# DNR

#### CADILLAC FOREST MANAGEMENT UNIT

#### COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 020 ENTRY YEAR: 2014

**County: Lake** 

Revision Date: 10/08/2012 11:22 AM

Stand Examiner: Cheryl Nelson, Forester

**Legal Description:** T18N R12W, Sec. 3-5, 8-10, 15-17

Management Goals: Mixed use.

**Soil and Topography:** Croswell sand, Tawas-Roscommon association, Rubicon sand, Grayling, Augras-Finch sands, Montcalm-Grayling complex. The swamp portion of this compartment is mostly flat with scattered finger ridges of higher ground. There are some hilly areas on the swamp edges.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is predominately state-owned land. The state land is generally in large blocks. The private ownership is mostly hunting type land which is undeveloped. The following parcels are recommended for acquisition if they become available for sale: Any private parcels that becomes available on the swamp edges that will give us better access to the interior of the swamp. Any parcel that has the Baldwin River or Cole Creek running through it.

Unique, Natural Features (include only non-site specific and non-sensitive information): E. Massasauga recorded in section 5 and just south of section 17. Eastern box turtle to the south of section 16. Potential for the E. Massasauga, wood turtle, spotted turtle, eastern box turtle and blanding's turtle along the Baldwin River and the North Branch Cole Creek. Potential for red-shouldered hawk and goshawk. Potential for ram's head, limestone oak fern and calypso in mixed swamp conifers and northern white cedar types.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** Parts of this area are old hay fields from the early 1900's. At one time there were numerous shingle and saw mills surrounding the swamp. There is no evidence of these mills today. On occasion the sites of old trapper's cabins can still be found on the swamp edge. There are three archaeological sites recorded in Section 5. In Section 15 there are 10 sites. All of these sites appear pre-historic.

**Special Management Designations or Considerations:** This area is isolated and rather inaccessible. Visual management is not much of a constraint except along King's Highway and Wide Waters Road. The streams and their headwaters will be protected and their integrity maintained. There are no plans to improve the access to the interior of the Baldwin-Luther swamp. The Big Springs area was acquired from the Topping Family in 1992.

**Watershed and Fisheries Considerations:** The Baldwin River and Cole Creek flow through Compartment 20. Cole Creek is a tributary of the Baldwin River, and the Baldwin River is a tributary to the Pere Marquette River. Both are very high quality trout streams, with populations of resident brook trout and brown trout, as well as migratory populations of steelhead, Chinook salmon, and coho salmon. As the Pere

Marquette River is a State-Designated Natural River, there is a 50' natural vegetation cutting setback on both the Baldwin River and Cole Creek. Also Fisheries Division recommends managing for species other than young aspen along small trout streams like the Baldwin River and Cole Creek, in order to discourage beaver activity. Beavers have the potential to seriously degrade small trout streams like those in Compartment 20. (M. Tonello 9/25/12)

Wildlife Habitat Considerations: The Baldwin-Luther Swamp is a large component of this compartment. It is a proposed management area for eastern massasauga rattlesnake under the Draft Candidate Conservation Agreement with Assurances between MDNR and the U.S. Fish and Wildlife Service, which provides guidelines for management. In addition, it is a core area for bear populations in this southern part of the Baldwin Bear Management Unit, and an important deeryard area. Heavy concentrations of deer during the winter and spring cause serious regeneration problems for oak and aspen management on the uplands surrounding the swamp. Regeneration of swamp conifers is a concern as high water tables, wind throw, and past beaver flooding have resulted in a conversion to ash and cattails. White pine is rapidly coming into the understory of many of the oak stands on the perimeter of the swamp. The capability to regenerate oak is a major management concern in this compartment not only because of the loss of acorn production around the swamp complex but by the replacement of the timber type by white pine. Featured species guidance will be considered for American woodcock, beaver, black bear, eastern massasauga rattlesnake, mallard, pileated woodpecker, red-headed woodpecker, ruffed grouse, snowshoe hare, turkey, white-tailed deer, and wood duck. (E. Victory 9/2012)

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Pennsylvanian Saginaw Formation and the Mississippian Bayport Limestone. The Saginaw is quarried for clay/shale products and the Bayport for limestone in other areas of the State. The County gravel pit is located in Section 10. Another gravel pit is also located 1.5 miles south of the compartment and potential is considered good especially the upland areas. The Compartment to the east is partially leased. A Devonian well is/was drilled just south of the compartment. The results are unknown.

**Vehicle Access:** A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

**Survey Needs:** Corners needed for T18N R03W Section 3, SWNW

Recreational Facilities and Opportunities: Recreational Facility Considerations: The Tin Cup Springs ORV route, motorcycle trail, motorsport trailhead, and undesignated equestrian trail are in the Northeast corner of this compartment. The motorcycle trail is under Directors Order prohibiting vehicular use by ORV's larger than a motorcycle. Management considerations along this cycle trail should include tools that will keep the trail tread narrow. Both the Tin Cup Route and cycle trail are heavily used motorsport areas. The undesignated, but field marked equestrian trail is used primarily by local horse enthusiasts via an event permit. This local group voluntarily maintains the trail. The department is developing a statewide trails plan, including an equine trails subcommittee which will review existing and potential opportunities to expand equestrian trails on a statewide basis. If the trails plan suggests a need for developed equine trail in this compartment, the process would include discussions/approvals from all Divisions prior to implementation. A designated equine trailhead would be needed to segregate ORV staging from horse staging. Timber management activities should include trail protection specifications for both the motorsport and horse trails,

while also serving as an example of how sound timber harvesting methods can co-exist, and often improve recreation and wildlife experiences for future generations. (T.M.N. 8-28-12)

**Fire Protection:** Historically fire has not been much of an issue as limited access to forest users keeps fires down. Suppression access for wildfire is a concern, however, as most of the area west of Kings Highway is very wet and composed of marsh grass fuels. The marsh area is divided by the Baldwin River, making this area difficult to access with fire suppression trucks. During a dry period we could see muck fire potential. Most suppression may be by hose lays and handwork. (BET 8-1-12)

#### **Additional Compartment Information:**

#### The following 9 Inventory reports from are attached:

- ◆ Table 1 Cover Type by Age Class
- ◆ Table 2 Treatment Type Summary
- ◆ Table 3 Treatments with No Limiting Factors
- ◆ Table 4 Treatments with Limiting Factors
- ◆ Table 5 Out of YOE Treatments (when applicable)
- ◆ Tables 6 & 7- Forested and Nonforested stands
- ◆ Tables 8 & 9 Proposed and Dedicated Special Conservation Areas

# The following information is displayed, where pertinent, on the attached compartment maps:

- ♦ Base feature information, stand numbers, cover types
- ♦ Proposed treatments
- ♦ Suggested potential and current SCA's

Compartment 020 Year of Entry 2014

Cadillac Mgt. Unit
Cheryl Nelson : Examiner



#### Age Class

						Age	J1055									
		000	\$2.00 / S	, c.t.	, S	O. C.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	8 /	, p. / .	\$ 6	85.	80,00,12	87.70	0 Ju	85 / X	, do
Aspen	14	221	114	233	107	19	22	5	0	0	0	0	0	0	734	[
Bare/Sparsely Vegetated	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	ĺ
Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	ĺ
Cedar	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	ĺ
Cropland	75	0	0	0	0	0	0	0	0	0	0	0	0	0	75	İ
Herbaceous Openland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15	ĺ
Jack Pine	0	18	16	32	0	0	11	0	0	0	0	0	0	11	87	ĺ
Low-Density Trees	49	0	0	0	0	0	0	0	0	0	0	0	0	0	49	İ
Lowland Aspen/Balsam Poplar	0	0	0	0	8	7	18	0	0	0	0	0	0	0	32	İ
Lowland Conifers	0	11	0	0	0	10	25	46	201	0	0	561	0	7	862	İ
Lowland Deciduous	0	27	0	4	57	676	53	11	0	0	3	0	0	0	830	İ
Lowland Mixed Forest	0	0	0	0	85	185	0	0	0	0	0	0	0	0	271	ĺ
Lowland Shrub	615	0	0	0	0	0	0	0	0	0	0	0	0	0	615	İ
Marsh	590	0	0	0	0	0	0	0	0	0	0	0	0	0	590	İ
Mixed Upland Deciduous	0	46	10	50	0	8	9	0	0	120	99	0	0	0	343	İ
Natural Mixed Pines	0	0	17	3	0	0	1	0	0	0	4	0	0	0	25	İ
Northern Hardwood	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	İ
Oak	0	19	0	0	0	0	0	0	0	79	134	18	0	0	249	İ
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	İ
Treed Bog	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	İ
Upland Conifers	0	0	0	0	0	0	0	2	12	0	0	0	0	0	15	ĺ
Upland Mixed Forest	0	0	0	3	17	18	3	0	0	13	0	0	0	0	54	ĺ
Upland Shrub	76	0	0	0	0	0	0	0	0	0	0	0	0	0	76	ĺ
Upland Spruce/Fir	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	ĺ
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	ĺ
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
White Pine	0	0	0	4	34	0	0	20	0	0	0	0	0	0	58	ĺ
Total	1466	341	157	331	308	924	141	83	222	212	240	578	0	18	5022	



#### **Table 2 – Proposed Treatment Summaries**

Cadillac Mgt. Unit

Compartment 020 Year of Entry 2014 **Total Compartment Acres: 5022** 

#### **Acres by Treatment Type**

Commercial Harvest - 451 Site Prep - 0 Tree Planting - 93 Prescribed Burn - 0 Other - 11

Habitat Cut - 13 Opening Maintenance - 0 Tree Seeding - 0 Pesticide - 0

#### **Cover Type by Harvest Method**

			COV	ei iy	De Dy i	iai ves	ot ivicti	iou	
		/ (	**************************************	10 S	N. S. S.	New Oo	Children Of the Control of the Contr		A CONTRACTOR OF THE PROPERTY O
Aspen		22	0	21	0	0	0	43	
Jack Pine		11	0	0	0	0	0	11	
Lowland Aspen/E	Balsam Poplar	24	0	0	0	0	0	24	
Lowland Deciduo	ous	54	0	0	0	0	0	54	
Mixed Upland De	ciduous	0	0	95	30	8	0	132	
Oak		8	0	76	81	0	0	166	
Upland Mixed Fo	rest	17	0	18	0	0	0	35	
	Total	136	0	209	111	8	0	464	

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

OF NATU	RAC
14	1/6
DNR	ROE
MICHIG	AN .
nrove	, I

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	63020002-Cut	10.6	42120 - Planted Jack Pine	High Density Pole	63	51-80	Harvest	Clearcut with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal

Prescription Clearcut with reserves. Retention in the form of individual to groups of trees averaging 10 BA.

Specs:

s

Other\_ Jack pine has three distinct age classes. Some decline in stand.

Comments:

<u>Next</u> Prescribed burn to promote a jack pine barren.

Steps:

**Proposed** 

Start Date: 10/01/2013

4139 - Aspen, 25 63020025-2.4 81-110 Seed Tree with Cmpt. Review 4131 - Aspen, Oak High 54 Harvest East-Cut Density Reserves Mixed Deciduous Proposal Pole

Prescription Cut all species. Mark to leave a mix of species averaging 10-20 BA. Use understory shrub protection spec in timber sale. Acceptable regen is a

mix of upland deciduous species. Specs:

<u>Other</u>

Comments:

<u>Next</u> Steps:

**Proposed** 

10/01/2013 Start Date:

63020025-8.6 25 4131 - Aspen, Oak High 54 81-110 Harvest Clearcut 4139 - Aspen, Cmpt. Review West-Cut Density Mixed Deciduous Proposal Pole

Prescription Clearcut stand. No retention due to woodcock initiative. Use understory shrub protection spec in timber sale. Acceptable regen is a mix of

upland deciduous species. Specs:

Other

Comments:

Next Steps:

Proposed

10/01/2013 Start Date:

63020028-Cut 51-80 Cmpt. Review 28 3.4 6119 - Mixed High 44 Harvest Clearcut with 6117 - Lowland Lowland Deciduous Density Log Reserves Deciduous, Mixed Proposal Coniferous

Forest

Prescription Wildlife habitat cut. Cut all species except, do not cut any cedar/hemlock.

Specs:

Other\_ Wildlife habitat cut. Treatment acres may vary slightly from boundary.

Comments:

<u>Next</u> Steps:

**Proposed** 

10/01/2013 Start Date:

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

1	OF	NATU	EAT.
THE	γ.		180
PAR	DN	IR	V K
1/2	\		1.9
	MI	HIGP	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	63020034-Cut	8.2	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	57	51-80	Harvest	Seed Tree with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Mark to leave averaging 20-40 BA of healthy, large canopy oak and a mix of other species as necessary. Focus retention south of two track Specs:

adjacent to private land. Acceptable regen is a mix of deciduous species and jack pine.

**Other** Stand in decline. Average residual BA may be lower if decline increases before harvest.

Comments:

<u>Next</u> Regeneration survey.

Steps:

s

<u>Proposed</u>

10/01/2013 Start Date:

Cmpt. Review 63020053-Cut 4199 - Other Mixed 102 81-110 4199 - Other Mixed 53 5.7 High Harvest Seed Tree with **Upland Deciduous** Density Reserves **Upland Deciduous** Proposal

Pole

Prescription Mark stand to leave averaging 20-30 BA. Focus retention on edges of low areas. Acceptable regen is a mix of deciduous and coniferous

Specs: species.

Oak component in decline. Some scattered low areas of leafterleaf and tag alder. Stand densities and diameters vary throughout stand. Other\_

Comments:

Regeneration survey. <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

55 63020055-Cut 42 6117 - Lowland Medium 34 81-110 Harvest Clearcut 6112 - Lowland Cmpt. Review Deciduous, Mixed Density Proposal Aspen Coniferous Pole

Prescription Clearcut stand. No retention due to Woodcock Initiative. Acceptable regen in the form of upland mixed deciduous species.

Specs:

Other Comments:

Regeneration survey. Next

Steps:

Proposed

Start Date: 10/01/2013

130 63020130-Cut 14.6 6112 - Lowland High 60 81-110 Harvest Clearcut with 6112 - Lowland Cmpt. Review Reserves Proposal Aspen Density Aspen

Pole

Prescription Clearcut stand. Focus retention along boundary of wildlife stand to the east and lowland areas along western border. Do not cut any cedar/hemlock. Use shrub protection spec. in timber sale, as well as grouse spec. Acceptable regen is a mix of lowland mixed deciduous

<u>Other</u> If stand cannot be cut commercially due to wet conditions wildlife will habitat cut. Harvest acres may vary from treatment acres due to soil

conditions. Comments:

Regeneration survey. Next

Steps: <u>Proposed</u>

Specs:

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

1	OF	NATU	EAT.
THE	γ.		180
PAR	DN	IR	V K
1/2	\		1.9
	MI	HIGP	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
142	63020142-Cut	17.9	4310 - Pine, Oak Mix	High Density Pole	50	81-110	Harvest	Seed Tree with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Cut all jack pine, aspen, and red maple. Mark oak and white pine to cut. Average residual BA of 30-40 where possible. Oak in decline may Specs:

restrict higher BA's. Focus retention along private boundary. Acceptable regen in the form of a mixed deciduous and pine mix.

Other\_ Black oak age = 88.

Comments:

<u>Next</u> Regeneration survey.

Steps:

s

<u>Proposed</u>

10/01/2013 Start Date:

63020145-Cut High 6119 - Mixed 6.6 6112 - Lowland 55 51-80 Harvest Clearcut with Cmpt. Review 145 Aspen Density Reserves **Lowland Deciduous** Proposal Pole Forest

Prescription Clearcut with reserves. Focus retention along the western boundary with lowland and around the dispersed camp site adjacent to the two-track. Specs: Use grouse spec and understory shrub protection spec in timber sale. Acceptable regen is a mix of lowland deciduous species.

Comments:

Harvest in winter or dry summer. Dispersed campsite within stand. Other\_

Regeration survey. <u>Next</u>

Steps:

Proposed

10/01/2013 Start Date:

147 63020147-Cut 12.3 4125 - Black, N. Pin High 105 81-110 Harvest Shelterwood 4139 - Aspen, Cmpt. Review Mixed Deciduous Oak Density Log Proposal

Prescription Cut all aspen. Mark a mix of species to leave averaging 40-50 BA. Vary leave trees from individual scattered to small groups. Mark heavier along ridge tops. Focus retention along boundary of wildlife opening. Use grouse spec in timber sale. Acceptable regen in the form of upland Specs:

mixed deciduous species.

Other\_ Faded red paint from old timber sale that wasn't treated.

Comments:

Regeneration survey.

Next

Steps:

Proposed

10/01/2013 Start Date:

4310 - Pine, Oak 1-50 4191 - Mixed 63020149-Cut 17.3 Medium 48 Harvest Clearcut with Cmpt. Review 149 Mix Density Reserves **Upland Deciduous** Proposal with Conifer Pole

Prescription Clearcut. Mark a mix of species to leave averaging 10-20 BA. Do not cut oak regen under 6" DBH. Use grouse spec and understory shrub protection spec in timber sale. Focus retention along the two-track as well as the scattered low, wet areas. Acceptable regen is a mix of upland Specs: deciduous and coniferous species.

Other Two-aged jack pine. Old red line in stand from previously untreated timber sale. Species generally in pockets. Heavy oak regeneration in

pockets. Dead/dying oak within stand. Some scattered low, wet areas with willow throughout. Comments:

Steps:

Regeration survey. Next

<u>Proposed</u> Start Date: 10/01/2013

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

1	TOF NATURAL	
RYME		1
OEPA	DNR	7
1	MICHIGAN .	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
161	63020161-Cut	13.3	4130 - Aspen	High Density Pole	48	51-80	Harvest	Seed Tree with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal

Specs:

s

Prescription Clearcut in aspen zones. Do not cut cedar. Mark a mix of species to leave averaging 20-30 BA. Focus on retaining large canopy oak. Use understory protection spec. in timber sale. Focus retention along the southern edge of two-track. Acceptable regen is a mix of deciduous and

Other\_

Few cedar trees in stand that were not noted in stage 1 data.

Comments:

<u>Next</u> Steps:

<u>Proposed</u>

10/01/2013 Start Date:

63020164-Cut 12.7 164

4199 - Other Mixed **Upland Deciduous** 

High Density Pole

81-110 97

Harvest

Seed Tree with Reserves

4121 - Oak, Aspen Cmpt. Review

Proposal

Prescription Clearcut in aspen zones. Mark a mix of species to leave averaging 30-40 BA. Focus on retaining large canopy oaks, especially white oak.

Specs:

Focus retention along two-track, ORV route, and dispersed camping site. Use ORV protection spec and understory shrub protection spec in timbersale. Acceptable regen is a mix of upland deciduous species.

<u>Other</u> Comments:

Stand is a mix of species and diameters throughout. Areas were too small to create individual stands. Good amount of oak seedlings and saplings. Tin Cup Spring ORV route runs through stand.

Next Steps: Regeneration survey.

**Proposed** 

Start Date: 10/01/2013

63020170-Cut 9.3 6119 - Mixed Medium 55 81-110 Harvest Clearcut with 6119 - Mixed Cmpt. Review Lowland Deciduous Lowland Deciduous Density Log Reserves Proposal Forest Forest

Prescription Wildlife habitat cut. Do not cut any cedar/hemlock.

Specs:

Habitat cut. Other

Comments:

<u>Next</u> Steps:

<u>Proposed</u>

Start Date: 10/01/2013

> 63020173-13.4

Cut\_small

Harvest Clearcut with 4131 - Aspen, Oak Cmpt. Review Proposal Reserves

Prescription Clearcut in aspen zones. Mark to leave averaging 10-20 BA. Focus on retaining large canopy oaks. Do not cut any cedar/hemlock that may be in treatment area. Focus retention along the wildlife opening. Use understory shrub protection spec in the timber sale. Acceptable regen in the

form of upland mixed deciduous species.

Other Excellent single-stem oak regen up to 20' in areas around the wildlife deer exclosure. Scattered basswood and autumn olive. Some small

Comments: openings in stand.

<u>Next</u> Steps:

Specs:

<u>Proposed</u>

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

3	10	NA	TUR	1
ME	1	4	7	18
PAR	D	NR	Ė	1
19	/		$\overline{}$	19
e.	1	/CH	GAN	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
190	63020190-Cut	28.3	4126 - White, Black, N. Pin Oak	High Density Pole	98	141-170	Harvest	Seed Tree with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal

Prescription Clearcut all aspen. Do not treat along ridge tops. Mark a mix of species to leave averaging 20-40 BA. Focus lower BA's in poorer quality oak areas and open up around oak seedlings. Focus retention along ridge tops. Acceptable regen is a mix of upland deciduous species. Specs:

**Other** Valleys are of a poorer quality than ridges.

Comments:

<u>Next</u> Regeneration survey.

Steps:

s

<u>Proposed</u>

10/01/2013 Start Date:

Cmpt. Review 63020193-Cut 193 18.2 4126 - White. High 95 111-140 Harvest Shelterwood 4139 - Aspen, Black, N. Pin Oak Density Mixed Deciduous Proposal Pole

Prescription Clearcut in aspen zones. Mark a mix of species to leave averaging 30-40 BA. Focus on retaining large canopy oak. Focus retention along border with adjacent cedar/hemlock zones. Use ORV, Horse Trail, and understory shrub protection specs in timber sale. Acceptable regen is Specs:

mixed upland deciduous species.

Horse event trail goes thru stand. Tin Cup Spring ORV route and trail run through stand. Pockets of aspen within stand. Diameters and Other\_

Comments: densities vary slightly throughout stand. Old red line from patch cuts that weren't harvested can be seen in the stand.

Next Steps:

Proposed

10/01/2013 Start Date:

51-80 208 63020208-Cut 10.3 4126 - White, 105 Seed Tree with 4126 - White, Cmpt. Review High Harvest Black, N. Pin Oak Density Reserves Black, N. Pin Oak Proposal Pole

Prescription Cut all aspen. Mark a mix of species to leave averaging 20-30 BA. Focus retention along two-track. Acceptable regen is a mix of deciduous

Specs: species.

Other Low quality oak stand. Small pocket of aspen on the east side of stand.

Comments:

<u>Next</u> Regeneration survey.

10/01/2013

Steps:

Start Date:

Proposed

63020209-Cut 209 21.2 4191 - Mixed High 98 141-170 Harvest Seed Tree with 4199 - Other Mixed Cmpt. Review **Upland Deciduous Upland Deciduous** Proposal Density Reserves

with Conifer Pole

Prescription Clearcut aspen pockets. Mark to leave a mix of species averaging 20-30 BA where possible. Declining oak zones may not allow for this BA. Focus retention along ORV route and trail. Use ORV and understory shrub protection spec in timber sale. Acceptable regen is a mix of upland

deciduous species.

<u>Other</u> Tin Cup Spring ORV route and trail run through stand. Dead and dying oaks in pockets as well as individual trees throughout stand. Treatment

Comments: boundary may vary due to decline in stand.

<u>Next</u> Steps:

Specs:

**Proposed** 

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: Year of Entry

020	NTOF NATURAL
2014	DNR DNR

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
209	63020209- Cut_small_1_ small	5.9	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	98	141-170	Harvest	Seed Tree with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal

Specs:

s

Prescription Clearcut aspen pockets. Mark to leave a mix of species averaging 20-30 BA where possible. Declining oak zones may not allow for this BA. Focus retention along ORV route and trail. Use ORV and understory shrub protection spec in timber sale. Acceptable regen is a mix of upland

deciduous species.

Tin Cup Spring ORV route and trail run through stand. Dead and dying oaks in pockets as well as individual trees throughout stand. Treatment Other boundary may vary due to decline in stand. Comments:

Next Steps:

Proposed

10/01/2013 Start Date:

63020209-209 108 4191 - Mixed High 98 141-170 Harvest Seed Tree with 4199 - Other Mixed Cmpt. Review Density **Upland Deciduous** Reserves **Upland Deciduous** Proposal Cut\_small\_sm all\_1 with Conifer Pole

Specs:

Prescription Clearcut aspen pockets. Mark to leave a mix of species averaging 20-30 BA where possible. Declining oak zones may not allow for this BA. Focus retention along ORV route and trail. Use ORV and understory shrub protection spec in timber sale. Acceptable regen is a mix of upland

deciduous species.

Other\_ Tin Cup Spring ORV route and trail run through stand. Dead and dying oaks in pockets as well as individual trees throughout stand. Treatment boundary may vary due to decline in stand. Comments:

<u>Next</u> Steps:

Proposed

10/01/2013 Start Date:

63020217-Cut High 217 17.5 4126 - White 96 111-140 Harvest Seed Tree with 4126 - White Cmpt. Review Black, N. Pin Oak Reserves Black, N. Pin Oak Proposal Density Pole

Prescription Cut all aspen. Mark to leave a mix of species averaging 30-40 BA. Focus retention along two-track.

Specs:

Old gas well exploration site withing. Use this existing open area for sale landing. Other\_

Comments:

Next Regeneration survey.

Steps:

Proposed

10/01/2013 Start Date:

242 63020242-Cut 17.1 4126 - White, Low 106 51-80 Harvest Seed Tree with 4191 - Mixed Cmpt. Review Black, N. Pin Oak Density Log **Upland Deciduous** Reserves Proposal with Conifer

Prescription Cut all species except, mark a mix of species to leave averaging 10-20 BA. Use grouse spec in timber sale. Acceptable regen is a mix of upland deciduous and coniferous species. Specs:

Other Comments:

<u>Next</u> Regeneration survey.

Steps:

<u>Proposed</u>

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

- 22	108	NAT	JRA	
13	1	1	1	Š
RTA			12	100
EPA	DI	NR.	•	100
10			,;	1
	1	CHIG		

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
244	63020244-Cut	8.5	4124 - Red with White Oak	High Density Log	92 J	81-110	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Specs:

s

Prescription Clearcut. Mark a mix of species to leave averaging 20-30 BA. Stand has both red and black oak. Focus on retaining large canopy oaks and especially the higher quality red oaks. Open up around oaks. Treatment must meet 150' set back from N. Cole Creek. Focus retention along

northern border with Creek set back. Acceptable regen in the form of mixed deciduous with coniferous species.

Other\_ Comments:

<u>Next</u>

Regeneration survey.

Steps:

<u>Proposed</u>

10/01/2013 Start Date:

4139 - Aspen, 63020255-Cut 4199 - Other Mixed 81-110 Harvest 255 9.1 High 62 Shelterwood Cmpt. Review Density **Upland Deciduous** Mixed Deciduous Proposal Pole

Prescription Cut all aspen, red maple, and ash. Mark a mix of species to cut to an average residual BA of 30-40. Focus retention along cedar/hemlock zones to west. Do not cut any stray cedar/hemlock. Use understory shrub protection spec in timber sale. Acceptable regen is a mix of upland Specs:

deciduous and coniferous species.

<u>Other</u> Stand consists of varying age classes and diameters of aspen. West side appears to have been treated at some point but no record could be

Comments: found.

Next Steps:

Proposed

Start Date: 10/01/2013

256 63020256-Cut 35.1 4126 - White, High 104 141-170 Harvest Shelterwood 4199 - Other Mixed Cmpt. Review Black, N. Pin Oak Density **Upland Deciduous** Proposal Pole

Prescription Clearcut in aspen zones. Mark to leave a mix of species averaging 30-40 BA. Treatment must meet 150' set back from N. Cole Creek. Focus Specs: retention along northern edge of stand to help with buffer along slope to N. Cole Creek. Acceptable regen is a mix of upland deciduous species.

Treat approximately 1/2 of stand. Acreage may vary due to dead/dying oak in pockets. Decline is not as severe as in other stands in the Other

Comments: compartment.

<u>Next</u>

Regeneration survey.

Steps:

**Proposed** 

Start Date: 10/01/2013

260 63020260-Cut 37.3 6117 - Lowland 54 51-80 Harvest Clearcut with 6117 - Lowland Cmpt. Review High Density Deciduous, Mixed Reserves Deciduous, Mixed Proposal Coniferous Pole Coniferous

Prescription Clearcut. Do not cut any cedar, hemlock, and oak. Focus retention along western edge with cedar/hemlock zones. Use grouse spec and Specs: understory protection spec in timber sale. Acceptable regen is a mix of lowland deciduous and coniferous species.

Commercial or habitat cut. Treated acres will vary from stand boundary due to soil moisture. Other\_

Comments:

<u>Next</u> Steps:

<u>Proposed</u>

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
267	63020267-Cut	30.0	4191 - Mixed Upland Deciduous with Conifer	High Density Log	105	111-140	Harvest	Seed Tree with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Specs:

s

Prescription Cut all aspen. Mark a mix of species to leave averaging 10-20 BA where possible as small amount of decline may not make this possible is some areas. Focus on retaining higher quality oaks as well as large canopy oaks. Focus retention along two-track. Use understory protection spec in timber sale. Acceptable regen is a mix of upland deciduous and coniferous species.

Other Comments:

Break stand up. Surrounding clearcut patches have not regenerated as well as expected. Species densities and diameters vary throughout stand. Stand quality increases slightly to the west, few northern red oak in area. Some oak seedlings in areas with low BA. Few scattered supercanopy white and red pine. Small pockets of aspen in stand. Small pocket of red pine pulp in stand.

Next Steps: Regeneration spec.

Proposed

10/01/2013 Start Date:

267 63020267-20.8 4191 - Mixed High 105 111-140 4191 - Mixed Harvest Shelterwood Cmpt. Review Cut\_small Upland Deciduous Density Log **Upland Deciduous** Proposal with Conifer with Conifer

Prescription Cut all aspen. Mark a mix of species to leave averaging 30-40 BA where possible as small amount of decline may not make this possible is Specs: some areas. Focus on retaining higher quality oaks as well as large canopy oaks. Focus retention along two-track. Use understory protection spec in timber sale. Acceptable regen is a mix of upland deciduous and coniferous species.

Surrounding clearcut patches have not regenerated as well as expected. Species densities and diameters vary throughout stand. Stand quality Other increases slightly to the west, few northern red oak in area. Some oak seedlings in areas with low BA. Few scattered super-canopy white and Comments: red pine. Small pockets of aspen in stand. Small pocket of red pine pulp in stand.

<u>Next</u>

Regeneration spec.

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

63020273-Cut 4.9 4131 - Aspen, Oak High 111-140 Harvest Seed Tree with 4131 - Aspen, Oak Cmpt. Review Density Log Reserves Proposal

Prescription Cut all aspen and red maple. Do not cut any oak unless decline is present. Mark to leave red pine averaging 30-40 BA. Focus retention along ridge edge and two-track. Use understory shrub protection spec in timber sale. Acceptable regen is a mix of deciduous and coniferous species. Specs:

Other\_ Mature aspen on top of ridge. Slope too steep for equipment. Larger aspen beginning to fall out of stand. Small zones of red pine within stand. Comments: White pine and musclewood understory heavier as you head east.

<u>Next</u> Steps:

**Proposed** 

Start Date: 10/01/2013

63020279-Cut 8.1 4191 - Mixed High 107 81-110 Harvest Low Thinning 4191 - Mixed Cmpt. Review Upland Deciduous Density Log **Upland Deciduous** Proposal with Conifer with Conifer

Prescription Cut all aspen. Thin to an average of 50-60 BA. Open up around oak seedling/small saplings. Focus on removing low quality pine. Do not cut Specs: white pine 4.5" DBH and under.

Other\_ Comments:

White and red pine scattered and in pockets throughout. Heavy white pine understory.

<u>Next</u> Steps:

**Proposed** 

10/01/2013 Start Date:

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

	OF	NAT	RAI	
THE	7	4	7	3
EPAR	DN	IR	ď,	1000
6	·M	CHIG	M.	9
	_	MIG		

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
288	63020288-Cut	15.6	4126 - White, Black, N. Pin Oak	High Density Log		111-140	Harvest	Shelterwood	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Cut all aspen. Mark to leave a mix of species averaging 30-40 BA. Some decline in stand not make this possible in all areas. Focus on retaining large canopy oaks, especially white oak. Do not cut white pine under 4.5" DBH. Focus retention along King's Highway. Use understory Specs:

protections spec in timber sale. Acceptable regen is a mix of deciduous and coniferous species.

Other\_ Comments:

Good amount of black & white oak seedlings throughout stand. Oak diameters larger to SE portion of stand.

Regeneration survey. <u>Next</u>

Steps:

s

<u>Proposed</u>

10/01/2013 Start Date:

9 NF 63020009-41.8 3303 - Mixed Low Tree Planting Hand Plant 42120 - Planted Cmpt. Review **Plant Density Trees** Jack Pine Proposal

Prescription Plant to jack pine.

Specs:

Other\_ Comments:

<u>Next</u> Steps:

<u>Proposed</u>

Start Date: Unspecified

227 NF 63020227-6.2 3205 - Mixed Tree Planting Hand Plant 4191 - Mixed Cmpt. Review **Plant Upland Shrub Upland Deciduous** Proposal with Conifer

<u>Prescription</u> Plant to red pine. Avoid regenerating areas noted in comments.

Specs:

Other\_ Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Good aspen and oak regeneration.

Comments:

Next Steps:

Proposed

10/01/2013 Start Date:

3205 - Mixed NF\_63020239-Cmpt. Review 239 96 Tree Planting Hand Plant 4191 - Mixed **Plant** Upland Shrub **Upland Deciduous** Proposal with Conifer

Prescription Plant to red pine.

Specs:

Other Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Oak seedlings heavy in oak areas. Regen by road is poor and mostly

Comments: blackberries/raspberries.

<u>Next</u> Steps:

Proposed

Unspecified Start Date:

## Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

with Conifer

2	105	NAT	URA	\
TAME	1	4	1	
EPAR	D	NR	•	100
1	1	ИСНИ	GAN	/

t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
268	NF_63020268- Plant	11.6	3205 - Mixed Upland Shrub				Tree Planting	Hand Plant	4191 - Mixed Upland Deciduous	Cmpt. Review Proposal

Prescription Plant to red pine. Avoid regenerating areas noted in comments.

<u>Specs</u>

s

Other Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak, aspen, and black cherry regeneration.

Comments:

Next Steps:

<u>Proposed</u>

Start Date: 10/01/2013

271NF\_63020271-6.53205 - MixedTree PlantingHand Plant4191 - MixedCmpt. ReviewPlantUpland ShrubUpland DeciduousProposalwith Conifer

<u>Prescription</u> Plant to red pine. Avoid regenerating areas noted in comments.

Specs:

Other Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak, aspen, and black cherry regeneration.

Comments:

Next Steps:

**Proposed** 

Start Date: Unspecified

272NF\_63020272-3.43205 - MixedTree PlantingHand Plant4191 - MixedCmpt. ReviewPlantUpland ShrubUpland DeciduousProposalwith Conifer

<u>Prescription</u> Plant to red pine. Avoid regenerating areas noted in comments.

Specs:

Other Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak and black cherry regeneration.

Comments:

Next Steps: Proposed

Start Date: 10/01/2013

277 NF\_63020277- 5.2 3205 - Mixed Tree Planting Hand Plant 4191 - Mixed Cmpt. Review Upland Shrub Upland Shrub Upland Shrub with Conifer

<u>Prescription</u> Plant to red pine. Avoid regenerating areas noted in comments.

Specs:

Other Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak and black cherry regeneration.

Comments:

Next Steps:

<u>Proposed</u>

## Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 020 Year of Entry 2014

**Upland Deciduous** 

with Conifer

DNR DNR DNR	
Approval	

Proposal

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
286	NE 63020286-	0 1	3105 - Miyed				Tree Planting	Hand Plant	4101 - Miyed	Cmnt Review

<u>Prescription</u> Plant to red pine. Avoid regenerating areas noted in comments.

Specs:

s

Other Scattered areas of good oak, aspen, and black cherry regeneration.

Upland Herbaceous

Comments:

Next Steps: Proposed

<u>Start Date:</u> 10/01/2013

**Total Treatment** 

Plant

Acreage Proposed: 552.4

Cadillac Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 020 a Limiting Factor s Year of Entry 2014 t а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment** Cover Type **Approval** n Method Objective Status Name **Density** Age Range Type d 63020148-Cut 2.4 6112 - Lowland High 44 51-80 Harvest Clearcut 6119 - Mixed Cmpt. Review 148 **Lowland Deciduous** Aspen Density Proposal Pole Forest Prescription Clearcut. Don not cut any cedar. No retention due to small acreage (2 acres) and shade concerns. Acceptable regen is a mix of lowland deciduous species. Specs: **Other** Low area. Restrict cutting to winter or dry summer. Wildlife will habitat cut if stand cannot be treated commercially. Comment: <u>Next</u> Steps: **Proposed** Start Date: 10/01/2013 Limiting Factor and No 2G: Too wet (sensitive soils, does not include access issues) **Treatment Reason** This area is part of the Baldwin-Luther swamp complex. The majority of the area is inaccessible to commercial harvest due to soil moisture and the Baldwin River and North Cole Creek running through the compartment. Some areas are accessible to wildlife habitat cutting. 242 63020242-2.5 4126 - White. 106 51-80 Harvest Seed Tree with 4191 - Mixed Cmpt. Review Iow Cut small 3 Black, N. Pin Oak Density Log Reserves **Upland Deciduous** Proposal with Conifer Prescription Cut all species except, mark a mix of species to leave averaging 10-20 BA. Use grouse spec in timber sale. Acceptable regen is a mix of upland deciduous and coniferous species. Specs: Other Comment: <u>Next</u> Regeneration survey. Steps:

Limiting Factor and No

**Treatment Reason** 

Proposed

Start Date:

Acreage Proposed: 4.9

10/01/2013

3J: Water quality / BMPs (stream,

river, or lake) Cedar/Hemlock zone.

# Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2014

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
	5.2	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
Prescription Specs:									
Other Comments:									
<u>Next</u> Steps:									
Proposed Start Date:									
	3.5	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
Prescription Specs:									
Other Comments:									
<u>Next</u> Steps:									
Proposed Start Date:									
	0.1	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
Prescription Specs:									
Other Comments:									
Next Steps:									
Proposed Start Date:									
	0.0	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
Prescription Specs:									F
Other Comments:									
<u>Next</u> Steps:									
Proposed Start Date:									

# Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2014

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63086083-Cut	10.2	4123 - Red Oak	High Density Log	80		Harvest	Shelter Wood with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

<u>Prescription</u> Mark red and white oak in groups reducing basal area down to an average of 30 sq.ft.(range from 20-50).

Specs:

Next Steps:

Other This is a natural continuation of stand 1 in Comp 79 (also prescribed).

Comments:

Follow harvest with roller chopping of red maple in gaps from previous harvest. Goal is to decrease red maple and cause enough scarification with harvest to create a seedbed for adjacent pine to seed in, as well as oak. Stump sprout oak is not expected, but would be welcome. Regen

survey per work instructions.

**Proposed** 

Start Date: 10/01/2013

**Total Treatment** 

Acreage Proposed: 19.0

S t	Cadillad	Mgt. Unit		5 – For	rested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	15.6	24	1-50	Stand planted to jack pine FTP #W-63-347
2	42120 - Planted Jack Pine	High Density Pole	10.6	Uneven Age	51-80	Stand has 3 distinct age classes. Overstory of ~63 year old logs, 34 year old pulp (planted per FTP#C-63-21), and ~20 year old sap/pulp. White pine in understory also.
6	6126 - Lowland Jack Pine	High Density Pole	32.0	33	51-80	Jack pine planted per FTP #C-63-21. Areas of leatherleaf throughout. Understory white pine heavy to east side of stand.
8	4310 - Pine, Oak Mix	High Density Pole	3.5	33		Upland ridge of planted jack pine with mature oaks. Jack pine planted per FTP #C-63-21 in 1979.
10	6126 - Lowland Jack Pine	High Density Pole	11.2	63	51-80	Two-track runs along upland ridge through center of stand.
11	42220 - Natural Jack Pine	High Density Sapling	17.6	16		Stand treated timber sale "Wide Waters Jack Pine", #63-014-94-01. Treated 1995. Regeneration is less dense to the very south of stand.
13	6119 - Mixed Lowland Deciduous Forest	High Density Pole	10.7	72	51-80	

Stand treated timber sale "High-Five Pine", #63-038-94-01.

Stand treated timber sale "High-Five Pine", #63-038-94-01. Treated 1996-1997. Released understory white pine.

18	6119 - Mixed Lowland Deciduous Forest	High Density Pole	3.9	62	81-110	Lowland deciduous with white pine in understory. Transitions to upland along boundry with private land.
22	6118 - Lowland Deciduous with Cedar	High Density Pole	16.2	52	81-110	Lowland hardwoods with cedar/hemlock zones. Some lowland shrubs.

High Density Sapling

11.0

15

6127 - Lowland Pine

17

S t				0 101	colou olu	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4131 - Aspen, Oak	High Density Pole	11.0	54	81-110	Sale boundary may vary due to low spots. Understory varies throughout stand depending on distace to lowlands with gray dogwood on edges.
28	6119 - Mixed Lowland Deciduous Forest	High Density Log	57.0	44	51-80	Mixed lowland deciduous forest with areas of tag alders, willows, and cattails. Small sized upland ridges scattered throughout.
29	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	33.1	75	1-50	
32	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	44.3	60		Mix of species varying in densities and diameters. Overall pulp sized Black Ash, BT Aspen, Red Maple, and Basswood. Conifer component of Black Spruce, Northern White Cedar, Hemlock, and White Pine. Small areas of cattail interspersed throughout.
34	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	8.2	57	51-80	Some low wet areas throughout especially to east side of stand. White pine pulp heavier to east side. Few aspen not in plots. Densities vary throughout stand but generally higher in oak/white pine mixed area.
35	4319 - Mixed Upland Forest	Medium Density Pole	8.5	98	51-80	Age estimate on hemlock. Hemlock, Cedar ridge with hardwoods. Some hemlock seedlings in stand.
38	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	34.8	116		Age estimate on cedar. Conifers with some lowland hardwoods.
39	4319 - Mixed Upland Forest	Medium Density Pole	4.4	98	111-140	Age estimate on hemlock. Hemlock, cedar ridge.
42	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	7.2	50		Age estimate on black ash.
44	6112 - Lowland Aspen	High Density Pole	5.5	45	111-140	Heavy white pine understory. Adjacent to private land.
45	6118 - Lowland Deciduous with Cedar	Medium Density Pole	24.8	50		Age estimate on black ash. Some tag alder and leatherleaf areas throughout.
47	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	78.3	116		Age estimate on cedar. Small ridges of cedar and hemlock.
49	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	65.4	116		Age estimate on cedar.
51	6129 - Mixed Coniferous Lowland Forest	High Density Pole	7.5	Uneven Age		Age estimate on cedar.
52	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	58.8	50		Age estimate on black ash.

Compartment: 020

Cadillac Mgt. Unit

S t	Cadillac Mgt. Unit			5 – Fo	orested Sta	Compartment: 020 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	4199 - Other Mixed Upland Deciduous	High Density Pole	5.7	102	81-110	Some scattered low areas of leafterleaf and tag alder. Stand densities and diameters vary throughout stand.
54	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	16.2	50		Age estimate on black ash. Lowland hardwoods with conifers and lowland brush.
55	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	4.2	34	81-110	Adjacent to private land.
58	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	81.8	50		Age estimate on black ash. Lowland hardwoods with cedar, white pine.
59	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	22.6	60		Age estimate on jack pine. Conifer component seems to be jack pine based on aerial photos. Conifers with lowland hardwood component.
60	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	2.2	60		Age estimate on jack pine. Conifer component seems to be jack pine and white pine based on aerial photos. Conifers with lowland hardwood component.
67	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	12.0	80		Age estimate on cedar. Some white pine super-canopy trees.
70	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	11.8	80		Age estimate on cedar. Cedar/hemlock zone with white pine and lowland hardwoods.
71	4199 - Other Mixed Upland Deciduous	Medium Density Pole	3.1	35	1-50	Upland edge along Twin Creek Rd.
72	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	15.8	50		Age estimate on black ash.
73	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	9.3	50		Age estimate on black ash. Lowland hardwoods with cedar and white pine.
<b>75</b>	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	20.5	80		Age estimate on cedar. Cedar with white pine and hardwoods.
76	4310 - Pine, Oak Mix	High Density Pole	2.7	66	81-110	Some scattered lowland spots w/tag alder.
77	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	4.3	50		Age estimate on black ash.
78	4130 - Aspen	Medium Density Pole	6.6	30		Age estimate on aspen based on aerial imagery (1998 imagery doesn't show heavy tree stocking but 2006 B&W shows standing timber). Aspen with white pine.

S t	Cadillac Mgt. Unit			0-10	nesteu ota	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
82	4125 - Black, N. Pin Oak	High Density Pole	1.8	108	81-110	Small pocket of aspen to east. Keep for age class/species distribution.
83	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	46.8	37	81-110	Leave for age class/species diversity.
85	4130 - Aspen	High Density Pole	3.3	50		Age estimate on aspen.
87	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	22.8	80		Age estimate on cedar. Lowland conifers (cedar, white pine) with hardwoods.
88	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	6.6	80		Age estimate on cedar. Cedar, white pine, lowland hardwoods.
90	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	6.5	50		Age estimate on black ash. Lowland hardwoods with conifer component and cattails.
95	6129 - Mixed Coniferous Lowland Forest	High Density Pole	72.3	116		Age estimate on cedar. Cedar, pine, lowland hardwoods.
96	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	9.4	50		Age estimate on black ash. Lowland hardwoods with cattails and cedar.
97	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	6.5	50		Age estimate on black ash. Lowland hardwoods with small amount of conifers. Cattails.
99	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	8.7	50		Age estimate on black ash.
101	4133 - Aspen, Mixed Pine	High Density Sapling	5.5	16		Stand treated timber sale #63-026-94-01, "Mosquite Coast Aspen".
102	4125 - Black, N. Pin Oak	High Density Pole	10.0	102	51-80	Good oak mast trees. White pine understroy heavier to the east of stand.
103	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	3.0	80		Age estimate on white pine. Transition zone to upland. Cattails in stand.
105	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	24.0	80		Age estimate on cedar. Cedar with white pine and lowland hardwoodsl
106	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	10.3	50		Age estimate on black ash. Lowland hardwoods with cedar and white pine.
109	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	30.8	116		Age estimate on cedar.

Compartment: 020

Cadillac Mgt. Unit

s t	Cadillac Mgt. Unit			0-10		Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
111	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	12.2	26	1-50	Stand treated timber sale #63-012-86-02, cut in 1986.
115	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	4.4	50		Age estimate on black ash. Lowland hardwoods with mixed conifers. Tag alder, cattail zones.
118	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	6.9	116		Age estimate on Cedar. Cedar with white pine and lowland hardwoods.
119	6129 - Mixed Coniferous Lowland Forest	High Density Pole	19.3	85	81-110	
120	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	54.1	50		Age estimate on black ash. Lowland hardwoods with occassional conifer. Tag alder and cattails mixed.
121	4130 - Aspen	High Density Pole	12.9	35	51-80	Stand treated in 1977 but timber sale paperwork could not be found. Current ring count matches with previous inventory age.
123	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	10.7	116		Age estimate on cedar. Cedar with black spruce, tamarack, white pine and lowland hardwoods.
124	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	6.9	116		Age estimate on cedar. Cedar with white pine and lowland hardwoods.
125	4125 - Black, N. Pin Oak	High Density Pole	9.6	102	51-80	Aspen heavier to the north.
126	4191 - Mixed Upland Deciduous with Conifer	Medium Density	2.1	25		Stand treated timber sale #63-027-87-01, "Aspen Clone 17".
128	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	9.9	50		Age estimate on black ash.
129	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	22.1	55		Age estimate on black spruce.
130	6112 - Lowland Aspen	High Density Pole	14.6	60	81-110	Varying diameter sizes and densities due to small cuts in past. Few scattered cedar, white pine. Good hawthorn component with moderate level of hawthorn seedlings throughout stand. Some areas of blackberries/raspberries.
131	6112 - Lowland Aspen	High Density Pole	3.4	60		Age estimate on Bigtooth Aspen from nearby stand.
132	4122 - Oak, Pine	High Density Pole	1.7	102	81-110	Small stand. Stand transitioning to white pine as hardwoods fall out.
134	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	135.0	116		Age estimate on white cedar. Cedar with white pine, other conifers, and lowland hardwoods.

Compartment: 020

Cadillac Mgt. Unit

s t	Cadillac Mgt. Unit			5 – Fo	orested Sta	Compartment: 020 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
135	4191 - Mixed Upland Deciduous with Conifer	Medium Density	1.3	25		Stand treated timber sale #63-027-87-01, "Aspen Clone 17".
136	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	11.8	50		Age estimate on black ash. Black ash, red maple, and white pine.
138	42390 - Mixed Non- Pine Upland Conifers	High Density Pole	11.3	88	51-80	Small amount of hawthorn on eastern edge of stand.
139	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	63.6	50		Age estimate on black ash. Lowland hardwoods with mixed conifers. Tag alder and cattail zones. Wetter zones scattered throughout stand.
140	42201 - Natural White Pine, Mixed Deciduous	High Density Pole	19.8	75		Age estimate on white pine. Lowland white pine with mixed conifers and hardwoods.
141	4199 - Other Mixed Upland Deciduous	High Density Sapling	7.1	25		Stand treated timber sale "King's Hwy Aspen", #63-026-87-01.  Excellent wildlife stand. Regenerating aspen and oak with a good mix of wildlife shrub species and densities. Moderate-high amount of hawthorn seedlings present. Flushed a cottontail rabbit.
142	4310 - Pine, Oak Mix	High Density Pole	17.9	50	81-110	Stand looks to have been treated previously however there is no record of this. Cored 10" JP = 42 rings, 5" JP = 24 rings.  Protect understory shrubs during harvest.
144	4131 - Aspen, Oak	Medium Density Log	6.2	45	81-110	Mostly pulp aspen. A few small areas of mature aspen in stand. Small amount of sassafras, white ash, and red maple.
145	6112 - Lowland Aspen	High Density Pole	6.6	55	51-80	Dispersed campsite within stand. Small acreage.
147	4125 - Black, N. Pin Oak	High Density Log	12.3	105	81-110	Stand surrounds wildlife opening.
148	6112 - Lowland Aspen	High Density Pole	2.4	44	51-80	Area trasitioning to lowlands.
149	4310 - Pine, Oak Mix	Medium Density Pole	17.3	48	1-50	Stand looks to have been treated previously however there is no record of this. Stand was set-up for treatment last entry but logger never finished sale.
150	4130 - Aspen	High Density Pole	9.1	25	51-80	Stand treated timber sale #63-026-87-01, "King's Hwy Aspen". Cut in 1987. Good oak single-stem regen especially on edges.
151	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	65.4	50		Age estimate on black ash. Lowland hardwoods with mixed conifer. Areas of lowland shrubs and cattails.
152	4130 - Aspen	High Density Sapling	9.6	25		Stand treated timber sale #63-005-86-01, "King's Hill". Treated in 1987.

s t	Cadilla	Cadillac Mgt. Unit			orested Sta	rinds Compartment: 020 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
153	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	37.2	116		Age estimate on Cedar. Cedar with black spruce, white pine, tamarack, and lowland hardwoods.
156	6132 - Mixed Lowland Forest with Cedar	High Density Pole	15.8	50		Age estimate on black ash. Lowland hardwoods with cedar, white pine, black spruce.
157	42290 - Natural Mixed Pine	High Density Pole	1.2	65	1-50	Deer exclosure to study browse effects on vegetation.
158	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	9.0	78	81-110	Age estimate on cedar.
160	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	3.7	78		Age estimate on white cedar.
161	4130 - Aspen	High Density Pole	13.3	48	51-80	Possibly leave stand untreated due to deer exclosure within stand.
162	4130 - Aspen	Medium Density	14.3	16		Stand treated timber sale #63-026-94-01. Treated in 1996.
163	6118 - Lowland Deciduous with Cedar	Medium Density Log	4.3	62	1-50	Lowland hardwoods. Black ash age = 62, Cedar age = 116.
164	4199 - Other Mixed Upland Deciduous	High Density Pole	12.7	97	81-110	Mix of species and diameters throughout stand with areas too small to create individual stands. Good amount of oak seedlings and saplings. Tin Cup Spring ORV route runs through stand.
166	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	14.2	55	51-80	Some areas with tag alder, gray dogwood, cedar, and black ash.
167	4131 - Aspen, Oak	High Density Pole	57.9	34	81-110	Stand treated under timber sale permit number 6-78. Treated in 1978. Occasional p-l white pine, black oak, and white oak. Excellent single-stem and clump sprout oak. Habitat cut in 1979 per FTP#W-63-30, residual aspen and mixed hardwoords were cut. Some trees were maked to save. Tin Cup Spring Trail runs along the eastern edge of stand.
168	4130 - Aspen	High Density Sapling	21.9	17		Stand treated timber sale #63-022-94-01, "Vulture Nest Aspen/Oak". Treated in 1995. Good amount of single-stem oak seedlings/saplings. Tin Cup Spring ORV route and trail run through stand.
169	4199 - Other Mixed Upland Deciduous	High Density Sapling	27.7	18		Stand treated timber sale #63-013-94-01. Excellent oak seedlings/saplings.
170	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	31.1	55	81-110	Occasional beech, yellow birch, white birch, and sugar maple. Tin Cup Spring Route runs through stand.
171	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	25.4	116		Age estimate on Cedar. Cedar with black spruce, white pine, tamarack, and lowland hardwoods.

S t	Cadillac Mgt. Unit			5 – Fo	orested Sta	rinds Compartment: 020 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
173	4131 - Aspen, Oak	High Density Pole	45.7	48	81-110	Treat portions of stand. Smaller sized aspen north of two-track, Excellent single-stem oak regen up to 20' on the south/southwest/western side of the deer enclosure, and to the west/southwest side of the wildlife opening. Scattered basswood and autumn olive. Some small openings in stand.
175	4131 - Aspen, Oak	High Density Pole	9.2	39	51-80	Stand treated timber sale permit #1-72. Treated in 1973. Occasional overstory red and white pine. Tin Cup Spring ORV route runs through stand.
176	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	19.2	116		Age estimate on Cedar. Cedar with black spruce, white pine, tamarack, and lowland hardwoods.
178	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	19.5	110		Age estimate on cedar. Cedar, hemlock, white pine, lowland hardwoods.
179	4126 - White, Black, N. Pin Oak	High Density Pole	3.0	102	111-140	Slightly higher qualilty oak.
182	4131 - Aspen, Oak	Low Density Sapling	13.8	5		Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Good single-stem and clump oak seedlings/saplings.
183	4131 - Aspen, Oak	Medium Density Pole	5.6	18		Stand treated timber sale #63-013-94-01. Small pole stand.
185	4130 - Aspen	High Density Pole	53.4	39		Stand treated timber sale permit #3-70. Treated in 1973. Some low, wet spots south of trail. Tin Cup Spring ORV route and trail run through stand.
186	42201 - Natural White Pine, Mixed Deciduous	Medium Density Pole	34.0	43		White pine with aspen.
187	4133 - Aspen, Mixed Pine	High Density Sapling	33.1	26		Stand treated timber sale #63-034-86-01. Sale specs read "Cut all jack pine and aspen trees. Do not cut any oak."
188	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	19.6	50		Lowland hardwoods with cedar and pine. Age estimate on black ash.
190	4126 - White, Black, N. Pin Oak	High Density Pole	28.3	98	141-170	Good amount of oak seedlings in spots. Valleys are of a poorer quality than ridges.
193	4126 - White, Black, N. Pin Oak	High Density Pole	18.2	95	111-140	Pockets of aspen within stand. Diameters and densities vary slightly throughout stand. Old red line from patch cuts that weren't harvested. Some oak seedlings above snow. Tin Cup Spring ORV route and trail run through stand.
194	4131 - Aspen, Oak	High Density Pole	13.6	44	51-80	Do not treat - keep for age class and species diversity. Nice upland stand amongst the lowland areas.
196	4130 - Aspen	High Density Pole	16.1	27	51-80	Stand treated timber sale #63-029-83-01, "Save the Oak". Treated in 1985.

Cadillac Mgt. Onit				or cottour otta	Year of Entry: 2014
Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4125 - Black, N. Pin Oak	High Density Pole	6.7	92	81-110	Heavy white pine in understory. Tin Cup Spring ORV trail in stand. Old red paint from previous patch cuts that were never cut.
4125 - Black, N. Pin Oak	Medium Density	18.9	12		Stand timber sale #63-218-94-01. Good oak regen in the form of single-stem and clumps, oak seedlings underneath regen. Dispersed hunting camp within stand. Tin Cup Spring Route runs along the eastern edge of stand.
4139 - Aspen, Mixed Deciduous	High Density Sapling	24.1	17		Stand treated timber sale #63-022-94-01, "Vulture Nest Aspen/Oak". Ridge of p-I oak runs north/south through center of stand.
6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	26.1	85		Age estimate on Cedar. Cedar, hemlock, white pine, lowland hardwoods.
4130 - Aspen	High Density Pole	13.3	39	81-110	Stand treated timber sale cut in 1973.
6118 - Lowland Deciduous with Cedar	High Density Pole	61.1	50		Age estimate on black ash. Lowland hardwoods with conifers.
6118 - Lowland Deciduous with Cedar	High Density Pole	9.4	50		Age estimate on black ash. Lowland hardwoods with conifers.
4131 - Aspen, Oak	High Density Sapling	6.5	19		Stand treated timber sale #63-013-93-01, "Hidden Aspen and Oak". Stand was included in timber sale with compartment 16 to the north. Scattered mature oaks left. Tin Cup Spring ORV route and trail run through stand.
4126 - White, Black, N. Pin Oak	High Density Pole	10.3	105	51-80	Lower quality oak stand. Small pocket of aspen on east side of stand.
4191 - Mixed Upland Deciduous with Conifer	High Density Pole	102.9	98	141-170	Tin Cup Spring ORV Trail and Route run through stand.
6118 - Lowland Deciduous with Cedar	High Density Pole	30.2	50		Age estimate on black ash. Lowland hardwoods with cedar, other conifers.
4131 - Aspen, Oak	High Density Sapling	12.5	16		Stand treated timber sale #63-033-94-01, "Indian Pipes Aspen/Oak". Treated in 1996. Regen heavier to south side of two-track.
6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	10.5	50		Age estimate on black ash. Lowland hardwoods with white pine.
4130 - Aspen	High Density Pole	14.8	17		Stand treated timber sale #63-022-94-01.
4131 - Aspen, Oak	High Density Sapling	9.4	27		Stand treated timber sale #63-033-85-01.
	Level 4 Cover Type  4125 - Black, N. Pin Oak  4125 - Black, N. Pin Oak  4139 - Aspen, Mixed Deciduous  6128 - Lowland Coniferous, Mixed Deciduous  4130 - Aspen  6118 - Lowland Deciduous with Cedar  4131 - Aspen, Oak  4191 - Mixed Upland Deciduous with Conifer  6118 - Lowland Deciduous with Conifer  4131 - Aspen, Oak  4191 - Mixed Upland Deciduous with Conifer  6118 - Lowland Deciduous with Conifer  6118 - Lowland Deciduous with Conifer  6118 - Lowland Deciduous with Conifer  6118 - Lowland Deciduous with Conifer  4131 - Aspen, Oak	Level 4 Cover Type  4125 - Black, N. Pin Oak  4125 - Black, N. Pin Oak  4139 - Aspen, Mixed Deciduous  4130 - Aspen High Density Pole  6118 - Lowland Deciduous with Cedar  6118 - Lowland Deciduous with Cedar  4131 - Aspen, Oak  4126 - White, Black, N. Pin Oak  4131 - Mixed Upland Deciduous with Conifer  6118 - Lowland Deciduous with Cedar  4131 - Aspen, Oak  4191 - Mixed Upland Deciduous with Conifer  6118 - Lowland Deciduous With Cedar  4191 - Mixed Upland Deciduous with Conifer  6118 - Lowland Deciduous With Conifer  4191 - Mixed Upland Deciduous With Conifer  6118 - Lowland Deciduous With Cedar  High Density Pole  4131 - Aspen, Oak High Density Sapling  6128 - Lowland Coniferous, Mixed Deciduous  High Density Pole  4130 - Aspen High Density Pole  4131 - Aspen, Oak High Density Pole	Level 4 Cover Type  Bize Density  Acres  4125 - Black, N. Pin Oak  4125 - Black, N. Pin Oak  Acres  4125 - Black, N. Pin Oak  4139 - Aspen, Mixed Deciduous  4130 - Aspen High Density Pole  4130 - Aspen High Density Pole  4131 - Aspen, Oak	Level 4 Cover Type         Size Density         Acres         Stand Age           4125 - Black, N. Pin Oak         High Density Pole         6.7         92           4125 - Black, N. Pin Oak         Medium Density         18.9         12           4139 - Aspen, Mixed Deciduous         High Density Sapling         24.1         17           6128 - Lowland Coniferous, Mixed Deciduous         High Density Pole         26.1         85           4130 - Aspen         High Density Pole         61.1         50           6118 - Lowland Deciduous with Cedar         High Density Pole         61.1         50           4131 - Aspen, Oak         High Density Pole         9.4         50           4126 - White, Black, N. Pin Oak         High Density Pole         10.3         105           4191 - Mixed Upland Deciduous with Conifer         High Density Pole         10.3         105           4131 - Aspen, Oak         High Density Pole         30.2         50           4131 - Aspen, Oak         High Density Pole         12.5         16           4130 - Aspen         High Density Pole         10.5         50           4131 - Aspen, Oak         High Density Pole         14.8         17           4131 - Aspen, Oak         High Density Pole         14.8	Level 4 Cover Type         Size Density         Acres         Stand Age         BA Range           4125 - Black, N. Pin Oak         High Density Pole         6.7         92         81-110           4125 - Black, N. Pin Oak         Medium Density         18.9         12           4139 - Aspen, Mixed Deciduous         High Density Sapling         24.1         17           6128 - Lowland Coniferous, Mixed Deciduous         High Density Pole         13.3         39         81-110           4130 - Aspen         High Density Pole         61.1         50         50           6118 - Lowland Deciduous with Cedar Deciduous with Cedar Pole         High Density Pole         9.4         50           4131 - Aspen, Oak         High Density Sapling         6.5         19           4126 - White, Black, N. Pin Oak         High Density Pole         10.3         105         51-80           4191 - Mixed Upland Deciduous with Conifer         High Density Pole         30.2         50         141-170           6118 - Lowland Deciduous with Cedar Pole         High Density Pole         30.2         50         141-170           4131 - Aspen, Oak         High Density Sapling         12.5         16         50           4130 - Aspen         High Density Pole         10.5         50         <

Compartment: 020

Cadillac Mgt. Unit

s t	Cadilla	c Mgt. Unit		0-11	orested ota	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
215	6139 - Mixed Lowland Forest	High Density Pole	37.5	48	1-50	Stand treated timber sale #63-010-94-01.
217	4126 - White, Black, N. Pin Oak	High Density Pole	17.5	96	111-140	Old gas well exploration site within stand.
218	6132 - Mixed Lowland Forest with Cedar	High Density Log	47.6	48	81-110	Lowland hardwoods with cedar/hemlock ridges. Possibly habitat cut.
220	4199 - Other Mixed Upland Deciduous	Medium Density	17.9	18		Stand treated timber sale #63-033-94-01, "Indian Pipes Aspen/Oak". Oak seed trees left behind.
221	4139 - Aspen, Mixed Deciduous	High Density Pole	19.3	26		Stand treated timber sale #63-034-85-01, "Turkey Squawk".
222	4131 - Aspen, Oak	High Density Pole	11.9	38		Stand treated timber sale #63-010-85-01.
223	4131 - Aspen, Oak	High Density Sapling	40.6	16		Stand treated timber sale #63-002-94-01. Tin Cup Spring Trails runs along western edge of stand.
224	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	9.7	15		Stand treated in habitat cut however, paperwork could not be found. Cattails.
225	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	67.4	50		Lowland hardwoods with cedar and pine. Age estimate on black ash.
226	42200 - Natural White Pine	High Density Pole	3.8	38	51-80	Stand treated timber sale #63-218-94-01. Treated 1997. Tin Cup Spring Trail and Route run through stand.
228	42260 - Natural Pine, Mixed Deciduous	High Density Pole	3.0	35	111-140	
230	4131 - Aspen, Oak	High Density Pole	10.1	28		Stand treated timber sale #63-028-83-01, "Aspen Wedge Sale".
231	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	15.1	116	81-110	Cedar/Hemlock zone with hardwoods. Age estimate on cedar.
232	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	3.3	116	81-110	Cedar/Hemlock ridge. Age estimate on cedar.
233	6118 - Lowland Deciduous with Cedar	Medium Density Pole	32.3	50		Age estimate on black ash. Lowland hardwoods with conifers.
234	4139 - Aspen, Mixed Deciduous	High Density Sapling	21.8	18		Stand treated timber sale #63-013-94-01. Treated in 1994.
235	4133 - Aspen, Mixed Pine	High Density Sapling	7.4	15		Stand treated in habitat cut however, paperwork could not be found. Cattails.

Compartment: 020

Cadillac Mgt. Unit

S t	Cadilla	c Mgt. Unit		5 – Fo	orested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
236	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	7.7	50	81-110	Diameters vary throughout stand. Overall pulp stand. Witch hazel and oak saplings heavier to south of stand.
237	4131 - Aspen, Oak	High Density Pole	6.6	44	51-80	Do not treat - keep for age class and species diversity. Nice upland stand amongst the lowland areas.
238	4199 - Other Mixed Upland Deciduous	High Density Pole	4.5	96	81-110	Leave for age class diversity. Small stand acreage next to private.
242	4126 - White, Black, N. Pin Oak	Low Density Log	34.1	106	51-80	Break up stand and treat southern portion. Adjacent clearcuts have not regenerated well and an overstory in the treated portion should be left.
243	4131 - Aspen, Oak	High Density Pole	34.1	37	81-110	Habitat cut in 1975 per FTP #W-262. Good amount of single- stem oak regen in pockets and individual stems scattered throughout stand up to 20' tall, averaging 5'-10'. Pockets of white pine pulp. Tin Cup Spring Trail and Route run through stand.
244	4124 - Red with White Oak	High Density Log	8.5	92	81-110	Higher quality oak for this area. Aspen to south of stand.
247	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	13.1	85	111-140	Cedar/hemlock zone.
248	6120 - Lowland Cedar	Medium Density Pole	8.2	80		
249	4131 - Aspen, Oak	High Density Sapling	13.0	15		Stand treated timber sale #63-205-97-01. Excellent oak single- stem regeneration especially along eastern edge of stand.
250	4130 - Aspen	High Density Pole	9.4	44	51-80	Age is approximately 44 years. Timber sale paperwork could not be found.
 251	4130 - Aspen	High Density Pole	4.1	37		Stand treated FTP # W-262. Treated in 1975.
253	4131 - Aspen, Oak	High Density Sapling	16.1	17		Stand treated timber sale #63-024-94-01, "Toppings Treat Oak & Aspen". Good amount of oak saplings.
 254	429 - Mixed Upland Conifers	High Density Log	2.3	78	51-80	Cedar/Hemlock ridge
255	4199 - Other Mixed Upland Deciduous	High Density Pole	9.1	62	81-110	Stand consists of varying age classes and diameters of aspen. White pine and black cherry understory heavier to west side of stand.
<b>256</b>	4126 - White, Black, N. Pin Oak	High Density Pole	35.1	104	141-170	
 257	4131 - Aspen, Oak	High Density Log	21.9	68	111-140	Stand within 150' buffer of N. Cole Creek. Steep slopes.

S t	Cadillad	Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 020 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
258	4116 - Mixed N. Hardwood - Aspen	Medium Density	2.9	5		Stand treated timber sale #630020501, Prolo IX. Treated in 2007.
 259	429 - Mixed Upland Conifers	High Density Log	1.1	82	51-80	Cedar/Hemlock ridge
260	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	37.3	54	51-80	
262	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	17.3	17	51-80	Stand treated timber sale #63-024-94-01, "Topping's Treat Oak/Aspen". Treated 1995. Occasional scattered jack pine.
263	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	27.8	55		Age estimate on black ash.
266	42310 - Planted Spruce	High Density Pole	1.7	32		Planted spruce.
267	4191 - Mixed Upland Deciduous with Conifer	High Density Log	85.5	105	111-140	Species densities and diameters vary throughout stand. Stand quality increases slightly to the west, few northern red oak in area. Some oak seedlings in areas with low BA. Few scattered super-canopy white and red pine. Small pockets of aspen in stand. Small pocket of red pine pulp in stand.
269	4131 - Aspen, Oak	High Density Log	5.2	53	51-80	
273	4131 - Aspen, Oak	High Density Log	4.9	70	111-140	Mature aspen on top of ridge. Slope too steep for equipment.  Larger aspen beginning to fall out of stand. Small zones of red pine within stand. White pine and musclewood understory heavier as you head east.
<u> </u>	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	11.0	85	111-140	Cedar/hemlock zone
 275	42260 - Natural Pine, Mixed Deciduous	High Density Log	3.7	100	171-200	Age taken from 22" white pine. White pine and red pine logs in pockets throughout stand.
276	4133 - Aspen, Mixed Pine	High Density Pole	11.8	45		Stand treated in timber sale however, sale paperwork could not be found. Treated in 1967 according to previous inventory and tree core. Ocassional red and white pine log trees.
278	4139 - Aspen, Mixed Deciduous	High Density Sapling	17.2	17		Stand treated timber sale #63-024-94-01, "Topping's Treat Oak/Aspen". Couple of poorly regenerated areas in stand creating natural openings.
 279	4191 - Mixed Upland Deciduous with Conifer	High Density Log	8.1	107	81-110	White and red pine scattered and in pockets throughout. Heavy white pine understory.
280	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	3.3	100	81-110	Age estimate on white pine taken from cored 22" white pine in stand to west.

S t	Cadilla	c Mgt. Unit		5 – Fo	orested Sta	Compartment: 020 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
281	4133 - Aspen, Mixed Pine	High Density Pole	7.1	28	81-110	Stand treated timber sale #63-002-94-01, "Below B.S. Ridge". Multi-part stand due to regeneration of species be un-equal throughout treatment area.
282	42260 - Natural Pine, Mixed Deciduous	High Density Pole	4.8	28	81-110	Stand treated timber sale #63-002-84-01, "Below B.S. Ridge". Previously an aspen stand but white pine took over after treatment.
283	4133 - Aspen, Mixed Pine	High Density Pole	29.2	35	51-80	Stand treated in sections between 1977-1979 per sales #1-77, 3-77, 3-79-A, 9-79.
285	4126 - White, Black, N. Pin Oak	High Density Log	13.4	110	111-140	Stand surrounds previous clearcut zone. Some oak seedlings/saplings along edges with clearcut where they are open to sunlight. Few scattered red pine up to 12" DBH in stand. Do not treat. Leave stand for age class and species diversity.
287	4126 - White, Black, N. Pin Oak	High Density Log	4.3	110	81-110	Stand surrounded by clearcut area. Do not treat. Leave for age class and species diversity.
288	4126 - White, Black, N. Pin Oak	High Density Log	15.6	105	111-140	Good amount of black & white oak seedlings throughout stand.  Oak diameters larger to SE portion of stand.
289	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	31.1	82	81-110	Occasional beech, yellow birch, white birch, and sugar maple. Hemlock/Cedar stand with a few zones of hardwoods. Tin Cup Spring Route runs through stand.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	3303 - Mixed Low Density Trees	3.9	Yes	Jack Pine	Stand treated timber sale #63-017-06-01, "Furrows & Feathers". Treated 2009.
4	6225 - Bog	2.9	No	Unspecified	Leatherleaf bog filling in with poor quality trembling aspen and jack pine.
5	6225 - Bog	0.9	No	Unspecified	Leatherleaf bog with wet areas and small amount of willow. Poor quality trembling aspen and jack pine filling in.
7	6225 - Bog	0.5	No	Unspecified	Leatherleaf bog.
9	3303 - Mixed Low Density Trees	41.8	Yes	High (NonForested)	Stand treated timber sale "4 Section Mix", #63-076-06-01.
12	6230 - Cattail	13.3	No	Unspecified	Cattails with lowland shrubs and some pulp conifers.
14	710 - Sand, Soil	0.6	No	Unspecified	
15	3303 - Mixed Low Density Trees	1.8	No	Unspecified	Lowland aspen and jack pine with tag alder, willows, and small amount of gray dogwood. Low volumes.
16	6229 - Mixed lowland shrub	14.0	No	Unspecified	Lowland shrubs with white pine. Small area of upland jack pine to west of stand along boundary with private.
19	3303 - Mixed Low Density Trees	1.3	No	Unspecified	Lowland aspen and jack pine with tag alder, willows, and small amount of gray dogwood. Low volumes.
20	6230 - Cattail	8.4	No	Unspecified	Small amount of hemlock and cedar in spots. Some red maple pulp.
21	50 - Water	2.5	No	Unspecified	
23	6230 - Cattail	2.0	No	Unspecified	Cattail with tag alder.
24	6230 - Cattail	9.2	No	Unspecified	Cattail with tag alder.
26	6220 - Alder/willow	70.0	No	Unspecified	Tag alder with cattails and low densitiy conifers.
27	6229 - Mixed lowland shrub	37.8	No	Unspecified	Field and remote call. Tag alder with cattails and small amount of lowland hardwoods.
30	6229 - Mixed lowland shrub	2.3	No	Unspecified	Tag alder with some pulp lowland aspen.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
31	3102 - Grass	1.5	No	Unspecified	Old Wildlife field. No longer maintained.
33	6229 - Mixed lowland shrub	2.5	No	Unspecified	
36	6230 - Cattail	4.2	No	Unspecified	
37	6229 - Mixed lowland shrub	8.4	No	Unspecified	
40	6229 - Mixed lowland shrub	17.9	No	Unspecified	
41	6229 - Mixed lowland shrub	32.2	No	Unspecified	Scattered lowland hardwoods and conifers.
43	3102 - Grass	3.9	No	Unspecified	Old wildlife opening.
46	6230 - Cattail	21.2	No	Unspecified	
48	6224 - Treed Bog	1.1	No	Unspecified	Leatherleaf with lowland hardwoods on edges.
50	6230 - Cattail	19.1	No	Unspecified	
56	6220 - Alder/willow	2.1	No	Unspecified	Tag alder, cattails.
57	6229 - Mixed lowland shrub	9.6	No	Unspecified	
61	6229 - Mixed lowland shrub	5.9	No	Unspecified	Tag alder with a few white pine.
62	6230 - Cattail	31.4	No	Unspecified	Cattails with tag alder and cedar.
63	6229 - Mixed lowland shrub	8.4	No	Unspecified	
64	6229 - Mixed lowland shrub	7.6	N\A	Unspecified	
65	6229 - Mixed lowland shrub	12.5	Yes	Aspen	Stand treated timber sale #63-014-94-01, "Wide Waters Jack Pine". Lowland tag alder with scattered Bigtooth Aspen and White Pine pulp. Some upland areas scattered through stand.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
66	6229 - Mixed lowland shrub	3.1	No	Unspecified	
68	6229 - Mixed lowland shrub	14.8	No	Unspecified	
69	6229 - Mixed lowland shrub	14.2	No	Unspecified	
74	6230 - Cattail	9.6	No	Unspecified	Stand is a mix of cattails, tag alder, zones of musclewood with scattered pulp-log black ash, red maple, white pine, and black cherry. Few scattered areas of upland oak and jack pine.
79	6230 - Cattail	29.1	No	Unspecified	Cattails with scattered white pine and some lowland hardwoods.
80	6220 - Alder/willow	2.1	No	Unspecified	Tag alder with some lowland hardwoods.
81	6229 - Mixed lowland shrub	30.3	No	Unspecified	Tag alder with cattails and small amount of lowland hardwoods with conifer component.
84	6230 - Cattail	3.4	No	Unspecified	Cattails with conifers.
86	6230 - Cattail	12.6	No	Unspecified	Cattails with ocassional cedar pulp, white pine pulp, black ash pulp, and red maple pulp-log.
89	6229 - Mixed lowland shrub	3.5	No	Unspecified	Tag alder with cattails.
91	6230 - Cattail	22.0	No	Unspecified	Cattails with areas of tag alder, black ash, red maple, aspen and some conifers.
92	6230 - Cattail	20.9	No	Unspecified	Cattails with some lowland hardwoods and conifers.
93	6229 - Mixed lowland shrub	23.3	No	Unspecified	Tag alders, willows, cattails.
94	3205 - Mixed Upland Shrub	33.4	Yes	High (NonForested)	Stand treated timber sale #63-076-06-01, "4 Section Mix".  Areas of good oak seedlings.
98	6229 - Mixed lowland shrub	14.2	No	Unspecified	
100	6220 - Alder/willow	8.6	No	Unspecified	Tag alder with cattails and conifer component.
104	6229 - Mixed lowland shrub	16.2	No	Unspecified	Mixed lowland shrub with scattered white pine filling in.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
107	6229 - Mixed lowland shrub	12.6	No	Unspecified	Tag alder with white pine and cedar.
108	6230 - Cattail	22.4	No	Unspecified	Cattails with tag alder and some lowland hardwoods.
110	6230 - Cattail	11.1	No	Unspecified	Cattails/lowland shrubs.
112	6239 - Mixed Emergent Wetland	4.8	No	Unspecified	Stand habitat cut in early to mid 80's. Regen is better than the majority of lowland habitat cuts. Aspen, red maple.  Small amount of black spruce = 10 rings. Small amount of cedar saplings no taller than 2' with deer browse.
113	6229 - Mixed lowland shrub	10.7	No	Unspecified	Tag alders
114	50 - Water	2.2	No	Unspecified	
116	6229 - Mixed lowland shrub	6.2	No	Unspecified	
117	6220 - Alder/willow	42.0	No	Unspecified	Tag alder with ridges of cedar and white pine.
122	6239 - Mixed Emergent Wetland	12.6	No	Unspecified	Stand habitat cut in early to mid 80's. Regen is better than the majority of lowland habitat cuts. Aspen, red maple. Small amount of black spruce = 10 rings. Small amount of cedar saplings no taller than 2' with deer browse.
127	6239 - Mixed Emergent Wetland	10.6	No	Unspecified	Stand habitat cut in early to mid 80's. Regen is better than the majority of lowland habitat cuts. Aspen, red maple. Small amount of black spruce = 10 rings. Small amount of cedar saplings no taller than 2' with deer browse.
133	2113 - Forage Crops	7.7	Yes	High (NonForested)	Alfalfa and clover
137	6230 - Cattail	34.6	No	Unspecified	Cattails with tag alder.
143	6230 - Cattail	28.7	No	Unspecified	Cattails with scattered pulp big tooth aspen, pulp cedar, and tag alder.
146	2113 - Forage Crops	3.8	Yes	High (NonForested)	Alfalfa and clover
154	6230 - Cattail	9.7	No	Unspecified	Cattails with tag alder.
155	6230 - Cattail	7.9	No	Unspecified	Habitat cut. Filling in with cattails.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
159	6229 - Mixed lowland shrub	27.1	No	Unspecified	Occassional conifer and lowland hardwood trees.
165	6229 - Mixed lowland shrub	21.0	No	Unspecified	Tag alders with white pine.
172	11 - Low Intensity Urban	10.6	No	Unspecified	King's Highway
174	6230 - Cattail	20.4	No	Unspecified	Cattails with black ash and conifer component.
177	2113 - Forage Crops	1.4	Yes	High (NonForested)	Alfalfa and clover
180	6229 - Mixed lowland shrub	51.5	No	Unspecified	Tag alder, willow.
181	6230 - Cattail	3.3	No	Unspecified	Cattails, tag alder, willows
184	6220 - Alder/willow	33.4	No	Unspecified	Tag alder with some lowland hardwoods and white pine.
189	6229 - Mixed lowland shrub	20.2	No	Unspecified	Stand treated FTP # W-162 in 1972. All pole hardwoods and balm-of-gilead cut. White pine and lowland hardwoods scattered.
191	6239 - Mixed Emergent Wetland	2.4	No	Unspecified	Leatherleaf
192	6230 - Cattail	4.6	No	Unspecified	
195	790 - Other Bare/Sparsely Vegetate	7.5	No	Unspecified	Old gravel pit.
198	2113 - Forage Crops	7.8	Yes	High (NonForested)	Alfalfa and clover
199	6230 - Cattail	40.5	No	Unspecified	
202	6220 - Alder/willow	0.7	No	Unspecified	Tag alder, cattails, red maple, white pine, leatherleaf.
216	6229 - Mixed lowland shrub	10.7	No	Unspecified	Stand treated FTP# G-152 in 1972. Clearcut of hardwoods in cedar areas. Tag alder and cattails.
219	6225 - Bog	1.3	No	Unspecified	Leatherleaf bog with few jack pine and white pine.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
227	3205 - Mixed Upland Shrub	6.2	Yes	High (NonForested)	Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Good aspen and oak regeneration.
229	2113 - Forage Crops	3.7	Yes	High (NonForested)	Alfalfa and clover
239	3205 - Mixed Upland Shrub	9.6	Yes	Oak	Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Oak seedlings heavy in oak areas. Regen by road is poor and mostly blackberries/raspberries.
240	6230 - Cattail	41.1	No	Unspecified	Old gas well exploration site to north of stand. Cattails with tag alder, cedar, and white pine.
241	6230 - Cattail	10.6	No	Unspecified	Beaver dam flooding. Open water with cattails and cedar regeneration.
245	6220 - Alder/willow	10.5	No	Unspecified	Tag alder and willow with scattered black ash.
246	6230 - Cattail	111.7	No	Unspecified	Adjacent to beaver dam flooding. Excellent cedar regeneration up to 20'. Slight browse line on cedar regen but not heavy. White pine super-canopy.
252	2113 - Forage Crops	5.2	Yes	High (NonForested)	Alfalfa and clover
261	6220 - Alder/willow	6.6	No	Unspecified	Tag alder with cattails and scattered white pine pulp.
264	50 - Water	0.6	No	Unspecified	Big Spring
265	6230 - Cattail	4.8	No	Unspecified	Old gas well exploration site within stand.
268	3205 - Mixed Upland Shrub	11.6	Yes	High (NonForested)	Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak, aspen, and black cherry regeneration.
270	2113 - Forage Crops	4.4	Yes	High (NonForested)	Alfalfa and clover
271	3205 - Mixed Upland Shrub	6.5	Yes	High (NonForested)	Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak, aspen, and black cherry regeneration.
272	3205 - Mixed Upland Shrub	3.4	Yes	High (NonForested)	Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak and black cherry regeneration.

#### 6 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
277	3205 - Mixed Upland Shrub	5.2	Yes	High (NonForested)	Stand treated timber sale #630020501, Prolo IX. Treated in 2007. Scattered areas of good oak and black cherry regeneration.
284	6230 - Cattail	1.6	No	Unspecified	
286	3105 - Mixed Upland Herbaceous	9.1	Yes	High (NonForested)	Scattered areas of good oak, aspen, and black cherry regeneration.
290	2113 - Forage Crops	40.6	Yes	High (NonForested)	Alfalfa and clover

Compartment: 020 Year of Entry: 2014



#### 7 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Stand	SCA Type	SCA Name	Acres	Comments

Cadillac Mgt. Unit Compartment: 020
Year of Entry 2014

#### **8 – DEDICATED CONSERVATION AREA DETAILS**



\* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservatio Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area	
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxy stocked trout populations and those of other coldwater year to year. Coldwater streams in Michigan typically p contributions of groundwater to their stream flows. Suc designated as trout resources by Fisheries Order 210.	fish species (e.g., slimy sculpin) to persist from provide these conditions due to substantial	
HCVA Natural Rivers  There are two Natural Rivers datasets which are derived from spatial buffers set from an established approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning District and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE folder.				





