

WETLANDS

Wetlands sustain as much life as many tropical rain forests. Canada has 24% of the planet's wetlands. They play a critical role in maintaining the global environment. Wetlands nurture hundreds of different species and provide the critical breeding and rearing habitat for a wide diversity of wildlife. Today, Canadian wetlands are under pressure from agricultural, urban and industrial land use development. Understanding and preserving these wetlands is as important for our future as it is to Canadian wildlife.

Wetlands are the transition zone between land and water

Bogs are peatlands covered with mosses, mainly sphagnum, which range in colour from pale green to deep red. Bogs are covered with low shrubs and may contain black spruce, tamarack, sundew, pitcher plant and cranberries.

Fens are also peatlands but the dominant plants are sedges accompanied by grasses, brown mosses and flowers such as iris. A fen is fed by streams or ground water and is less acidic and generally richer in nutrients than a bog. The water table is usually at, or above, the surface of the peatland.

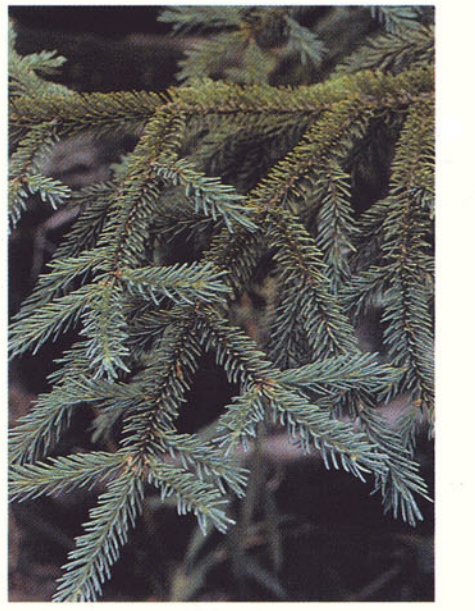
Shallow waters are two metres or less in depth, and are found in basins between lakes, rivers, and marshes. Water levels often drop in summer, exposing mud flats.

Swamps are where the water is either in pools or flowing very slowly. The forest swamps include mature trees such as maple, elm, white cedar, tamarack, and black spruce.

Marshes are areas either permanently or periodically flooded by water. They are split into channels by stands of sedges, grasses, rushes and reeds. Cattails, arrowheads and water lilies are common in marshes.

A habitat for a diverse range of plants and animals

In Canada, more than 200 bird species, 45 species of waterfowl, at least 50 mammals and one third of the wildlife species identified at risk by the Committee on the Status of Endangered Wildlife in Canada, (COSEWIC), and extensive plant life depend on wetlands.

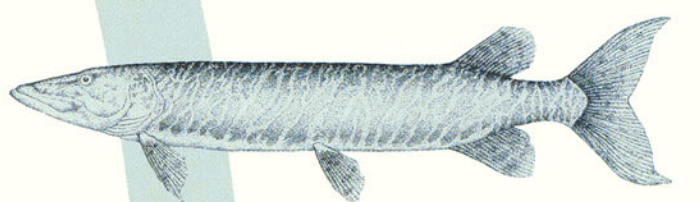


Black Spruce



Shorebirds and songbirds depend on freshwater and saline wetlands.

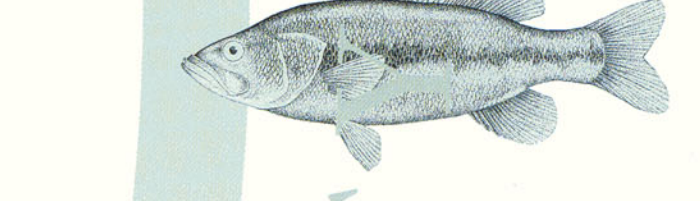
Many species of mammals, including muskrats, beavers, rabbits, moose, deer, bear, and marine mammals such as otters, use wetlands for food, escape cover, and breeding.



Moose



Muskrat



Bass

Shell fish, finfish and crustacean species and a large number of freshwater fish use these areas for spawning, food, cover or nursery areas for their young.



The Prairie Potholes Region provides habitat for approximately 50% of the continent's waterfowl population.



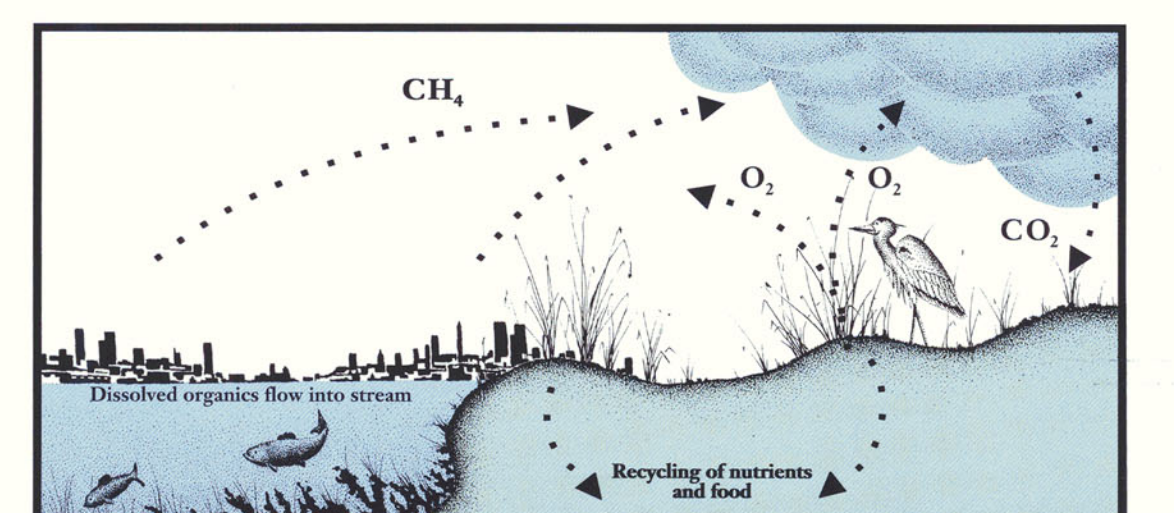
Spotted Turtle



Beaver

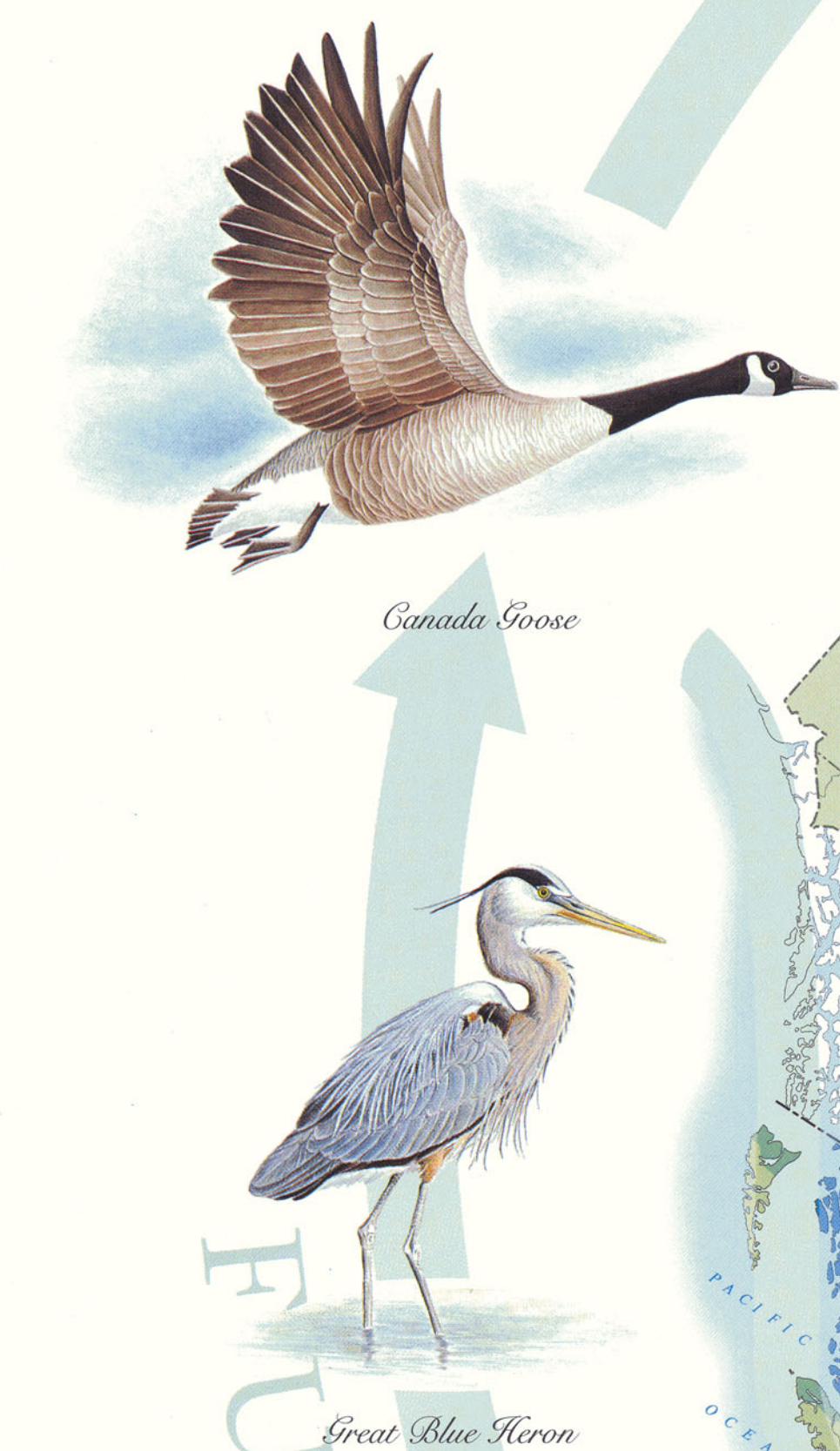
Wetlands are called nature's kidneys...

They provide a natural flood barrier that slows down the runoff of spring melt and rainstorms. In lakes and seashores, wetlands act as a natural storm barrier, absorbing some of the effects of waves. Extensive wetlands in urban and agricultural regions play a large role in water purification.



The carbon in dead plant and animal tissue accumulates in wetlands without being released into the atmosphere as carbon dioxide. Wetlands also produce oxygen. By off-setting the accumulation of carbon dioxide in the atmosphere, wetlands help slow global warming.

...and help slow global warming

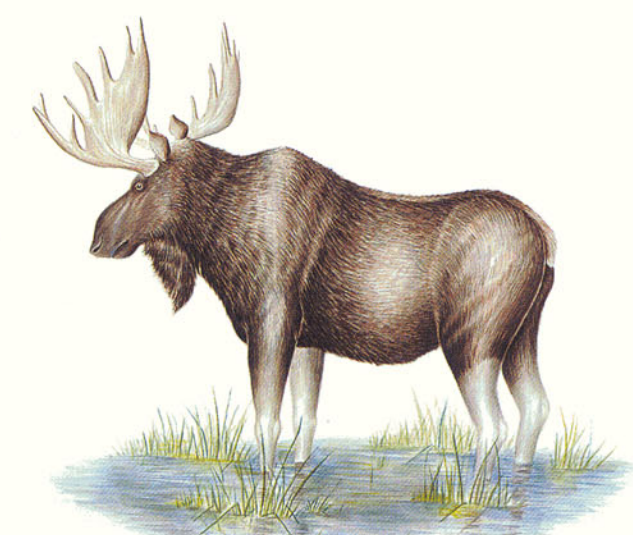


Canada Goose

Great Blue Heron



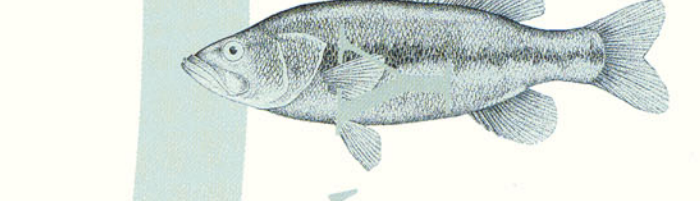
Black Duck



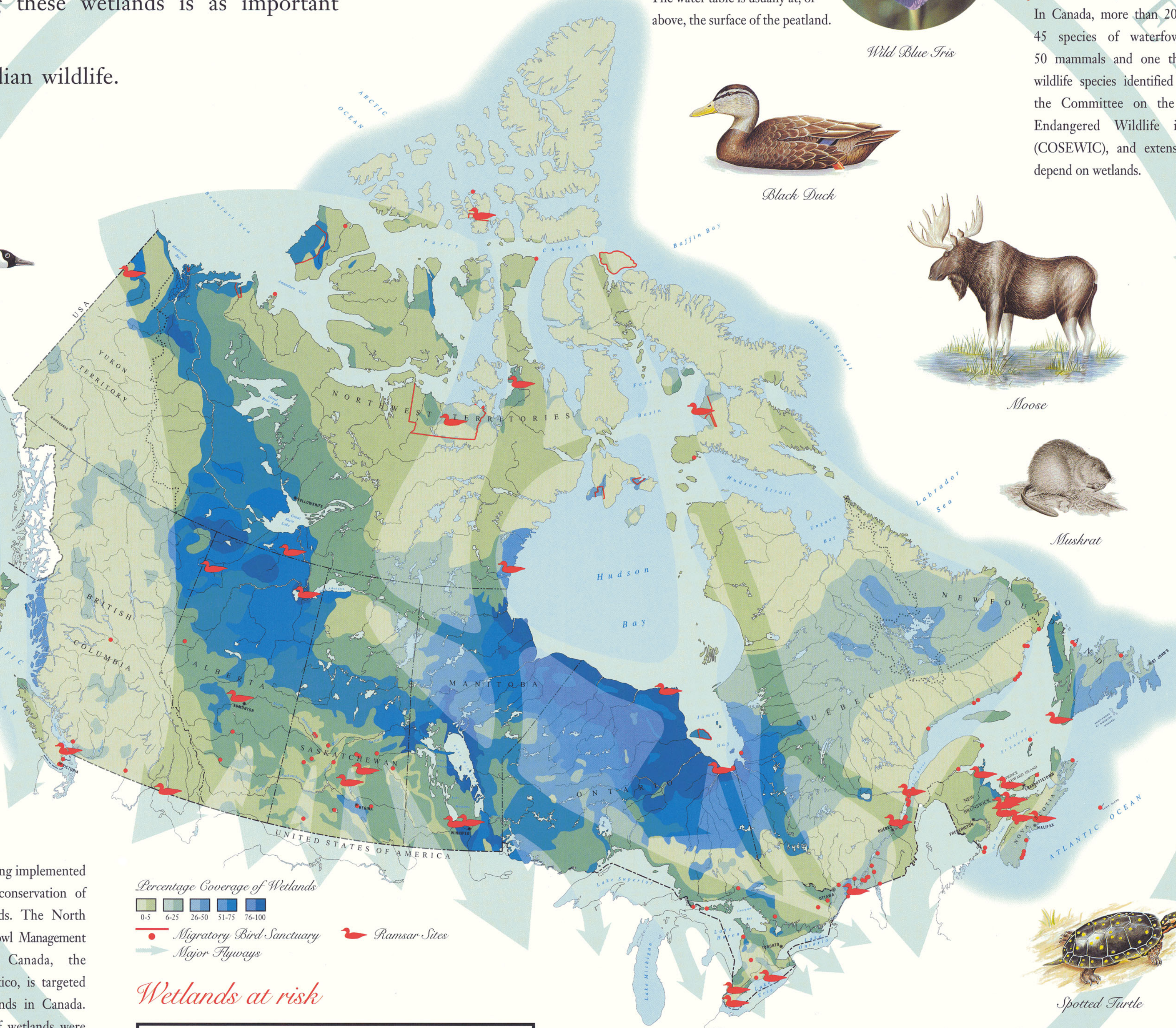
Moose



Muskrat

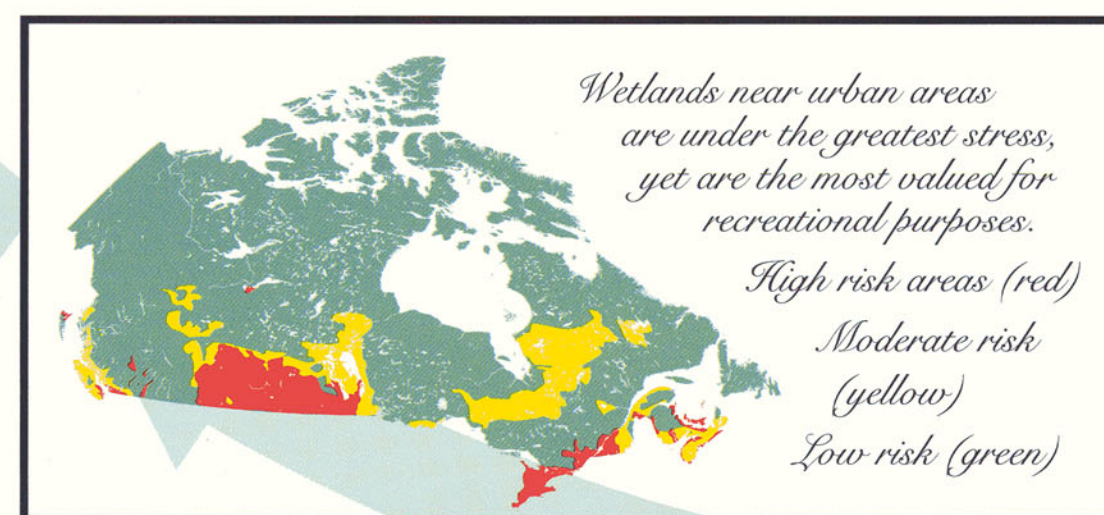


Bass



Percentage Coverage of Wetlands
 0-5 6-25 26-50 51-75 76-100
 Migratory Bird Sanctuary Ramsar Sites
 Major Flyways

Wetlands at risk



Wetlands near urban areas are under the greatest stress, yet are the most valued for recreational purposes.
 High risk areas (red)
 Moderate risk (yellow)
 Low risk (green)

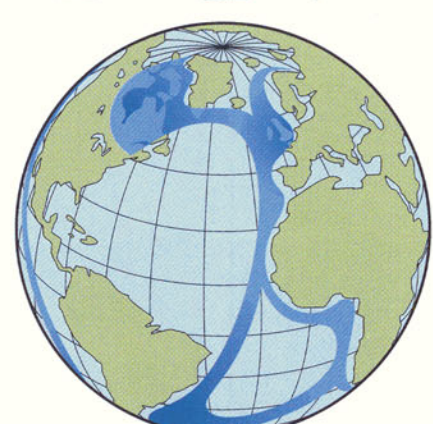
Over 20 million hectares of wetlands across Canada have been destroyed for agriculture, harbour facilities, manufacturing, plants, garbage dumps, warehouses, roads, airports, residential development, utility rights of ways and shopping centres. Since 1950, increasing pressures for dredging, draining and filling of wetlands continue to occur.

Agricultural conversion is a major cause of wetland loss

About 85% of wetland loss is due to conversion to agriculture. The clearing and drainage of wetlands causes increased soil salinization, reducing crop success and causes changes in ground water level, water quality and magnitude and timing of stream flow; often resulting in downstream flooding and loss of wildlife habitat.



Wetland conversion is estimated at:



Major flyways link wetlands that are used for feeding, staging, breeding and nesting by migratory birds

Canada's wetlands are essential to the survival of migratory bird populations both in the Western Hemisphere and polar regions. Western Hemispheric Shorebird Reserves and Canada's 32 sites designated under the Ramsar Convention as wetlands of international importance promote intercontinental flyway habitat conservation for migratory birds.

The future of Canada's remaining wetlands

Major programs are being implemented to promote the conservation of Canada's wetlands. The North American Waterfowl Management Plan, involving Canada, the United States and Mexico, is targeted towards protecting over 2.5 million hectares of wetlands in Canada. During the 1988-1993 period over 700 000 hectares of wetlands were secured. Over the next 10 years, this plan will result in major waterfowl habitat, soil, water and socio-economic benefits. The Government of Canada is the first national government in the world to bring forward a federal wetland policy. Parallel provincial wetland initiatives are being implemented. These policies cover over 70% of Canada's wetland resources. The future of agricultural policies through GATT and NAFTA also offers an opportunity to promote wetland and habitat conservation in the 1990s.



Cap-Tourmente

Recreational activities

Wetlands provide a valuable source of recreation such as photography, bird-watching, sport fishing and hunting of wetland-dependent game. Many wetland sites across Canada have well developed interpretation facilities for visitors. These include Cap-Tourmente National Wildlife Area in Quebec and Alaksen National Wildlife Area in British Columbia, both of which are Ramsar Convention designated wetlands.