can be used for making decisions related to conservation and sustainable planning and land-use; and, help build a shared view of the heritage of a place.

CREDIT VALLEY CONSERVATION GREENLANDS STRATEGY DEVELOPMENT

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Abstract

Since 1954, Credit Valley Conservation has worked to protect the quantity and quality of water and ecosystems in the Credit River watershed. This service included active land ownership and management programs that in turn support private land stewardship and sound planning activities undertaken by watershed municipalities. Today, the watershed is challenged by the rapid growth of urban areas, roads, highways, concerns about the safety of drinking water, and demands for public access and recreation arising from growing communities. In response, CVC staff is developing new approaches to watershed management including Subwatershed Studies, Water Management Strategy, Natural Heritage Strategy, Credit River Fisheries Management Plan and The Greenlands Strategy. The Greenlands Strategy is a viable tool directed at securing land for the purposes of enhancing existing features and functions found within representative ecosystems. The conservation areas system within the water shed is established to provide opportunities for natural heritage appreciation, tourism, and recreation.