VEGETATION DESCRIPTIONS FOR ISLE ROYALE NATIONAL PARK

Picea mariana / Pleurozium schreberi Forest

COMMON NAME	Black Spruce / Feathermoss Forest
SYNONYM	Black Spruce / Feathermoss Forest
PHYSIOGNOMIC CLASS	Forest (I)
PHYSIOGNOMIC SUBCLASS	Evergreen forest (I.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar needle-leaved evergreen forest (I.A.8)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (I.A.8.N)
FORMATION	Conical-crowned temperate or subpolar needle-leaved evergreen forest (I.A.8.N.c)
ALLIANCE	PICEA MARIANA FOREST ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM TERRESTRIAL

RANGE

Isle Royale National Park

This community is uncommon, mostly found in the central and southwestern portions of the park.

Globally

This community is found in northeastern Minnesota, northern Michigan, northwestern Ontario, and southeastern Manitoba. It may be found in other parts of Manitoba.

ENVIRONMENTAL DESCRIPTION

Isle Royale National Park

This community occurs on gentle to moderate slopes of ridges, usually at elevations of about 630 to 790 feet, on well-drained to rapidly-drained, organic or sandy soils.

Globally

This community is found on level to gently sloping ground. Soils are typically moderately well drained, coarse loams, sands, and silts (Sims *et al.* 1989).

MOST ABUNDANT SPECIES

Isle Royale National Park

Stratum	Species
Tree canopy	*Picea mariana*
Nonvascular	*Pleurozium schreberi*

Globally

Stratum	Species
Tree canopy	*Picea mariana*
Nonvascular	*Pleurozium schreberi*

CHARACTERISTIC SPECIES

Isle Royale National Park

Picea mariana, Pleurozium schreberi

Globally

Picea mariana, Pleurozium schreberi

VEGETATION DESCRIPTION

Isle Royale National Park

This black spruce/feathermoss forest is a closed canopy evergreen forest with 60 to 90% canopy cover. *Picea mariana* is the most abundant canopy tree; *Pinus banksiana* is rare or absent; the feathermoss *Pleurozium schreberi* is common in the groundlayer (average 38% cover); characteristic herbs are *Aster macrophyllus* and *Cornus canadensis*.

Globally

The canopy of this community is closed and strongly dominated by *Picea mariana* with small amounts of *Abies balsamea*, *Betula papyrifera*, *Picea glauca*, *Pinus banksiana*, and *Populus tremuloides*. The shrub and herb layer are poorly developed (Grigal and Ohmann 1975). Species that are most abundant in these layers include the shrubs *Corylus cornuta*, *Gaultheria*

procumbens, *Ledum groenlandicum*, *Rosa acicularis*, *Vaccinium angustifolium*, and *Vaccinium myrtilloides*, and the herbs *Aster macrophyllus*, *Cornus canadensis*, *Equisetum arvense*, and *Maianthemum canadense*. Feathermosses, particularly *Pleurozium schreberi*, are very abundant. Mosses may cover from 23 % (Grigal and Ohmann 1975) to over 85% (Sims *et al.* 1989) of the forest floor.

OTHER NOTEWORTHY SPECIES
Isle Royale National Park
Information not available.

CONSERVATION RANK G5.

DATABASE CODE CEGL002447

MAP UNITS 05

COMMENTS

REFERENCES

Grigal. D. F. and L. F. Ohmann. 1975. Classification, description, and dynamics of upland plant communities within a Minnesota wilderness area. Ecological Monographs. 45:389-407.

Minnesota Natural Heritage Program. 1993. Minnesota's native vegetation: A key to natural communities. Ver. 1.5. Minn. Dep. Nat. Resour., Nat. Heritage Prog. St. Paul, Minn. 110 p.

Sims, R. A., W. D. Towill, K. A. Baldwin, and G. M. Wickware. 1989. Field guide to the forest ecosystem classification for northwestern Ontario. Ontario Ministry of Natural Resources.

Zoladeski, C. A., G. M. Wickware, R. J. Delorme, R. A. Sims, and I. G. W. Corns. 1995. Forest ecosystem classification for Manitoba: field guide. Natural Resources Canada, Canadian Forest Service, Northwest Region, Northern Forestry Center, Edmonton, Alberta. Special Report 2.