# Missisquoi National Wildlife Refuge Designated as a Ramsar site; Wetland of International Importance



# The Missisquoi Delta and Bay Wetlands

Ramsar Sites are designated because they are considered Wetlands of International Importance. These wetlands contain representative, rare or unique wetland types, and they are important for conserving biological diversity. Only 38 Ramsar sites are in the U.S. of the 2,200 Ramsar sites identified in the world. The Missisquoi Delta and Bay wetlands is the only Ramsar Site in Vermont, the designation encompasses nearly 7,665 acres, and includes the Missisquoi NVR and the VT F&Ws Maquam Wildlife Management Area (VVMA), Carmens Marsh VWA, and Rock River VVMA.

The Missisquoi Delta and Bay Wetland is important for maintaining the biological diversity of the region, due to its size, location, and variety of habitats. The flood-plain forest, scrub-shrub wetlands, swamps, and emergent wetlands (dominated by soft-stemmed plants) provide habitat for a large number of different animals, such as the river otter and 34 other mammals, over 200 species of migratory and resident birds, numerous insects/pollinators, amphibians, reptiles, fish, mussels and a variety of plant species. Some plants, birds and animals found within the wetland are Rare, Threatened, or Endangered (RTE) within the state.

The wetland also provides floodwater storage, protects water quality including protection of our drinking water, and helps stop land along the river or lakeshore from washing away. There are almost 2,000 acres of floodplain forest and an extensive wetland grassland which grows along both the Missisquoi River and Lake Champlain shoreland. There are two Research Natural Areas specifically identified within the wetland; scientists and students conduct research.

In addition, hunters and fishermen, bird watchers, hikers, kayakers and motorized boaters use and enjoy the wetland., which in turn can help support the local economy through their purchase of food, fuel, lodging, and purchase of activity elated equipment (boats, clothes, hunting gear).

### Planning for the FUTURE















#### **ECOLOGY**

The Missisquoi Wetland is the largest wetland in the Lake Champlain Basin, containing the greatest contiguous floodplain forest in VT and unique habitat types such as the Maquam Bog, the largest bog in VT and the Pitch Pine Woodland, the only example of this natural community type in VT.

The wetland is necessary for fish species that use the site as feeding, spawning and nursery grounds, including the state-endangered lake sturgeon and stonecat and the threatened sand darter.

The wetland is important for RTE species such as the eastern spiny softshell turtle, seven species of mussel, at least two plant species, two bat species and bald eagle. It is the only known breeding site for the state-endangered black tern in VT. The flood-plain forest is important for breeding migratory songbirds of conservation concern.

The wetland is a breeding area for numerous species of ducks/geese, song birds, birds of prey, and wading birds; including the largest blue heron rookery (nesting area) in the state. The wetland is a critical link along the Atlantic Flyway and it supports the largest concentration of waterfowl in VT often reaching 20,000 birds in the autumn.

# Why It Matters

As demonstrated by the Ramsar Site designation, this wetland complex is of International significance. It is a rare, intact and complex ecological system supporting a high degree of species and habitat biodiversity both for VT and for the world. The Missisquoi Wetland also provides numerous functions and values at the highest level to VT; such as water quality, flood water storage, fish, wildlife, and RTE habitat, and recreation and economic benefits.

