

## Sunhaze Meadows

Milford

### ***Description:***

With over 5,000 acres of contiguous wetlands, the Sunhaze Meadows area comprises one of the largest and most diverse wetland systems in Maine. The southwest corner of Sunhaze Meadows Wildlife Refuge supports adjacent Unpatterned Fen and Domed Bog ecosystems, each nearing 1,000 acres in size, and a 100 acre Hardwood Floodplain Forest along Sunhaze Stream.

Most of the available information on Sunhaze Meadows was derived by researchers at the University of Maine. The Unpatterned Fen contains a variety of vegetation types, including sedge meadows, acidic fens, dwarf shrub bogs, peatland lags, forested bogs, shrub swamps, and a red maple swamp. Westward and contiguous to the Unpatterned Fen, the Domed Bog Ecosystem contains more than ten distinctly raised sections. This peatland contains one large, coalesced, raised bog that is composed of two concentrically patterned domes. Several other smaller raised bogs are not as conspicuously domed but are nonetheless distinct on air photos and in the field. Raised areas are dominated by dwarf shrub bog vegetation, characterized by ericaceous shrubs and cotton grass (*Eriophorum vaginatum v. spissum*). The raised areas are embedded within broad, lower areas of unpatterned geogenous peatlands (i.e., shrub and sedge fen) along the stream valleys. The large number and configuration of the raised units is unlike most other peatlands in Maine.

At the southwestern part of the large wetland complex, the floodplain forest forms a narrow band along Sunhaze Stream and is dominated by silver maple (*Acer sachharinum*), with lesser amounts of red maple (*Acer rubrum*). The forest is relatively young (average tree diameter was less than 10 inches in 1996).

Further to the northeast, a 70 acre northern white cedar seepage forest occurs along Johnson Brook. Known locally as the “Penobscot Stick Cedar Seepage Swamp,” this wetland contains a very dense stand of small cedar trees (with a median diameter of less than five inches, the basal area of one measured stand was over 250 square feet/acre!).

Thousands of acres of open wetlands provide outstanding breeding habitat for wetland-dependant birds. Breeding pairs and calling males of the sedge wren and yellow rail have both been observed (and presumably breed) in an area of tall emergent vegetation along the Sunhaze Stream shore. The large Unpatterned Fen also appears to provide outstanding habitat for peatland dragonflies and damselflies.

### ***Rare Species and Exemplary Natural Community Table for Sunhaze Meadows***

Common Name	Latin Name	S-RANK	G-RANK	State Status
<b><i>Exemplary Natural Communities</i></b>				
Domed Bog Ecosystem		S3	N/A	N/A
Unpatterned Fen Ecosystem		S4	N/A	N/A
Evergreen Seepage Forest		S3	N/A	N/A
Silver Maple Floodplain Forest		S3	N/A	N/A
<b><i>Rare Plants</i></b>				
Prickly hornwort	<i>Ceratophyllum echinatum</i>	S2	G4?	SC
Bog bedstraw	<i>Galium labradoricum</i>	S2?	G5	SC

Showy lady's slipper	<i>Cypripedium reginae</i>	S3	G4	T
<b><i>Rare Animals</i></b>				
Sedge wren	<i>Cistothorus platensis</i>	S1	G5	E
Yellow rail	<i>Coturnicops noveboracensis</i>	S2B	G4	SC

***Other Habitats Mapped by MDIFW:***

Waterfowl / Wading Bird Habitat

Deer Wintering Area

***Conservation Considerations:***

- With virtually all of the ecologically significant wetlands protected at the site, the only remaining threats are invasive species (e.g., purple loosestrife – *Lythrum salicaria*) and hydrologic alteration of the many tributary streams that converge in Sunkhaze Stream.

***Protection Status:***

The 9,337 acre Sunkhaze Meadows Wildlife Refuge, owned and managed by the U.S. Fish and Wildlife Service, encompasses all but the southwest corner of the significant wetlands on this site.