

What is the SWAP?

by
Lynn Harper

This special issue of *Massachusetts Wildlife* is devoted to a single topic, one that is important to everyone concerned with the conservation of biodiversity in Massachusetts. The Massachusetts State Wildlife Action Plan (SWAP) was recently approved by the U.S. Fish and Wildlife Service; this issue introduces our readers to the SWAP and a few of the topics it covers.

In 2001, the U.S. Congress established the State Wildlife Grant Program to provide federal funds to help states conserve their species “of greatest conservation need.” In order to qualify for these funds, at least every 10 years each state must produce a SWAP addressing conservation of the species the state fish and wildlife agency deems to be of greatest conservation need, while also covering the full array of wildlife and wildlife-related issues.

An essential element of biodiversity protection in Massachusetts is the fact that many conservation-minded organizations, agencies, and individuals work together as a conservation community to conserve our diverse and precious landscape. Federal and state government agencies, local and regional non-profits, colleges and universities, Native American tribes, and municipalities: all of us coordinate and collaborate toward this shared goal. While the Massachusetts Division

of Fisheries and Wildlife (MassWildlife) was charged with writing this plan, this is not MassWildlife’s plan alone; this is everyone’s SWAP and all were invited to participate in producing it.

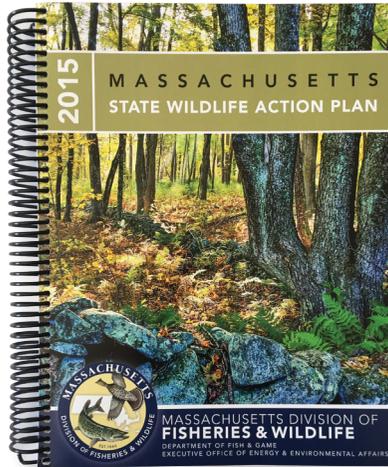
In 2005, MassWildlife submitted a SWAP covering 262 animal species. The current SWAP is greatly expanded, covering 172 vertebrates, 115 invertebrates, and 283 plants—a total of 570 species. While Congress required the states to include only animals of greatest conservation need, not plants, we have chosen to include plants in this update, as we

recognize that both plants and animals are essential components of biodiversity in Massachusetts.

Of the 570 species of greatest conservation need (SGCN), the majority, 427 species, are listed under the Massachusetts Endangered Species Act (MESA). Another species, the Red Knot—a shorebird—has been added to the federal Endangered Species list and will be proposed for listing in Massachusetts under MESA. The remaining 142 SGCN include,

among others, most coldwater fishes, many early successional birds, and several disappearing orchids.

These 570 SWAP-listed species were assigned into one or more of 24 habitats, because species using the same habitat often suffer from the same threats and need the same conservation actions. These SWAP habitats range from very large to very small. Here are the 24 habitat types, organized more or less from large to small:

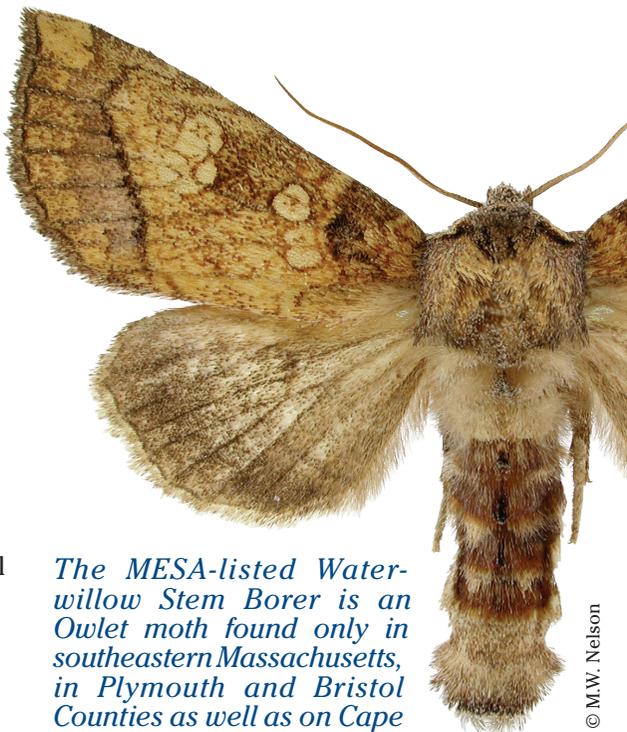


mass.gov/dfw/swap

- Connecticut and Merrimack Mainstems
- Large and Mid-sized Rivers
- Marine and Estuarine Habitats
- Transition Hardwoods-White Pine Upland Forest
- Northern Hardwoods-Spruce-Fir Upland Forest
- Central Hardwoods-White Pine Upland Forest
- Pitch Pine-Oak Upland Forest
- Large Unfragmented Landscape Mosaics
- Small Streams
- Shrub Swamps
- Forested Swamps
- Lakes and Ponds
- Salt Marsh
- Coastal Dunes, Beaches, and Small Islands
- Grasslands
- Young Forests and Shrublands
- Riparian Forest
- Vernal Pools
- Coastal Plain Ponds
- Springs, Caves, and Mines
- Peatlands and Associated Habitats
- Marshes and Wet Meadows
- Rocky Coastlines
- Rock Cliffs, Ridgetops, Talus Slopes, and Similar Habitats

In this issue, we focus on five of the SWAP habitats to give readers an idea of the life histories of and threats to the species in each habitat, as well as some of the conservation actions we and our partners are taking to conserve the habitat and its species.

In the first SWAP, in 2005, land protection was the highest priority conservation action. In the current SWAP, land protection is still a top priority. However, the SWAP emphasizes the need to redouble our habitat management efforts. Over 25% of Massachusetts is now protected from further development, but it does no good to protect a calcareous wetland full of rare plants if invasive phragmites overwhelms the native rarities. The pitch pine-scrub oak barrens of southeastern Massachusetts and Montague Plains have long been targets for land protection, but that globally rare habitat disappears without fire or equivalent disturbance



The MESA-listed Water-willow Stem Borer is an Owllet moth found only in southeastern Massachusetts, in Plymouth and Bristol Counties as well as on Cape Cod and the offshore islands. It occurs nowhere else on Earth.

Photo © M.W. Nelson

across its landscape. Thus, the focus is increasingly on managing the land we have all protected, by removing exotic invasives, recreating grasslands, young forests and shrublands, re-establishing natural flows in rivers and streams, and imitating the effects of wild fires with prescribed burns, selective cutting, and ground scarification.

We hope you enjoy this special issue and that you plan to join us and the many other conservation organizations across the Commonwealth in conserving these species of greatest conservation need for the future.

The complete Massachusetts State Wildlife Action Plan is not available in print, but it can be downloaded by chapter at: mass.gov/dfw/swap.

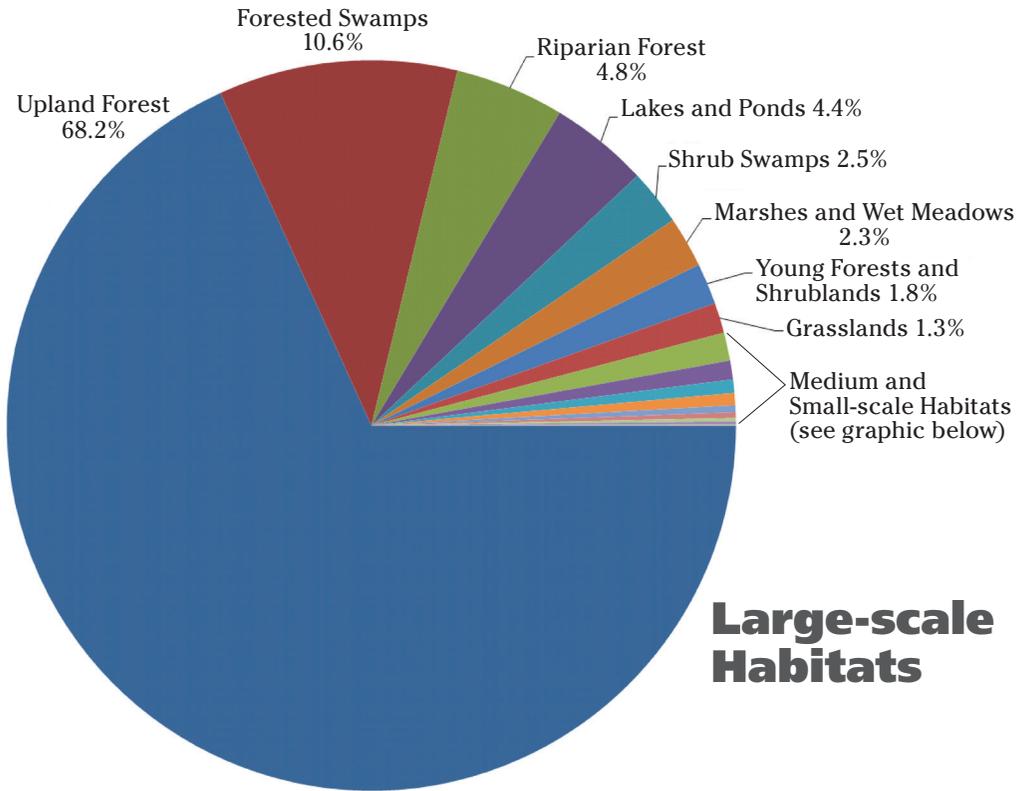


About the Author

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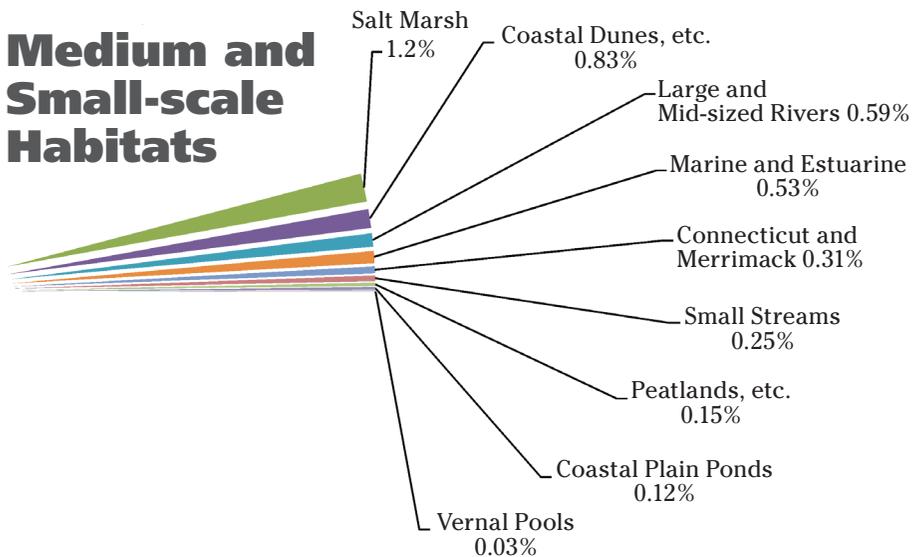
SWAP Habitats

Percentage of Massachusetts acreage by habitat type



Large-scale Habitats

Medium and Small-scale Habitats



Photos © Jennifer Garrett (orchid), Bill Byrne (salamander)



The diversity of SWAP species in Massachusetts, from the Blue-spotted Salamander, to the American Kestrel, Hentz's Redbelly Tiger Beetle, and Yellow Lady's-slipper, reflects the diversity of habitats that stretch from the coastal salt marshes to the Berkshire Hills.

Photos © Chris Buelow (beetle), Bill Byrne (kestrel)

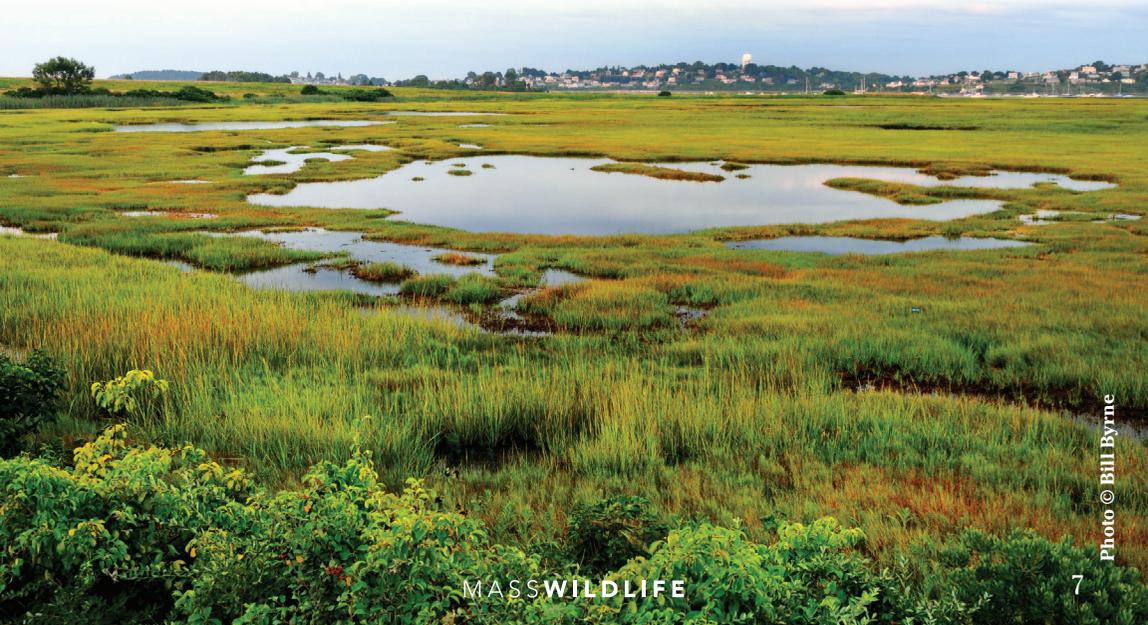


Photo © Bill Byrne