Tall Shrub Fen

State Rank S4

Community Description

This peatland vegetation is characterized by tall shrubs, with spotty tree cover above. Shrub cover is usually >70%, with alder and mountain holly almost always present and with other shrubs locally common. Red maple is typical in the tree layer, along with black spruce. The herb layer is patchy, with 10-50% cover. Labrador tea and pitcher plants are frequent, though not necessarily in high abundance. Cinnamon fern and wild calla are good indicators. The bryoid layer is mostly peat mosses and is patchy, averaging ~50% cover.

Soil and Site Characteristics

Sites occur in peat filled basin wetlands, often at the upland/peatland transition. Areas bordering the upland (the peatland "lagg") have standing water for much of the growing season; however, this community can be found in settings other than the peatland lagg. Substrates are somewhat acidic to circumneutral, with relatively high levels of nitrogen, presumably from the nitrogen fixing alders.

Diagnostics

Vegetation associated with a peatland, with well-developed shrub layer (1-3 m) is dominated by non-heath shrubs and often with scattered trees. Some heaths and other peatland species are present.



The substrate is peat or is transitional from peat to mineral soil.

Cinnamon Fern

Similar Types

Alder Shrub Thickets can be similar, but occur on mineral/muck soil and are not associated with peatlands. Sweetgale Mixed Shrub Fens can have similar structure and can be associated with peatlands, but they are more strongly dominated by sweetgale and heath shrubs rather than alder or other shrubs. Spruce - Larch Wooded Bogs and Red Maple Woodland Fens have greater tree cover, less tall shrub cover, and typically occur on deeper peat.

Conservation, Wildlife, and Management Considerations

This community is common around the perimeter of peatlands and in some non-peatland drainages as well. It often receives runoff from adjacent uplands, so

Location Map



Community is known from this Ecoregion
Community may occur in this Ecoregion
Bailey's Ecoregion

County





Mountain Holly Flowers

maintenance of appropriate wetland buffers can help retain the quality of individual occurrences.

Wetland species that use this community type include common yellowthroat, Wilson's warbler, Lincoln's sparrow, spotted salamander, wood frog, and northern waterthrush. The black meadowhawk, an uncommon dragonfly of open fens and marshes, may be found in this community. Some occurrences of this community type host vernal pools, which are important breeding habitat for a variety of amphibians including wood frogs, spotted salamanders, and blue-spotted salamanders. The rusty blackbird may occur in this type in northern Maine.

Distribution

Central Maine northward, extending west through New England and New York, and presumably north and east into Canada.

Landscape Pattern: Small Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Canopy

Black spruce
Red maple
Sapling/shrub
Balsam fir
Highbush blueberry
Mountain holly*
Red maple
Speckled alder*
Wild-raisin

Dwarf Shrub

Labrador tea Leatherleaf Small cranberry

Herb

Cinnamon fern*
Marsh St. Johnswort
Pitcher plant
Three-leaved false Solomon's seal
Three-seeded sedge

Bryoid

Sphagnum mosses

Associated Rare Plants

Bog bedstraw

Associated Rare Animals

Rusty blackbird

Examples on Conservation Lands You Can Visit

- Acadia National Park Hancock Co.
- Appleton Bog Preserve Knox Co.
- Great Heath Public Lands Washington Co.
- Number Five Bog Public Lands
 Somerset Co.
- Sunkhaze Meadows National Wildlife Refuge – Penobscot Co.

