

**Deboullie**  
T15 R9 WELS

**Vital Statistics**

**Size: 7,253 acres**

Regulated: 1,086 acres

Non-Regulated: 6,167 acres

Upland: 6,213 acres

Forested Wetland (NWI):

108 acres

Non-Forested Wetland: 49 acres

Open Water: 897 acres

Roads: unimproved-4 miles

trails-17 miles

total-21 miles

Biophysical Region: St. John

Uplands

BPL Region: North



***Rare Species and Exemplary Natural Community Table for Deboullie***

| Common Name                                 | Latin Name   | S-RANK | G-RANK | State Status |
|---|--|--------|--------|--------------|
| <b><i>Exemplary Natural Communities</i></b> |  |        |        |              |
| Circumneutral Outcrop                       |  | S2     | GNR    | N/A          |
| Cold-air Talus Slope                        |  | S2     | G3G5   | N/A          |
| Evergreen Seepage Forest                    |  | S4     | GNR    | N/A          |
| Lower Elevation Spruce-Fir Forest           |  | S4     | GNR    | N/A          |
| Northern Hardwoods Forest                   |  | S4     | G3G5   | N/A          |
| Riverside Seep                              |  | S2     | G2     | N/A          |
| Spruce Rocky Woodland                       |  | S4     | G3G5   | N/A          |
| <b><i>Rare Plants</i></b>                   |  |        |        |              |
| Alpine Rush                                 | <i>Juncus alpinoarticulatus</i>                    | S3     | G5T5?  | SC           |
| Arctic sandwort                             | <i>Minuartia rubella</i>                           | S1     | G5     | T            |
| Few-flowered Spikerush                      | <i>Eleocharis quinqueflora</i>                     | S2     | G5     | SC           |
| Fragrant Cliff Wood-fern                    | <i>Dryopteris fragrans</i>                         | S3     | G5     | SC           |
| Northern Slender<br>Pondweed                | <i>Stuckenia filiformis</i> ssp.<br><i>alpinus</i> | S2     | G5T5   | SC           |
| Northern Woodsia                            | <i>Woodsia alpina</i>                              | S1     | G4     | T            |
| Smooth Woodsia                              | <i>Woodsia glabella</i>                            | S1     | G5     | T            |
| <b><i>Rare Animals</i></b>                  |  |        |        |              |
| None found                                  |  |        |        |              |

## **Description**

The Deboullie Ecological Reserve is a microcosm of the landscape of northern Aroostook County, with lakes, ponds, low mountains, and stream valleys providing a variety of physical settings. Fire and logging have both played a part in the reserve's history; however, because of steep slopes and lakeshore, much of the reserve has received little cutting in the recent past, with some isolated older stands.

The large ponds include Deboullie, Gardner, and Black Ponds; smaller ponds (Mud Pond, Pushineer, Little Black, etc.) are scattered throughout the reserve. The reserve encompasses the entire shorelines of 11 ponds, with surface waters totaling almost 900 acres. These ponds are well known as sport-fishing areas, as long as one is willing to make the effort to get to them. Blueback trout (a.k.a. the landlocked arctic charr), an unusual variety of trout, occur in several of the lakes. Some pondshores have gradual transitions to upland, such as the Mud Pond basin, with various wetland habitats (e.g. Acidic Sedge Fens and Northern White Cedar Swamps). Other pondshores, where slopes come steeply into the pond basin, have an abrupt transition from aquatic to upland habitats.

The mountains ringing the lakes include areas of spruce slope forests, northern hardwood forests, and exposed talus, reflecting the variety of exposures and slopes. The steep slopes of Deboullie and Black Mountains (and probably Whitman Mountain) support several stands of old-growth spruce (some over 200 years old); though uncut, all have been heavily damaged by budworm and subsequent windthrow. The ridges and upper slopes on Black Mountain and Whitman Mountain support mature Beech – Birch – Maple Forests, with trees over 50 cm dbh, fallen trees, and canopy gaps. The Cold-Air Talus Woodlands on Deboullie and Gardner Ponds (which are so sparsely treed that “woodland” is an exaggeration) are particularly noteworthy, with similar communities found in only a few other places in the state.

Away from the ponds and their hills are several broad stream valleys with extensive mature cedar forests along the drainages. The cedar forms a dense canopy over sedges, sphagnum, and boreal herbs.

## **Resources**

Deboullie Management Unit—Management Plan. 1987. Bureau of Public Lands, Department of Conservation, Augusta, Maine. 47 pp.

Kern, M.J. 1985. Natural Resources Inventory and Critical Area Survey of T15 R9. Bureau of Public Lands, Department of Conservation, Augusta, Maine. 169 pp.