APPENDIX C. MANAGEMENT INDICATOR HABITATS

This appendix provides more detailed description of Management Indicator Habitats (MIH).

Table APP-C1 describes MIHs in terms of forest types.

APP-C1. Management Indicator Habitats: forest types.		
#	**Management Indicator Habitat**	**Description and Forest types (Code in Forest Service Data Base)**
1	Upland forest	All upland forest types: jack pine (01), red pine (02), white pine (03), balsam fir-aspen-birch (11), spruce-fir (16), black spruce-jack pine (17), northern hardwoods, including oak and maple (50s, 80s), aspen (91), paper birch (92), bigtooth aspen (93), balsam poplar (94), 95 (aspen-spruce-fir)
2	Upland deciduous forest	All upland deciduous and deciduous-dominated mixed forest types: (50s, 80s, 91, 92, 93, 94, 95)
3	Northern hardwood and oak forest	All northern hardwood and oak forest types: (50s, 80s)
4	Aspen-birch and mixed aspen-conifer forest	All aspen, birch, and aspen-dominated aspen-birch-conifer mixed forest types: (91, 92, 93, 94, 95)
5	Upland conifer forest	All upland conifer and conifer-dominated mixed forest types: (01, 02, 03, 11,16, 17)
6	Upland spruce-fir forest	All spruce-fir and spruce-fir-dominated mixed forest types: (11,16, 17)
7	Red and white pine forest	Both red and white pine forest types: (02, 03)
8	Jack pine forest	Jack pine forest type: (01)
9	Lowland black spruce-tamarack forest	All lowland conifer and lowland mixed conifer types dominated by black spruce or tamarack: (12, 15, 18)
10	Upland mature riparian forest	All upland mature or old forest types in Riparian areas; inner zone 0-100 feet and outer zone 100-200 feet: (01, 02, 03, 11,16, 17, 50s, 80s, 91, 92, 93, 94, 95)
11	Management-induced Edge Density Upland forest & Lowland forest	Edge density (miles/sq mile) of young upland (management indicator habitat 1) or lowland forest (management indicator habitat 9). This indicator does not include or measure inherent edge such as edges between forested lands and lakes, streams, non-forested lands.
12	Upland Interior forest habitat	Acres of forest interior in all mature and older upland forest patches of any size (see management indicator habitat 1 for forest types in upland forest). All forest patches were buffered inwardly with100 meter buffer.
13	Large patches of upland mature/old forest	Large (>300 acres) upland mature/old forest patches acres. (See management indicator habitat 1 for forest types in upland forest).
14	Aquatic habitats	These represent the wide variety of lakes, rivers, streams, pond, marshes or pools (permanent, intermittent, or seasonal) that provide habitat to wildlife.

Management indicator habitats are based on groupings of forest types in different age groupings. The age groupings are surrogates for ecological successional or vegetative growth stages. Because of the ecology of the different forest types, age grouping depends on forest type and was selected to best typify vegetative growth stages.

Table APP-C2 shows how each forest type is grouped.

APP-C2. Management Indicator Habitats: Age groupings for forest types.					
Forest Types and (codes)	Young (Seedling-open)	Sapling/ pole	Mature/ Old	Old/Old Growth	Old Growth Multi-aged
Jack pine (01)	0-9	10-39	40-59	60-79	80+
Red pine (02)	0-9	10-49	50-119	120-149	150+
White pine (03)	0-9	10-49	50-119	120-149	150+
Lowland black spruce-tamarack dominated conifers (12, 15, 18)	0-19	20-59	60-119	120-149	150+
White cedar (14, 19)	0-19	20-59	60-119	120-149	150+
Spruce/fir (11, 16, 17)	0-9	10-49	50-89	90-149	150+
Upland northern hardwoods (50s & 80s Sup)	0-9	10-59	60-119	120-149	150+
Upland northern hardwoods (80s Chip)	0-9	10-59	60-119	120-149	150+
Oak (50s Chip)	0-9	10-59	60-99	100-149	150+
Lowland northern hardwoods (70s)	0-19	20-59	60-119	120-149	150+
Aspen-birch and aspen-birch-conifer (91,92,93,94, 95)	0-9	10-49	50-79	80+	80+