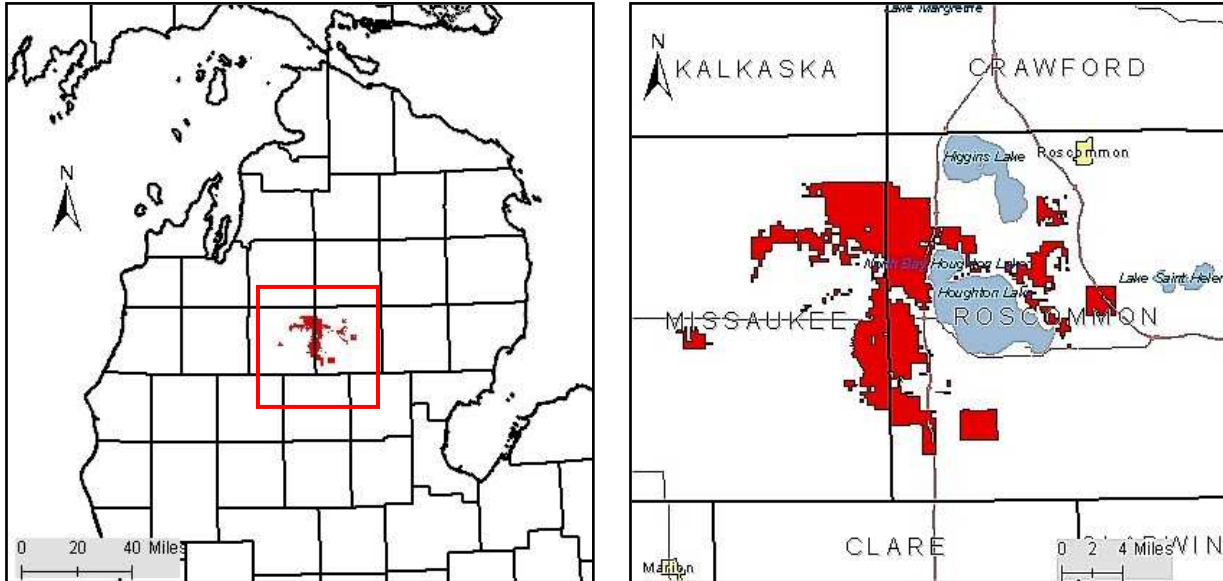# Houghton Lake Wetlands Management Area

Attributes

The Houghton Lake Wetlands Management Area is located in Missaukee and Roscommon Counties and has approximately 69,000 acres of scattered State Forest land. The primary attributes which were important in identifying this MA include:

- Ecological Classification - The MA falls within the Grayling Outwash Plain sub-region of the NLP Ecoregion as classified by Albert (1994).

- Cover Types - Historically, most of this area was covered with mixed red, jack and white pine with some areas of upland hardwood and lowland types. The current vegetation composition is primarily aspen, oak, red pine, jack pine and over 60% in various lowland types.

- Landforms - The dominant landform consists of sandy outwash plains with large ridges of ice-contact sands surrounded by poorly drained outwash channels and plains. Houghton and Higgins Lakes are adjacent to this MA. The Muskegon River flows out of this MA.

- Ownership size and connectivity – The state land in this Management Area is scattered in patches across the two counties.

- Social and Economic – This MA is a popular area for game hunting, hiking, mushroom hunting and other activities for the nearby communities of Harrison, Houghton Lake, Grayling, and Roscommon. The Houghton Lake Flats, Bear Creek, and Potty Marsh Floodings are managed for water fowl.

Major Cover Types

- Aspen – There are almost 14,000 acres of good quality aspen with two age class spikes in the 10-19 and 40-49 year age classes. There are limitations on harvesting in inaccessible wet areas, except during dry years. The age class distribution is mostly balanced, with only 6% of the aspen over age 60, reflecting recent intensive management.

- Mixed Swamp Conifers, Cedar and Swamp hardwoods – Virtually all of the 19,000 acres of these swamp types originated after the early 20th century harvests, with most of the acreage in the 50-100+ age classes. Younger age classes are under-represented, as demonstrated by the scant regeneration over the past 50 years.

- Marsh – There are almost 6,700 acres of marsh land in this MA. Significant marsh areas managed for waterfowl include the Houghton Lake Flats Flooding, Bear Creek Flooding, and Potty Marsh.

- Jack Pine – The majority of the 4,000 acres jack pines occurs in two age class groupings: 10-19 and 40-69 years. Though manageable, this area has a very high water table which is part of a natural jack pine complex.

- Oak – Oak is generally of high quality and 75% of the 2,200 acres are in the 70–100+ year age classes. There has been almost no oak regeneration in the past 70 years.

- Red Pine – Most of the 1,300 acres of red pine is in the 60-80 year age classes and there has been very little regeneration of red pine over the past 30 years.

- White Pine – Most of the 1,300 acres of white pine is of natural origin and most acres are in the 40-69 year age classes. There has been little regeneration over the past 30 years.

Houghton Lake Wetlands			Age Class (Years)											
Cover Type	Acres	%	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	Uneven Aged
Aspen	13,706	20%	1,479	3,036	2,113	1,589	2,749	752	384	577	805	222	0	0
Mixed Swamp Conifers	7,655	11%	0	30	10	3	51	146	178	546	1,948	1,484	3,018	241
Marsh	6,689	10%	0	0	0	0	0	0	0	0	0	0	0	0
Cedar	5,811	8%	0	0	0	0	0	0	340	689	913	1,332	2,537	0
Swamp Hardwoods	5,366	8%	38	134	39	16	172	739	225	531	2,552	456	326	134
Jack Pine	4,000	6%	362	572	33	144	586	749	1,108	346	81	19	0	0
Oak	2,151	3%	4	61	0	51	197	29	92	456	638	415	96	112
Red Pine	1,257	2%	0	10	32	65	181	236	201	368	44	44	71	5
White Pine	1,255	2%	0	0	0	90	475	166	140	40	63	81	170	30
Lowland Brush	11,947	17%												
Water	1,788	3%												
Marsh	1,738	3%												
Grass	1,222	2%												
Upland Brush	223	0%												
Other Types	4,308	6%												

Total   69,116

Other Types include: Bog, Lowland Poplar, Tamarack, Spruce-Fir, Upland Hardwoods, Hemlock, White Birch, Mixed upland and Lowland Types.

Concepts of Management

- Mixed Swamp Conifers, Cedar and Swamp hardwoods (27% of the MA) – Harvest for regeneration, if cuts can be done in a manner that will not adversely impact wetland soils or encourage deer browse issues.

- Aspen (20% of the MA) – Harvest aspen to balance the distribution of the 0-59 year age classes. Seek opportunities to harvest selected areas before rotation age to accelerate balancing age classes. There may be a slight decline in acreage due to inaccessibility of older stands.

- Marsh (10% of the MA) - Continue to control Phragmites, glossy buckthorn and other exotic invasive species in the floodings.

- Jack Pine (6% of the MA) – Balance the distribution of the 0-69 year age classes through harvesting. Where practicable, target for harvest operable 70+ year old areas. Allow areas greater than 70 years of age that are inoperable to succeed to mixed stands.

- Oak (3% of the MA) – Final harvest to encourage regeneration in oak over age 70 and seek opportunities to under-plant red and white pine to achieve an oak-pine type.

- Red Pine (2% of the MA) – Follow the Red Pine Management Guidelines to balance the age class distribution by aggressively harvesting in the age classes between 40-79 years and regenerating red pine through planting or natural regeneration. Allow selected areas of managed red pine areas to reach biological maturity. Following the Within Stand Retention Guidelines allow selected individual red pines in other cover types to become super canopy specimens. The acreage of red pine may potentially increase due to planting of current upland brush areas.

- White Pine (2% of the MA) – Continue thinning white pine plantations based on site suitability and allow selected plantations to become mixed stands with oak or other hardwood species. Utilize selection harvests to maintain white pine as a component of other cover types.