Beginning with HABITAT

An Approach to Conserving Maine's Natural Space for Plants, Animals, and People

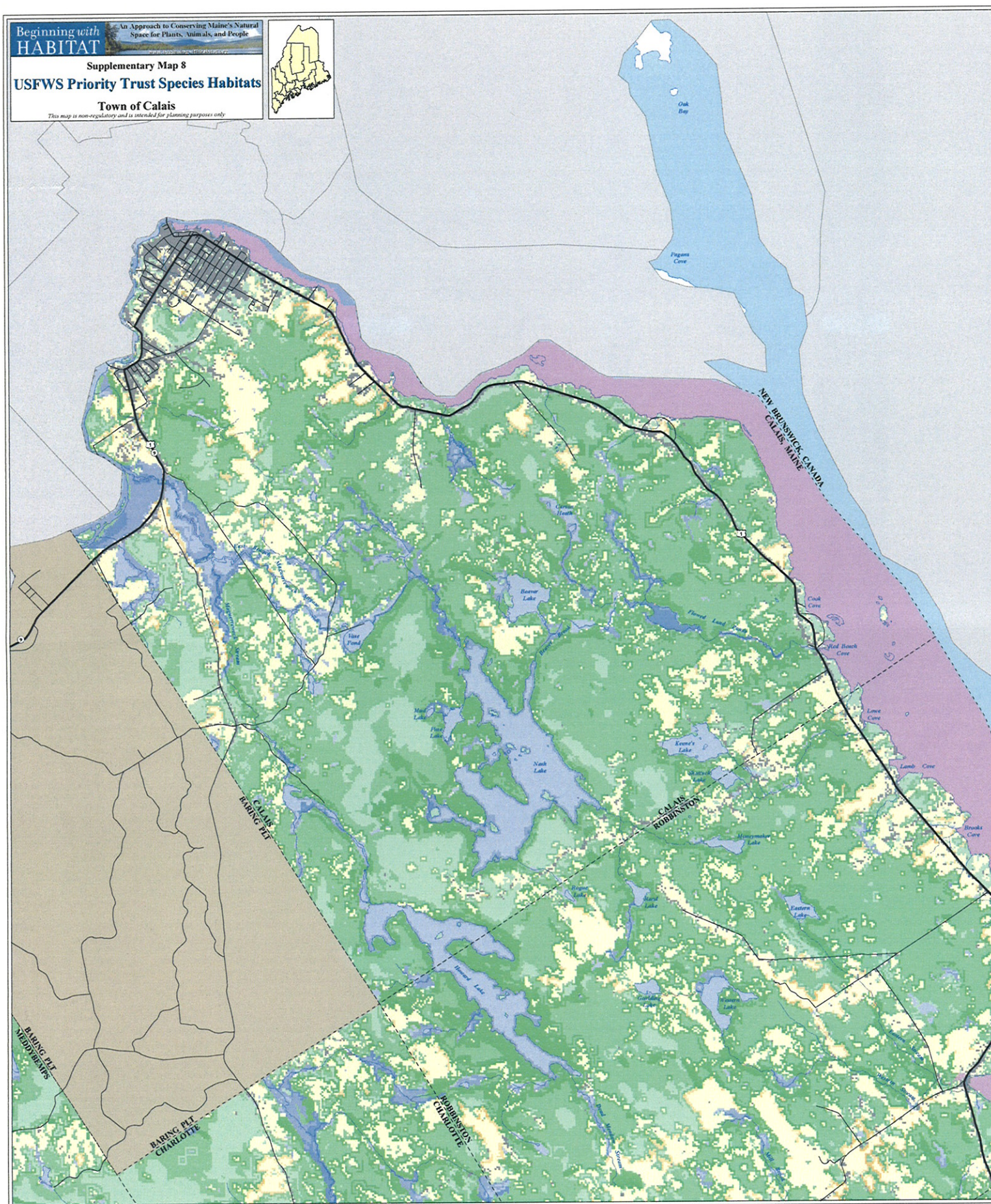
www.beginningwithhabitat.org

Supplementary Map 8

USFWS Priority Trust Species Habitats

Town of Calais

This map is non-regulatory and is intended for planning purposes only



LEGEND

For more information about U.S. Fish & Wildlife Service Priority Trust Species, contact Bob Houston at the U.S. Fish & Wildlife Service Gulf of Maine Coastal Program (207-781-8364, robert_houston@fws.gov).

Introduction

This map identifies potentially valuable habitat for U.S. Fish and Wildlife Service (USFWS) Priority Trust Species based on the Gulf of Maine Watershed Habitat Analysis developed by the USFWS Gulf of Maine Coastal Program. This analysis was completed for the United States portion of the Gulf of Maine watershed that includes all of Maine, most of New Hampshire, and the eastern third of Massachusetts.

Habitat Types and Importance

- **Township Boundary**
- **Unorganized Township** *(Beginning with Habitat does not provide data for unorganized townships)*
- **Developed-** Residential, Industrial, Commercial, and Roads
- **Streams and Brooks**
- **Ocean, Lake, Pond, and River Boundaries**

Habitats

Saltmarsh/saltwater
- 1 - 49%
- 50 - 74%
- Top 25% (most important)

Freshwater wetlands *(excludes forested wetlands)*
- 1 - 49%
- 50 - 74%
- Top 25% (most important)

Grassland/shrub/bare ground
- 1 - 49%
- 50 - 74%
- Top 25% (most important)

Forested *(includes forested wetland)*
- 1 - 49%
- 50 - 74%
- Top 25% (most important)

Priority Trust Species

The 91 USFWS Gulf of Maine Priority Trust Species include animals and plants that regularly occur in the Gulf of Maine watershed and meet any of the following criteria:
- Federally endangered, threatened, or candidate species
- Migratory birds, sea-run fish and marine fish that:
  Show significant and persistent declining population trends, OR have been identified as endangered or threatened by 2 or 3 states in the Gulf of Maine watershed
- Species of concern as identified in the U.S. Shorebird Conservation Plan, Colonial Waterbird Plan or Partners in Flight

The priority list of trust species is (* denotes high value habitat in your town/region with the potential to support this species):

BIRDS
American bittern *
American black duck *
American oystercatcher *
American woodcock *
Arctic tern
Bald eagle *
Baltimore oriole *
Bay-breasted warbler *
Bicknell's thrush
Black scoter *
Black tern
Black-bellied plover *
Blackburnian warbler *
Blackpoll warbler *
Black-throated blue warbler *
Blue-winged warbler
Buff-breasted sandpiper *
Canada warbler *
Cape May warbler *
Chestnut-sided warbler *
Common loon *
Common snipe *
Common tern
Eastern meadowlark *
Field sparrow *
Golden-winged warbler
Grasshopper sparrow
Hudsonian godwit *
Killdeer *
Least sandpiper *
Least tern
Little blue heron
Little gull

BIRDS (cont'd)
Louisiana waterthrush
Marsh wren *
Nelson's sharp-tailed sparrow
Northern flicker *
Northern goshawk *
Northern harrier *
Olive-sided flycatcher *
Osprey *
Peregrine falcon *
Pied-billed grebe *
Piping plover
Prairie warbler
Purple sandpiper *
Razorbill
Red crossbill *
Red-headed woodpecker
Red knot *
Red-shouldered hawk *
Roseate tern
Ruddy turnstone *
Saltmarsh sharp-tailed sparrow
Sanderling *
Scaup (greater and lesser) *
Seaside sparrow
Sedge wren *
Semipalmated sandpiper *
Short-billed dowitcher *
Short-eared owl
Snowy egret
Solitary sandpiper *
Spruce grouse *
Surf scoter *
Tricolored heron

BIRDS (cont'd)
Upland sandpiper
Veery *
Whimbrel *
Whip-poor-will *
White-winged scoter *
Wood duck *
Wood thrush *
Yellow rail *

FISHERIES
Alewife *
American eel *
American shad *
Atlantic salmon *
Atlantic sturgeon *
Blueback herring *
Bluefish
Horseshoe crab *
Shortnose sturgeon
Winter flounder *

PLANTS
Eastern prairie fringed orchid
Furbish's lousewort
Robbins' cinquefoil
Small whorled pogonia

MAMMAL
Canada lynx*

REPTILE
Plymouth redbelly turtle

Mapping Valuable Habitat

Using a Geographic Information System (GIS), valuable habitat was mapped by combining field sightings (collected by various agencies and non-governmental organizations) and habitat modeling. Frequently, sightings are too limited to adequately represent all habitat used. Therefore, habitat models based on selected environmental conditions can be helpful in more fully predicting potential habitat utilization.

To create the final map shown on this page, we first identified habitat for each of the 91 species in the analysis and ranked its importance on a scale of one to ten, with ten being considered the most important. Next, we combined the scores for each of the species to create a sum of scores. Then, we subdivided the sum of scores into the four basic habitat types shown on this map. Finally, we portrayed the data in a three level gradient (the top 25%, the next 25%, and then, the bottom 50% of the habitat value for each habitat type). The top 25% may be considered the most important habitat in that gradient.

Uses of the Data

This map may be used in combination with other data sources to help identify potentially valuable wildlife habitat at the local or town level. This information can be incorporated into town comprehensive planning or open space planning. It may also be used to help prioritize habitat protection by local land protection organizations or to support grants for habitat protection. This map represents only one possible way of portraying the model results; there are many other maps that may be derived from the data. Please contact the Gulf of Maine Coastal Program for more information and assistance.

Limitations of the Data

Maps of habitats for individual species are limited by the accuracy and timeliness of the data sets used in developing them and by the validity of models used to interpret those data. We used the most recent data available and relied on species experts to review the models. We also tested predicted habitats using occurrence data. Habitat maps rely quite extensively on land cover and the land cover used for this project is based on the interpretation of 1993 satellite imagery with a resolution of 30 meters (each pixel on the map is about 1/4 acre). It is important to realize that if land cover has changed significantly since 1993 in a given area, the predicted habitat value for individual species may no longer be reliable. We must also emphasize that this map only depicts predicted high value habitat for the species included in the analysis; important habitat may exist for other species not included in this analysis. Other important USFWS habitat of significance includes Nationally Significant Maine Coastal Nesting Islands, areas around National Wildlife Refuges, and specific endangered species habitat. There also may be important habitat information available from state conservation agencies or other environmental organizations. In addition, this map does not show buffer zones that should be included to protect valuable wildlife habitat.

For More Information

The Gulf of Maine Coastal Program can provide more information that will help support your habitat protection initiatives. This includes detailed parcel-specific maps, detailed tables delineating habitat importance for each of the 91 species and assistance in grant-writing for some habitat portection grants. For more information please contact us or see our website http://www.fws.gov/northeast/gulfofmaine.

Data Sources

DATA SOURCE INFORMATION

(note: italicized file names can be downloaded from Maine Office of GIS)

TOWNSHIP BOUNDARIES
Maine Office of GIS (2006); *metwp24*

ROADS
Maine Office of GIS, Maine Department of Transportation (2005); *medotpub*

HYDROLOGY
Maine Office of GIS, U.S. Geological Survey (2004); *hyd24*

HIGH VALUE HABITAT FOR PRIORITY TRUST SPECIES
U.S. Fish & Wildlife Service-Gulf of Maine Coastal Program; *forest91, fresh91, grass91, saline91, gomlc7*

DATA SOURCE CONTACT INFORMATION

Maine Office of GIS- http://apollo.ogis.state.me.us/catalog
U.S. Fish & Wildlife Service- Gulf of Maine Coastal Program- http://www.fws.gov/northeast/gulfofmaine
Maine Department of Transportation- http://www.maine.gov/mdot/
Maine Geological Survey- http://www.maine.gov/doc/nrimc/mgs/mgs.htm

DIGITAL DATA REQUEST

To request digital data for a town or organization, or to request a CD containing GIS data of the Gulf of Maine Watershed Habitat Analysis, visit our website http://www.beginningwithhabitat.org/the_maps/gis_data_request.html

Additional Funding:

Feet: 5,000 2,500 0 0.5 1 Miles
Meters: 1,000 500 0 0.5 1 Kilometers

1:24,000 Scale
Universal Transverse Mercator (UTM) Projection
North American Datum (NAD) 1983

Supported in part by Maine Outdoor Heritage Fund lottery ticket sales

Map Prepared by Maine Department of Inland Fisheries & Wildlife
December 31, 2009

Supported in part by Loon Conservation Plate funds