



Unwelcome Guests



Purple loosestrife eradication efforts at Acadia

The spread of non-native plants and animals is one of the biggest threats facing natural areas. Exotic species threaten rich communities of native plants and animals across the United States. The issue is particularly evident in national parks, where more than 2.6 million acres of park lands are affected by invasive plant species, and 234 national park areas have invasive animals in need of management. At Acadia National Park, exotic plant species are a pressing issue: one quarter of the 1,135 vascular plant species found in Acadia are exotics. Park staff work hard to manage these exotic species, but they can use your help!

What is an exotic species?



Purple loosestrife
(*Lythrum salicaria*)

Exotic plants are non-native species introduced by humans—intentionally or otherwise—into an area where they did not previously exist. Some may have escaped from gardens. Others have traveled via ship ballast, car and truck tires, and boats. Exotics can also be spread in fill and road salt or sand.

Exotic plants can be either terrestrial or aquatic species. If extremely invasive, exotics can pose serious threats to natural environments. Despite purple loosestrife's (*Lythrum salicaria*) attractive appearance, it threatens the existence of native plants and wildlife in wetlands by choking out native vegetation such as cattails

(*Typha latifolia*). Many species of mammals, fish, insects, and waterfowl, including mallards, muskrats, and red-winged blackbirds, depend on the aquatic plants that purple loosestrife pushes out. In Acadia, Japanese barberry (*Berberis thunbergii*), oriental bittersweet (*Celastrus orbiculatus*), and buckthorn (*Frangulus alnus*) are a few of the other invasive exotic plant species.

Not all exotics are necessarily harmful. Some, such as domestic apple trees (*Pyrus malus*) and lilacs (*Syringa* sp.), grow in former homesites within Acadia and are not invasive and do not directly threaten other plants or wildlife.

How do we manage exotic plants?

National parks were set aside to protect and preserve natural, cultural, and scenic resources for the future. Since many invasive exotics threaten these resources, park staff work to control them and thereby protect native species.

Acadia National Park staff use an integrated pest management approach to manage exotic plant species. This includes determining whether a particular exotic poses a serious

threat to native resources and whether control is feasible; identifying and monitoring areas where non-native plants grow; and deciding what treatments will be effective. Purple loosestrife, for example, is managed by carefully using herbicide on individual plants, and educating park neighbors and local nurseries about this invasive ornamental.

What you can do to help!

You can help reduce the spread of exotics and enhance the survival of native plants in the park and at home by following these tips:

- Watch your step. While exploring natural areas, stay on designated trails to avoid crushing tiny plants underfoot and disturbing fragile habitats. Remember, plants grow by the inch and die by the foot.
- Leave it be. In Acadia National Park, collecting plants or other natural or historic objects degrades the park and threatens species survival. Collecting is prohibited.
- Clean your boat before you float. Remember to watch out for hitchhiking plants on boats and equipment (trailers, paddles, and fishing gear). Avoid giving a ride to ANY aquatic vegetation. A single invasive aquatic plant or plant fragment can infest an entire lake or stream.



Native mountain sandwort
(*Minuartia groenlandica*)

- It all starts at home. Check your home and garden. Are the plants native to your area? If not, do their seeds spread to other areas? Consider removing the plants you know to be invasive.
- Take a stand against the invaders. Avoid purchasing plants that are known to be invasive, such as purple loosestrife, Japanese barberry, oriental bittersweet, or buckthorn.
- Garden with natives. Local agricultural extension services, nature centers, and garden clubs can often assist you with identifying native plants, and many states have native plant societies that promote the use of such species. Remember, plant species native to Acadia may not be suited to other regions; use plants native to your area and growing conditions.
- Visit the U.S. Fish and Wildlife Service website at www.fws.gov for a national plant list of threatened and endangered plant species, and learn the identity of threatened plants in your area.

Additional Resources

Acadia National Park
www.nps.gov/acad

National Park Service
www.nps.gov

Invasive Plant Atlas of New England
<http://invasives.eeb.uconn.edu/ipane>

National Invasive Species Information Center
www.invasivespeciesinfo.gov

New England Wildflower Society
www.newfs.org/conserve/invasive.htm

U.S. Department of Agriculture – Natural Resource Conservation Service Plants Database
<http://plants.usda.gov>