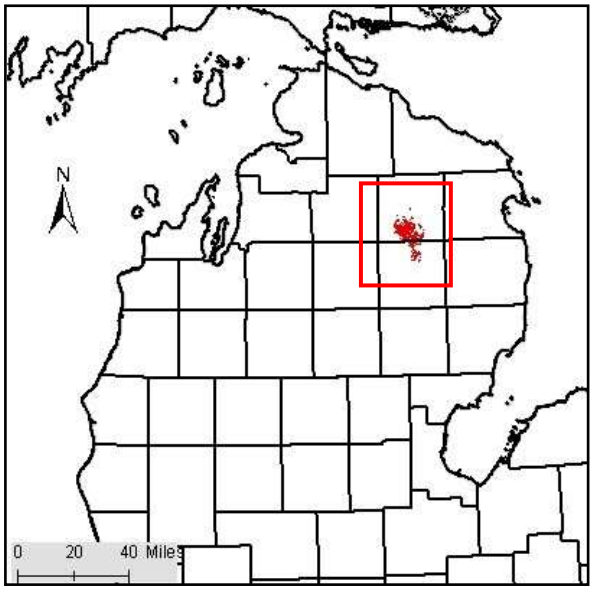
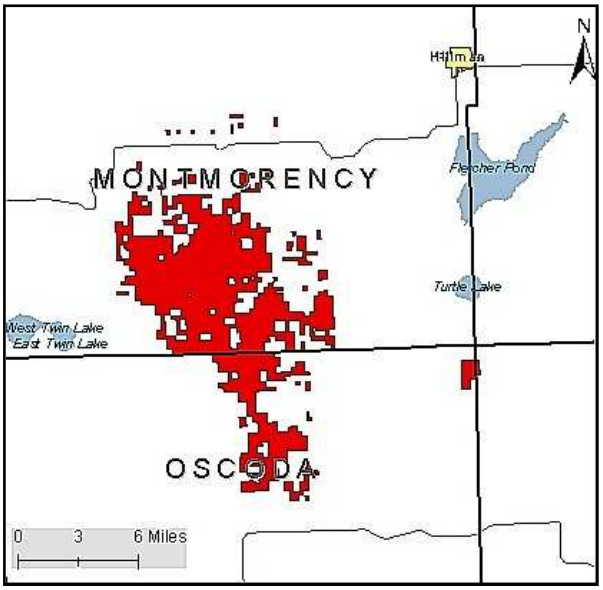
Avery Hills Management Area





Attributes

The Avery Hills Management Area management area is located in southern Montmorency County and northern Oscoda County and has approximately 45,000 acres of State Forest land. The primary attributes which were important in identifying this MA include:

- Ecological Classification - The MA falls within the Vanderbilt Moraines 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. The current vegetation composition is primarily aspen, oak and upland hardwoods with 9% in relatively inaccessible lowland cover types.
- Landforms - The dominant landform consists of sandy, well drained moraine ridges surrounded by poorly drained outwash channels and plains.
- Ownership size and connectivity – The state land in this management area is fairly concentrated.
- Social and Economic – This MA is a popular area for game hunting, hiking, mushroom hunting, etc. for the nearby communities of Atlanta, Comins, and Mio. The DNR Hunt Creek Fish Laboratory, Greasy Creek Grouse Management Area, Sage Lake Flooding, and Lunden Game Refuge are located in this MA. Antrim gas development is extensive.

Major Cover Types

- Aspen – There are over 20,000 acres in the MA, with some of the highest quality aspen in the Atlanta FMU. Only 7% of the aspen is over age 60 which indicates recent intensive management.

- Oak – About 88% of the 8,200 acres of oak is over 80 years of age. The medium quality oak sites are not regenerating well due to red maple competition. As evidenced by residual stumps, red and white pine have historically dominated this area.

- Northern Hardwoods/Upland Hardwoods – There are approximately 6,500 acres of fairly good quality upland hardwoods that are beginning a transition to an uneven-aged structure. Approximately 22% of the hardwood acres are at a density where thinning harvests could be prescribed.

- Red Pine – About 80% of the 1,500 acres are over age 50, with the largest spike between 50-69 years of age. There has been very little red pine regeneration over the past 50 years.

- Jack Pine – There are about 1,000 acres of jack pine with about 750 acres in the 40–60 age class.

- Upland Brush/Grass – Grass and upland brush totals 2,500. This is a result of the past management practices or natural processes of fire, frost or other disturbances which create openings in the forest canopy along with maintenance treatments to keep areas open

Avery Hills			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	19,200	43%	468	2,651	4,418	4,918	5,144	334	95	289	719	19	0	145
Oak	8,173	18%	0	131	55	307	80	0	194	1,345	3,627	2,196	97	141
Upland Hardwoods	6,526	15%	0	154	201	316	290	54	60	82	258	23	40	5,048
Cedar	1,548	3%	0	0	0	0	0	0	90	27	69	793	498	71
Red Pine	1,504	3%	29	0	8	4	249	222	374	154	78	119	178	89
Mixed Swamp Conifers	1,368	3%	0	0	0	8	44	0	34	353	180	170	174	405
Lowland Poplar	1,067	2%	30	80	128	158	447	28	33	113	48	2	0	0
Jack Pine	989	2%	0	28	42	195	336	217	101	30	17	23	0	0
Grass	1,339	3%												
Upland Brush	989	2%												
Water	274	1%												
Other Types	1,656	4%												
Total	44,633													

Other Types include: White Pine, Marsh, Swamp Hardwoods, Lowland Brush, Spruce-Fir, White Birch, Upland Mixed Conifers, Tamarack, Bog, Sand Dune, and Hemlock.

Concepts of Management

- Aspen (43% of the MA) – Following silvicultural criteria, continue final harvests to maintain the current amount of aspen and balance the age class distribution of aspen, especially in the 50–59 year age class. Allow selected areas of older or inaccessible aspen to succeed to more shade-tolerant species. Expect future aspen acreages to decline as more accurate inventory is conducted.

- Oak (18% of the MA) – Utilize regeneration harvests, especially in the age classes above 70 years of age. Where appropriate, under-plant red and white pine to achieve a mixed oak-pine type. Conduct prescribed burns to stimulate oak regeneration and to minimize competition from red maple. Follow best management practices to minimize damage on steep slopes during management operations.

- Upland Hardwoods (15% of the MA) - Continue single-tree selection management of upland hardwoods to develop uneven-aged stand structure.

- Upland Brush/Grass (5% of the MA) - Continue opening maintenance by prescribed burning or brush removal to sustain upland brush/grass. Acreage levels are expected to be

maintained or may slightly decrease based on natural succession to thinly stocked pine or other species.

- Red Pine (3% of the MA) – Following the Red Pine Management Guidelines, address the age class spike of red pine and trough of regeneration. Harvest aggressively in the age class spikes between 40-69 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.

- Jack Pine (2% of the MA) – Increase harvest in the 70-79 year age class. Continue to balance the distribution of the 0-69 year age classes through harvests of the older age classes and regeneration through planting or natural regeneration.