

LAPAC Focus Area – Ecological Reserves

Summary from: “An Assessment of Accomplishments and Gaps in Maine Land Conservation” Draft 2021

From the 1997 LAPAC report: “Maine is a state of enormous natural variety. A State Planning Office study and follow-up efforts by the Maine Forest Biodiversity Project (a collaborative effort involving State agencies, landowners, scientists, and environmentalists), have documented that Maine’s existing conservation ownerships do not protect the full range of Maine’s native plants, animals, and natural communities. In order to establish an ecological reserve system that protects all the natural communities and species found in the State, additional lands will need to be acquired to complement existing sites. Special attention should be given to those areas that include rare species, as well as unique or exemplary natural communities. Ecological reserves can serve as benchmarks which will provide important information about changes to our environment. These sites can be used for scientific research, long-term environmental monitoring, education, and in most cases can also provide important outdoor recreation opportunities.”

Progress and status:

As a result of enabling legislation, in 2001 the Maine Bureau of Parks and Lands designated approximately 70,000 acres of public lands as Ecological Reserve where timber harvesting and other resource extraction is restricted. In the following ~20 years, an additional ~25,000 acres were added to the state’s Ecological Reserve System. The purpose of these Ecological Reserves is to act as a benchmark against which biological and environmental change may be measured, to protect sufficient habitat for species whose habitat needs are unlikely to be met on lands managed for other purposes, and as sites for ongoing scientific research, long term environmental monitoring and education.

Additionally, lands managed by other state, federal, and private conservation organizations are managed consistently with Ecological Reserves (“reserve type management”). The total area of lands in Maine in reserve type management (where timber harvesting is restricted) is approximately 940,000 acres (4.8% of Maine’s area). These areas include large tracts of public land such as Baxter State Park and Acadia National Park, as well as smaller holdings throughout the state.

Ecological Reserves and similarly managed reserve lands contain many high-quality examples of Maine habitats, including high elevation areas, emergent wetlands, and examples of old forest. However, certain habitat types are regionally under-represented on lands in reserve type conservation. Habitat gaps in reserve type conservation lands include most forest types in southern Maine, and low elevation northern hardwoods forest and cedar swamps in northern Maine.

Climate change: Ecological Reserves are recognized for carbon sequestration and contributing to the resilience of Maine forests. Conservation of Ecological Reserves is a key recommendation of the Maine Climate Council. Additionally, Ecological Reserves are important benchmarks for tracking changes in Maine’s forest over time.

Summary: While Ecological Reserves or similarly managed reserve type lands have increased to include examples of most habitats in Maine, certain lower elevation forest types are still under-represented. New Ecological Reserves containing large blocks of forest in southern Maine, and northern hardwoods forest and cedar swamps in northern Maine could help fill gaps in Maine’s network of reserve managed lands and address species and habitat needs in response to climate change.