



ANDROSCOGGIN LAND TRUST

P.O. Box 3145
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(207) 782-2302

Rules and Regulations

The preserve is open to the public
during daylight hours.

Carry in - Carry out.

No camping or fires are permitted.

No motorized vehicles are permitted.

Please respect private property
boundaries and remain on marked trails.

Dogs must be kept on leashes.

Please pick up after your dog.

Do not pick or remove any plants.

Hiking, nature walking, and
snowshoeing are all encouraged!

Maine State Police: (207) 657-3030
IN CASE OF EMERGENCY: 911

Purinton Homestead Conservation Area

Self-Guided Natural History Tour



ANDROSCOGGIN
LAND TRUST

<https://androscogginlandtrust.org/>

1. Tree Plantation

Do you notice anything different between the forest in front of you and the one behind you? This White Pine grove was planted as a tree farm in the late 1950s/early 1960s. Tree farms were originally managed for production of forest crops (timber, fiber, etc.), and have evolved to include management for wildlife habitat, water quality, species of concern, and general sustainability.

2. Early Succession

These fields are actively maintained, and show the earliest stages of forest succession. The fields in the distance are mostly grasses and wildflowers, but the one you're standing in contains some woody plants too. Pioneer tree species that grow here - Willows, Red Maple, and Birch - would quickly turn this field to shrubland if left uncut.

3. Mixed Forest, Mixed Age

Young trees. Old trees. Hardwood. Softwood. This section of forest contains various species of various ages. Red Oak, White Pine, Red Maple, Eastern Hemlock, American Beech, and others are all growing together. The remains of stumps that were cut some time ago show that this area was lightly harvested, possibly for firewood.

4. Forest Pathogens

Many pests and diseases have changed our forests, damaging or destroying certain types of trees. Chestnut blight and Dutch Elm disease have had severe impacts in the past, and the Emerald Ash borer has recently arrived in Maine. Here you can see the effects of Beech bark disease, causing these cankers to grow on otherwise very smooth, silver-gray trees. This will eventually girdle and kill the trees.

5. Shrubland

Not too long ago, the shrubby area to the South was a field. Abandoned around 2000, it has quickly succeeded to shrubland. The area now contains grasses and herbaceous perennials, small shrubs, and a number of pioneer trees, including Red Maple, White Pine, and some Paper Birch. In 2012, drainage ditches were removed from the field as part of a wetland restoration program.

Forest Succession

A forest is always changing, sometimes slowly, and other times very rapidly. Disturbances - fires, hurricanes, environmental changes, human intervention - can have profound effects on a forest, sometimes destroying it altogether and leaving bare ground. If left alone, the disturbed area will go through a series of stages - a succession - to return itself to forest. In general, those stages are field, shrubland, young forest, and mature forest, with a number of variations along the way.

PHCA contains examples of many stages and variations - see if you can find different types of forest and stages of succession along the trail!

6 + 7. Canopy Disturbance

When even a small opening forms in the canopy of a forest, it can lead to rapid plant growth. Increased sunlight and changed microclimates give a boost to shade-tolerant trees that were alive but not thriving. Notice the number of saplings that have grown here since the opening was created. Also notice the size difference between the saplings at the two different disturbances.

8. Stream Erosion

As water flows, it carries rocks, soil, branches, and other debris with it. Over time, this process changes the landscape, removing material from one area, breaking it down into smaller pieces, and leaving it in another area (deposition). Notice the steep banks, the rocks and debris that have built up in different areas, and the flat land in other areas. Not long ago, this stream flowed along a different path!

9. Blowdowns

Trees that are broken or uprooted by wind are called blowdowns. Weak or damaged trunks, poor root strength or soil structure, and changed wind exposure from the loss of surrounding trees can all lead to blowdowns. The disturbance created by a blowdown encourages other growth (see Canopy Disturbance), and the fallen trees create habitat for plants, animals, fungi, and other organisms.

10. Moss

Mosses are often found in dense mats in moist, shady locations. They can absorb and retain large amounts of water, but not with roots like most other land plants. Mosses absorb water and nutrients through their leaves, and since they photosynthesize to create their own food, they can grow on substrates other than soil, including rocks, logs, and trees.

11. Ferns

Like many plants, ferns have roots, stems and leaves, but they don't have flowers or seeds, and instead reproduce via spores. In general, ferns specialize in growing in marginal habitats. Some grow in open fields, others in rock crevices, and some in acidic wetlands. In this area, multiple species are thriving in a moist, shady forest - Sensitive, Evergreen Wood, Christmas, Cinnamon, and Bracken Ferns.