Open Cedar Fen

State Rank S4

Community Description

These open canopy woodlands occur in a peatland setting with northern white cedar dominant. Canopy closure is 20-60%. Black spruce, red maple, balsam fir, black ash, or larch may be mixed with the cedar. The shrub layer may be locally dense with patches of trees and scattered shrubs of winterberry, alder, or mountain holly. The herb layer, usually with >50% cover, is variable in composition and may be predominantly heath shrubs or herbs with a prominent component of graminoids. Shrubby cinquefoil, alpine cotton-grass, sticky false-asphodel, and grass-of-parnassus may be at higher pH sites. The bryoid layer is mostly peat mosses, but the presence of mountain fern moss is indicative of this type.

Soil and Site Characteristics

Sites generally occur as part of a peatland (peat >30 cm deep) or occasionally along a peatland outlet stream where the peat substrate is shallower. Sites are in lowlands at elevations up to 1000', ranging from quite acidic to circumneutral (pH 4.6-7.2), and typical of somewhat minerotrophic (fen) conditions, not raised bog conditions.



Yellow Lady's-slipper

Diagnostics

Northern white cedar forms a partial canopy (<65%) and is frequently dominant in the shrub layer. Dwarf shrub peatland indicator plants are present. Sites often occur adjacent to an open peatland.

Similar Types

Northern White Cedar Swamps and Cedar - Spruce Seepage Forests occur on mineral soils or on thin to moderate peat over mineral soil, and not as part of a peatland with forested and non-forested areas (Northern White Cedar Swamps may occasionally occur in that setting). Cedar swamps and seepage forests also have very low cover of peatland dwarf shrubs. Red Maple Wooded Fens can be similar, but have far less northern white cedar in the

Location Map





Northern White Cedar Woodland Fen

canopy. Gradations from cedar fens to Spruce - Larch Wooded Bogs also occur.

Conservation, Wildlife, and Management Considerations

These fens usually occur as part of larger peatlands, and maintaining the hydrologic integrity of the entire wetland is key. The cedars generally remain small, therefore this type is typically not a target for forest management. In some areas these fens have been altered by beaver activity.

Conifer-preferring birds that may use this partly open type include black-backed woodpecker, palm warbler, common yellowthroat, Lincoln's sparrow, and Swainson's thrush. Cedar fens that have a large number of dead trees provide habitat for the three-toed woodpecker.

Distribution

New England - Adirondack Province and Laurentian Mixed Forest Province, extending eastward, westward, and northward from Maine.

Landscape Pattern: Large Patch

Examples on Conservation Lands You Can Visit

Lake Umbagog National Wildlife
 Refuge - Oxford Co.

Characteristic Plants

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

Canopy

Black spruce* Larch* Northern white cedar*

Sapling/shrub

Balsam fir* Black ash* Northern white cedar* Red maple* Speckled alder

Dwarf Shrub

Black huckleberry* Labrador tea Leatherleaf* Sheep laurel Sweet gale*

Herb

Bluejoint* Cinnamon fern* Creeping snowberry* Dwarf raspberry* Northern white cedar* Three-leaved false Solomon's seal Tussock sedge*

Bryoid

Dicranum moss* Mountain fern moss Sphagnum mosses*

Associated Rare Plants

Bog bedstraw Dioecious sedge Horned beak-rush Livid sedge Marsh valerian Showy lady's-slipper Sparse-flowered sedge Swamp birch

- Mattagodus Wildlife Management Area
 Penobscot Co.
- Number Five Bog Public Lands – Somerset Co.

Maine Natural Areas Program