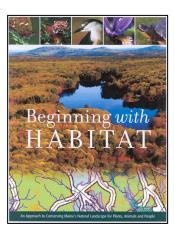


Maine's State Wildlife Grant Program



Congress created the State Wildlife Grant [SWG] Program in 2001 to help state and tribal fish and wildlife agencies address the unmet needs of fish and wildlife and associated habitats, especially species of greatest conservation need [SGCN]. Funds appropriated under the State Wildlife Grants program are allocated to states according to a formula that takes into account each state's size and population. To date, Maine has received more than \$6 million in SWG funds. Projects funded to date are diverse, covering many species groups, all geographic areas of the state, and ranging in scale from ecosystems to subspecies. Projects vary in length from one to five years, and include baseline surveys and inventories, research, and habitat conservation. State Wildlife Grant funds support 10 full time positions within the Maine Department of Inland Fisheries and Wildlife [MDIFW] and have funded many projects that support conservation actions identified in Maine's Wildlife Action Plan [WAP]. Here are a few examples of projects that State Wildlife Grant funds have supported. Many other SWG-supported activities not described here are described in MDIFW's annual Research and Management reports.



Beginning with Habitat

Beginning with Habitat is a cooperative effort of agencies and organizations working together to secure Maine's outdoor legacy. The goal of the program is to maintain sufficient amounts of habitats to support all native plant and animal species currently breeding in Maine 100 years from now. We aim to provide each Maine town with a collection of maps and accompanying information depicting and describing various habitats of statewide and national significance in the town. Beginning with Habitat partners then work with communities to design a landscape that accommodates the growth they need with the highest resource conservation. Beginning with Habitat is the foundation of Maine's Wildlife Action Plan and is a non-regulatory collaborative and information-based habitat conservation tool.

Seabird Outreach

The principal objective of this project was to inform Maine students and the general public about seabird biology and marine conservation by providing insight into the lives of Maine seabirds [e.g., puffins and terns] through a web-based school curriculum and Internet access that features live-streaming video from Eastern Egg Rock, a state-owned 7-acre sanctuary managed by National Audubon Society.



Distribution & Ecology of Purple Sandpipers Wintering in Maine

The northeast Atlantic coast is recognized by the U.S. Shorebird Conservation Council as an area that is extremely important to the survival of wintering purple sandpipers in the Western Hemisphere. In fact, there is strong evidence that Maine supports a large percentage of the wintering population. With threats from catastrophic oil spills and consequent damage to shorebird habitats or shorebirds themselves, the Maine Department of Inland Fisheries and Wildlife identified the need to locate and map important purple sandpiper habitats and determine population abundance, distribution, and limiting factors. This project enabled the Department to: 1) estimate abundance and distribution of purple sandpipers in Maine; 2) assess movements and site fidelity of individuals at particular sites; and 3) develop a protocol for monitoring purple sandpiper populations in Maine.

Enhance Management of Piping Plovers and Least Terns



Piping plovers and least terns are designated as endangered species in Maine and are known to nest on a handful of beaches in the State. To successfully raise young, these birds need sand beaches free from human disturbance and predators. This project enabled MDIFW, working in cooperation with Maine Audubon and



local towns, to conduct the planning and data gathering necessary to enhance the management of piping plovers and least terns, including

the development of cooperative beach management agreements with Maine municipalities.

Bald Eagle Survey and Essential Habitat

Bald eagles continue their dramatic comeback in Maine. Presently, the State is home to more than 600 nesting pairs, a remarkable increase from the 30 nesting pairs reported in the late-1970s. Despite this accomplishment, our ultimate challenge is to provide suitable habitat for eagles in the future. Nesting eagles need mature trees and wooded buffers in shorelands, a niche that will always be at risk to land development and recreational pressures. This project devised statewide strategies and identified optimal sites for long-term conservation of bald eagle nesting habitat as the fundamental safeguard for a lasting recovery of the species in Maine. The delisting of the bald eagle is a great example of what SWG is all about. This is a tremendous story of conservation successful through federal and state partnership, and we are striving for many more to come.



Ecoregional Surveys

Since 1997, MDIFW and the Maine Natural Areas Program have been working on a systematic, statewide, 10year survey of rare and endangered wildlife, plants, and natural communities. Surveys are designed to document new locations of rare species to better assess their status and distribution and design conservation strategies to predict potential new occurrences and promote their recovery. SWG funds helped support surveys in the Aroostook Hills and Lowlands [2.5 million acres], Eastern Lowlands [2.2 million acres], and Central and Western Mountains ecoregions [5 million acres]. Inventories focused on high value habitats supporting rare, threatened, and endangered animals. Data gathered support voluntary land protection by large and small private landowners.

Canada Lynx Ecology

The Canada lynx has long been a rare carnivore in northern and western Maine. Ten years ago, its status was largely unknown and was based on anecdotal reports or a track in the snow. SWG funds helped support an ongoing study of Canada lynx in Maine to: 1) determine that there is in fact a viable, self-supporting population of lynx in the State; 2) document mortality factors affecting lynx; 3) identify habitats used by lynx and how they relate to distribution and abundance of prey; 4) investigate how lynx distribution in Maine is affected by populations of bobcats, coyotes,



fishers, and fox; and 5) test the efficacy of various survey methods used to determine status of lynx.

Stream Survey Databasing of Restored Aquatic Habitats

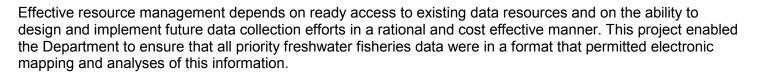
The Maine Department of Inland Fisheries and Wildlife is enhancing its efforts towards managing and conserving flowing water habitats and their respective animal communities. Although the Department currently holds extensive survey information regarding these ecosystems, most data exist in a multitude of formats and physical locations. This project will compile existing stream habitat and fish community data into a computerized Geographic Information System [GIS] database for easier use, analysis, and visualization within landscapes.



Lake Habitat Inventories

One of the primary responsibilities of the Maine Department of Inland Fisheries and Wildlife is to conduct habitat surveys of the aquatic resources in the State. These surveys include gathering data related to water quality, fish species composition and relative abundance, bathymetry, aquatic habitat types, and macroinvertebrate species composition. Surveys are important to present and future management of Maine's lakes and ponds. To date, there are roughly 3,800 ponds that have never been inventoried by MDIFW staff and many that have been completed need to be updated. The purpose of this project is to use various fisheries techniques to collect data to properly plan for the future management of lacustrine habitat in Maine.

Aquatic Biodiversity Project



Unique Aquatic Ecosystems

Fishless Ponds are believed to be rare in the Maine landscape. Many of these ponds occur in mountainous terrain where fish access is limited because of local topography. These sites have sometimes been targeted for introductions of sport fish, but they may have unique ecological attributes, especially for invertebrates and amphibians. Introduction of predatory fish could permanently alter the ecology of fishless ponds. This study documented the ecology of fishless ponds in Maine and conducted a landscape analysis to predict and evaluate the presence of these potentially unique natural communities.

Wildlife Park Displays

The Maine Wildlife Park receives more than 80,000 visitors annually, including a large number of school children on field trips. These visitors come to the park to learn more about Maine's fish and wildlife resources and management. This project enabled the Department to construct a new fisheries display and to complete educational exhibits for moose, deer, coyote, turkeys, and turtles.



Fish and Wildlife Education

This project provided educational materials to every fourth grade classroom in the State to increase students' awareness and understanding of fish and wildlife resources. The materials consisted of posters, activity guides for teachers, animal and fish guides, and management reports.

Wildlife Management Areas: Planning and Habitat Management for the Future



Two-thirds of MDIFW's 52 Wildlife Management Areas [WMAs] contain special habitats or communities that support federal or state-listed threatened or endangered wildlife, species of special concern, and species identified of greatest conservation need. SWG funds supported development of a statewide WMA database, update of WMA management plans, development of a WMA schedule of development and maintenance treatments, and implementation of a schedule of habitat treatments across all WMAs to benefit a diversity of featured wildlife species and species of greatest conservation need.

An Investigation of Blanding's Turtle Road Mortality

There is increasing emphasis on the part of federal and state transportation authorities to minimize and mitigate impacts to wildlife passage and mortality from road construction projects. This project helped the Maine Departments of Inland Fisheries and Wildlife and Transportation identify the location and extent of road impacts on endangered turtles in Maine as a precursor towards designing strategic mitigation measures.



Status and Monitoring of Maine Owls

MDIFW worked with Maine Audubon to evaluate the abundance and distribution of owls in Maine and to develop a volunteer-based monitoring system. Both Partners in Flight and recent initiatives directed at integrated bird conservation have identified monitoring of nocturnal birds as a high priority research and management need in the northeast.

Species of Greatest Conservation Need Research and Status Investigations

Maine has identified 213 species of greatest conservation need [SGCN] in its Wildlife Action Plan: 103 birds, 7 herpetofauna [1 amphibian and 6 reptiles], 72 invertebrates, 12 inland fish, 6 non-marine mammals, and 13 marine species [5 diadromous fish, 5 whales, and 3 turtles]. For many SGCN, there is a need for financial resources to evaluate population dynamics and habitat relationships and use information gathered to support listing and de-listing proposals [state endangered, threatened, or special concern] and aid in conservation and management of these species, so that they may ultimately be de-listed.



For more information on Maine's Wildlife Action Plan please visit <u>https://www3.maine.gov/ifw/fish-wildlife/wildlife/reports-publications/</u>research-management.html.