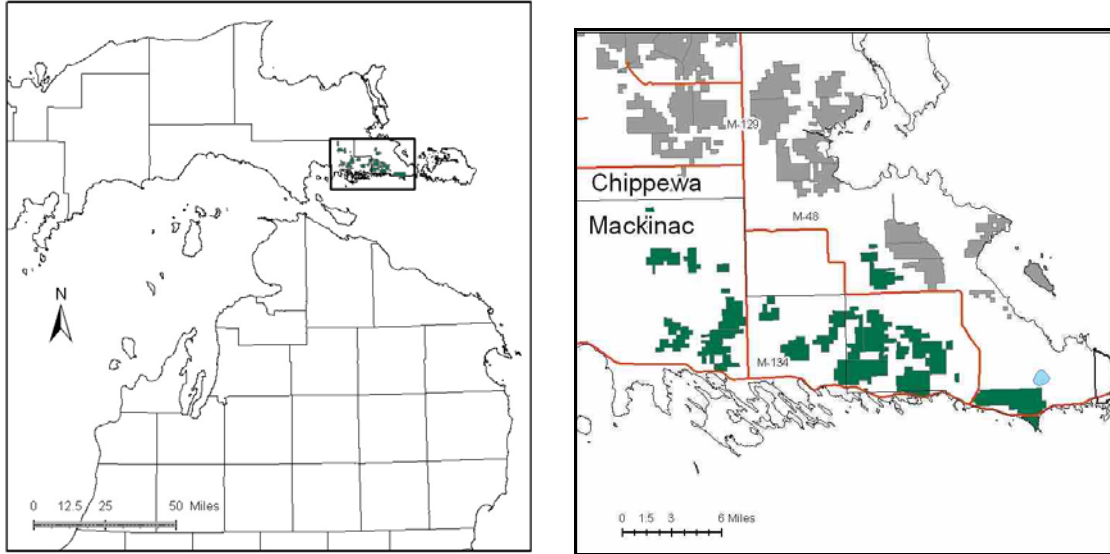


Huron Patterned Outcrop Management Area Summary



Attributes

The Huron Patterned Outcrop Management Area is located in the southeastern portion of the Eastern Upper Peninsula in Chippewa and Mackinac counties. It has approximately 26,649 acres of state-owned land. The attributes which were important in identifying this MA include:

- Ecological Classification - The MA falls within the St. Ignace Lake Plain sub-section of the EUP Ecoregion as classified by Cleland (2006).
- Landforms – The dominant landform consists of Huron Patterned Outcrop. Variable landscape with upland and scattered low areas associated with coastal streams and coastal fens; often found with areas of limestone outcrop. There is a large limestone quarry on private land in this MA (O-N Minerals).
- Cultural - There are several Nature Conservancy properties along this northern Lake Huron Lakeshore. There are several archeological sites and historic lumber era camps. Kayaking along the shoreline is increasing in popularity. Many of the cottages along the Lake Huron Coasts are seasonal second homes.
- Social / Economic - Within the MA are the De Tour State Forest campground, snowmobile trails, and several ORV trails. Hunting for deer and bird watching are important activities.
- Special Features - Within this MA there are quite a number of special plant and animal habitats along the northern Lake Huron lakeshore, including habitat for several T&E species and Great Lakes endemic species. Migrating neo-tropical song birds utilize habitat along the coast quite heavily during spring and fall migration. There are Special Conservation Areas (SCA) for deer wintering areas, visual management, coastal environmental area, and critical coastal habitat. There are Ecological Reference Areas (ERA) for Great Lakes Marsh and Wooded Dune and Swale. This segment contains numerous trout streams including: Nunn's Creek, Hessel Creek, McKay Creek, Prentiss Creek, Beavertail Creek, and Albany Creek. Due to their temperature regimes, many of these streams are susceptible to significant changes in fish species composition as a result of small changes in temperature. Many of these streams support runs of potamodromous species (migrate fresh water to fresh water)

such as steelhead and Chinook salmon. Major threats to these systems include beaver dams, undersized culverts, and sedimentation. These special features are primary attributes for this MA.

- Ownership – The state land is spread out in smaller blocks. Land within this MA is managed by the Sault Management Unit.

Major Cover Types

- Aspen – Covers 8,080 acres in this MA. Aspen stands make up the largest cover type, and aspen species occur in other cover types. Active aspen management has occurred in the past, with over half of all stands in the 0-29 year age classes.
- Cedar – Found on 4,702 acres in this MA. Most of the Northern White Cedar is older age classes, generally 60 to over 100 years old. In many places cedar is difficult to regenerate due to low snow accumulation and subsequent deer browsing.
- Upland Hardwoods – There is a variety of site conditions for upland hardwoods, which is found on 3,186 acres in the MA. Regeneration of the most edible types can be a problem on sites near deer yards. Most of these acres are in all-aged stands, represented by seedlings through large overstory trees.
- Mixed Swamp Conifers – Of the 1,727 acres in this cover type, most tend to be older stands, for the same reasons as with northern white cedar.
- Lowland Brush – Lowland brush occurs on 1,726 acres, including areas associated with beaver activity or seasonal flooding.
- Paper Birch – Of the 1,091 acres of paper birch, very little is in any young age class with most in older age classes. In some areas the presence of birch can be a result of the fire history associated with humans.
- Lowland Poplar – Covers 1,059 acres in this MA. This type can consist of balsam poplar and trembling aspen, often in association with balsam fir. The age classes are fairly well distributed, although with less acreage in the 30-59 year age classes.
- Grass – There are 1,012 acres of grassy openings, which are important for a number of wildlife species.

Huron Patterned Outcrop			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	8080	30%	1252	1036	1883	488	180	801	752	1201	194	179	85	29
Cedar	4702	18%	0	0	0	32	0	0	187	285	533	896	2621	148
Upland Hdwds	3186	12%	0	8	0	0	17	0	15	42	16	0	0	3088
Mx Swmp Cnfr	1727	6%	0	0	0	45	86	0	117	308	39	111	1021	0
Lowlnd Brush	1726	6%	0	0	0	97	0	0	0	79	4	5	0	0
Paper Birch	1091	4%	45	0	0	0	0	0	94	446	320	123	63	0
Lowlnd Poplrr	1059	4%	113	262	129	0	22	45	152	181	0	47	108	0
Grass	1012	4%	0	0	0	0	0	0	0	0	0	0	0	0
Spruce Fir	906	3%	115	50	61	47	60	0	196	159	43	161	9	5
Marsh	707	3%	0	0	0	0	0	0	0	0	0	0	0	0
Red Pine	543	2%	0	0	179	20	155	9	0	0	0	0	159	21
Swamp Hrdwds	522	2%	0	14	0	0	0	41	9	199	95	0	0	164
White Pine	458	2%	0	0	24	54	0	0	0	23	12	11	191	143
Water	408	2%	0	0	0	0	0	0	0	0	0	0	0	0
Other Type	522	2%												
Total		26,649												

Other Types include: Oak, Black Spruce, Hemlock, Non stocked, Treed Bog, Upland Brush, Bog or Marsh, Tamarack, Upland Mixed Deciduous, and Jack Pine

Concepts of Management

- Aspen (30% of the MA) - Where possible manage for a balanced age distribution, harvesting accessible older age classes first. Consider upland game management strategies for species such as hare, ruffed grouse, deer and woodcock.
- Cedar (18% of the MA) - The primary management goal will focus on providing critical winter habitat for white-tailed deer within yards. Harvest will be limited to assure that a closed canopy structure is maintained but will be considered where deer yard habitat is not impacted and cedar regeneration is likely.
- Upland Hardwoods (12% of the MA) - Single tree management should be considered where timber quality is good. Where the site quality is good and tree quality is poor consider group selections, shelterwoods and other even age techniques. Retention of dead and down wood, snags, and cavity trees are essential for wildlife in this type. Where possible, under plant oak and disease resistant beech to provide hard mast.
- Mixed Swamp Conifers (6% of the MA) - Where access and regeneration success allow, work toward balancing the age distribution. Consider wildlife species needs prior to treatment.
- Lowland Brush (6% of the MA) - These are often areas of seasonal flooding, sometimes cause by faulty water control structures. Work with other agencies to assure proper drainage.
- Paper Birch (4% of the MA) - Consider the use of prescribed fire and scarification to encourage regeneration of paper birch. Continue to work towards balancing the age class distribution. Retain stands along the lakeshore to provide foraging habitat for neo-tropical migrants.
- Lowland Poplar (4% of the MA) - Continue to work towards balancing the age class distribution. Older inaccessible stands will succeed to more shade tolerant species.
- Grass (4% of the MA) - Consider the use of fire and other strategies to maintain acres of desirable openings. Work toward consolidating smaller openings to create larger openings to provide for open-land species requirements.
- Other - ERA's should be managed to protect and enhance their natural vegetative and wildlife communities, as directed by site-specific management plans for each ERA.