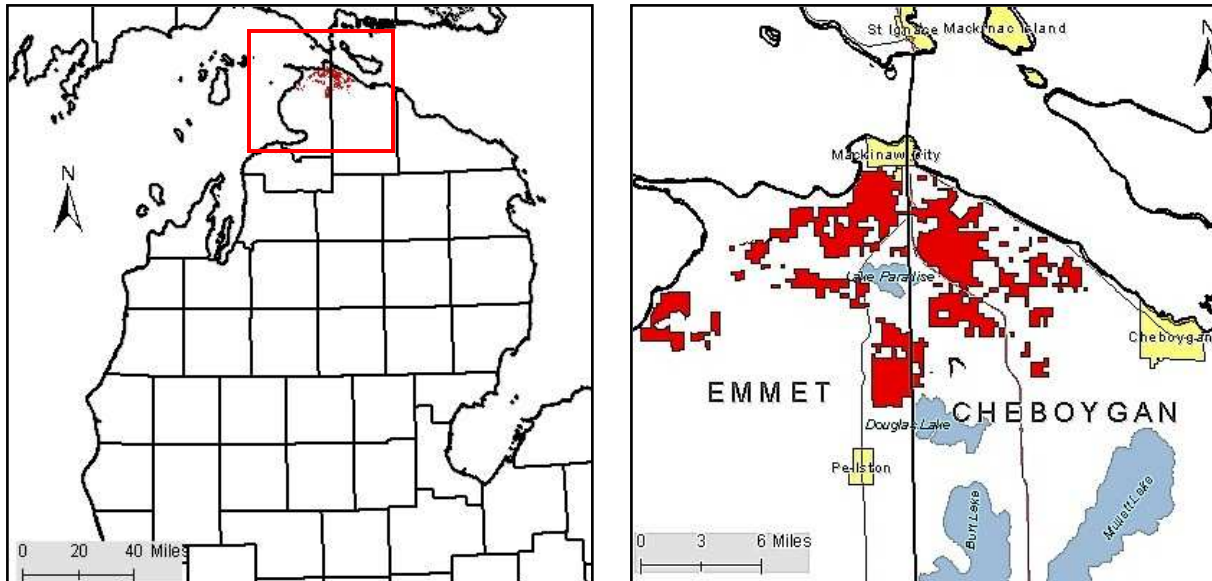


Mackinaw Lake Plain Management Area



Attributes

The Mackinaw Lake Plain Management Area is located in the extreme north end of the Northern Lower Peninsula in Emmet and Cheboygan counties and has approximately 38,000 acres of state-owned land. The primary attributes which were important in identifying this MA include:

- Ecological Classification - The MA falls within Cheboygan sub-region of the NLP Ecoregion as classified by Albert (1994).
- Landforms – The dominant landform consists of sandy lake plain over limestone bedrock which is frequently near the surface. Like other sand lake plains, much of the topography is a series of beach ridges and adjacent wet depressions. Most of the State Forest land in this MA is swampy.
- Cover Types – The current vegetation composition is mostly aspen, cedar, lowland poplar (balsam poplar) and lowland conifers. Historically, there was less aspen and more northern upland hardwoods. Since much of this MA (62%) is wet and inaccessible, the landscape experienced little disturbance before European settlement.
- Cultural - There are three managed floodings in this wetland: Dingman Marsh, French Farm, and O’Neal Lake. Wilderness State Park, Colonial Fort Michlimackinac and Historic Mill Creek Discovery Park are located within the MA.
- Social - This MA is experiencing increased development of private land adjacent to State Forest land (especially in the Mackinaw City area) leading to an increase in recreational pressure.
- Ownership size and connectivity – The state land in this MA is fairly concentrated.

Major Cover Types

- Aspen – About one fifth of the MA, 8,000 acres, is covered by aspen. More than half of it, especially acreage over 40 years of age is considered inoperable due to poor access.

- Cedar – Over 5,000 acres in this MA, most of it at least 80 years old. There is virtually no cedar in younger age classes.
- Swamp Hardwoods and Lowland Poplar – Swamp hardwoods and lowland poplar cover over 5,000 acres, and due to poor access only about 20% of it considered operable.
- Mixed Swamp Conifers, Tamarack, and Black Spruce – There are over 6,400 acres of mixed swamp conifers, tamarack and black spruce, and due to poor access, most of it is considered inoperable.
- Red Pine – There are approximately 1,700 acres of red pine, with about 700 acres in the 60 – 80 year age class. There has been no red pine regeneration in the past 30 years.

Mackinaw Lake Plain			Age Class (Years)											Uneven Aged
Cover Type	Acres	%	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	
Aspen	7,297	19%	226	1,218	1,832	1,894	16	176	645	570	507	213	0	0
Cedar	5,176	14%	0	0	0	0	36	0	348	1,856	1,261	734	941	0
Lowland Poplar	4,894	13%	0	477	603	222	15	327	199	1,827	980	232	12	0
Mixed Swamp Conifers	3,704	10%	0	10	0	0	227	311	307	1,187	656	709	297	0
Tamarack	2,488	7%	0	0	0	1,199	0	15	138	366	434	0	336	0
Red Pine	1,724	5%	0	0	64	50	314	502	219	13	4	122	131	305
Swamp Hardwoods	1,475	4%	0	19	114	126	139	78	136	332	344	10	0	177
Oak	1,336	3%	0	0	0	0	0	0	74	572	259	113	318	0
Lowland Brush	3,845	10%												
Water	1308	3%												
Grass	698	2%												
Upland Brush	188	0%												
Other Types	4,119	11%												

Total 38,252

Other Types include: Bogs, Marsh, Upland Hardwoods, White Birch, Black Spruce, White Pine, Hemlock, Sand Dunes.

Concepts of Management

- Aspen (19% of the MA) – Balance the distribution the 0-59 year age classes on the operable acreage. Allow inoperable aspen to succeed to more shade tolerant cover types such as red maple and white pine. It is expected that the overall acreage of aspen will decline.
- Cedar (14% of the MA) –Harvest and regeneration should be considered if harvests can be done in a manner that will not adversely impact wetland soils and if deer browsing can be minimized.
- Lowland Hardwoods and Conifers (34% of the MA) - Younger age classes are under-represented. Regeneration should be considered if harvests can be done in a manner that will not adversely impact wetland soils and if deer browsing can be minimized.
- Red Pine (5% of the MA) - Following the Red Pine Management Guidelines, address the age class spike and trough of regeneration. Harvest aggressively in the age class spike between 40-59 years and regenerate suitable red pine areas through planting or prescribed fire to encourage natural regeneration. Allow selected areas of managed red pine to reach biological maturity. Following the Within Stand Retention Guidelines allow selected individual red pines in other cover types to become super canopy specimens.