



**DEPARTMENT OF NATURAL RESOURCES  
STATE OF MICHIGAN  
TIMBER SALE PROSPECTUS #7082**

SCHEDULED SALE DATE AND TIME: **9:00 a.m. (local time) on August 11, 2022.**

LOCATION: **BARAGA MGMT UNIT, 427 US 41 NORTH, BARAGA, MI 49908.**

CONTACT NAME: Brad Carlson

PHONE NUMBER: (906) 353-6651

PROSPECTUS NOTE: The bidder is advised to inspect the sale area and review the location, estimated volumes, operating costs and contract terms of proposed sales. Please be aware that some landowners may request 60 days or more notice for access across their land.

Notice is hereby given that bids will be received by the Unit Manager, BARAGA MANAGEMENT UNIT, for certain timber on the following described lands:

Rat Trap (11-007-22) / T49N, R32W, SEC. 16, NW,E1/2NE,NESW,E1/2SE.

Baraga County, Advertised Price \$34,677.45, 174.9 Acres, Hardwood, Spruce/Fir/Tamarack.

SALE NOTE: All units of volume listed for this sale were estimated using the Inventory Manager computer program and the new Michigan taper model.

Access may be through private land.

## TIMBER SALE INFORMATION

Rat Trap (11-007-22)

T49N, R32W, SEC. 16.

Baraga County (Advertised Price \$34,677.45)

SALE NOTE: All units of volume listed for this sale were estimated using the Inventory Manager computer program and the new Michigan taper model.

Access may be through private land.

A timber sale contract for this lump sum, sealed bid timber sale will be awarded to the responsible bidder offering the highest sealed bid price. All units of volume listed below were estimated using the Inventory Manager computer program and the new Michigan taper model. Bids must be at or above the following advertised price for each product and species:

<u>PRODUCTS &amp; SPECIES</u>	<u>ESTIMATED UNITS*</u>	<u>ADVERTISED PRICE</u>
Sawtimber		
Black Cherry	5.9 MBF	\$ 71.00 / MBF
Paper Birch	7.4 MBF	\$ 55.00 / MBF
Red Maple	34.3 MBF	\$ 103.00 / MBF
Sugar Maple	84.5 MBF	\$ 204.00 / MBF
Yellow Birch	7.2 MBF	\$ 31.00 / MBF
Pulpwood		
Balsam Fir	207 Cords	\$ 5.35 / Cord
Mixed Hardwood	1,256 Cords	\$ 6.55 / Cord
Mixed Spruce	298 Cords	\$ 8.05 / Cord
Paper Birch	45 Cords	\$ 4.40 / Cord
Quaking Aspen	8 Cords	\$ 21.10 / Cord
Tamarack	150 Cords	\$ 5.05 / Cord

\* The total volume is statistically estimated within plus (+) or minus (-) 6.33 percent. There are an estimated 2,324 cords on this timber sale, plus or minus 147 cords at the 95% confidence level. The estimated units are final and not subject to adjustment. Prospective bidders are urged to examine this timber and to make their own estimates of quantity and quality.

### **BOND AND PAYMENT SCHEDULE:**

1. A bond in the amount of \$3,000.00 to insure faithful performance of the conditions of the contract will be deposited by the successful bidder within 21 days of the sale award.
2. Cutting in any sale or unit without the required advance payment would be considered a trespass.
3. Total payment must be paid in advance or according to the following schedule :
  - (a) Ten percent (10%) of the sale value must be paid within 21 days of the sale award.
  - (b) The 10% down payment will be credited towards the first unit cut.
  - (c) Payment for each of the following units must be made before cutting begins in that unit:

<u>PAYMENT UNIT NUMBER</u>	<u>PERCENT OF TOTAL SALE VALUE</u>
01	6.4%
02	21.1%
03	7.4%
04	8.9%
05	18.3%
06	29.8%
07	8.1%

4. If no cutting takes place, the 10% down payment will not be refunded.
5. Operations on the contract issued will terminate on 06/30/2025.

### **SALE STATISTICS**

Volumes were calculated in cubic feet using the Michigan taper model. Cubic foot volume includes all wood inside bark for the product indicated. For display purposes, cubic feet were converted to cords and MBF using a simple conversion factor, e.g. 79 cubic feet per cord and 185 cubic feet per MBF. The cubic foot volumes are precise; the cords and MBF volumes are not. Cubic foot volume cannot be directly converted to cords or boards with precision.

## SALE VOLUMES

The total estimated sale volume may not equal the sum of the species/products due to the nature of statistical calculations associated with double sampling methodology.

VOLUME			STATISTICAL RANGE IN CORDS	
TOTAL CUBIC FEET	TOTAL CORDS	PERCENT ERROR	MINIMUM	MAXIMUM
183,575	2,324	6.33%	2,176	2,471

## VDU VOLUMES

A VDU is a Volume Determination Unit. Volumes and their associated statistics are calculated at the VDU level and summarized to the sale level. There is often a one to one relationship between a VDU and a Payment Unit, but not always, depending on the cruise design. Refer to the VDU TO PAYMENT UNIT table.

	VOLUME			RANGE IN CORDS	
VDU	TOTAL CUBIC FEET	TOTAL CORDS	PERCENT ERROR	MINIMUM	MAXIMUM
1	25,736	326	17.99%	267	384
2	73,080	925	12.29%	811	1,039
3	6,902	87	18.63%	71	104
4	14,091	178	21.88%	139	217
5	16,523	209	10.06%	188	230
6	31,227	395	11.85%	348	442
7	7,494	95	19.72%	76	114
8	8,521	108	21.97%	84	132
<b>TOTAL:</b>	<b>183,575</b>	<b>2,324</b>		<b>1,986</b>	<b>2,662</b>

## VDU TO PAYMENT UNIT

When a VDU is associated with more than one Payment Unit (PU), the VDU volumes are assigned to the PU based on acres of the VDU within the PU.

VDU	VDU ACRES	PU	PU ACRES
1	14.4	1	14.4
2	33.4	2	33.4
3	12.2	3	12.2
4	25.1	4	25.1
5	18.9	5	18.9
6	38.2	6	38.2
7	14.6	7	14.6
8	18.1	7	18.1
<b>TOTAL:</b>	<b>174.9</b>		<b>174.9</b>

**DESCRIPTION OF TIMBER BY PU (PU)**

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE
1	Paper Birch	Sawtimber	4.5	MBF	14.4	\$2,215.25
	Balsam Fir	Pulpwood	61	Cords		
	Mixed Hardwood		109	Cords		
	<i>Red Maple</i>		70	<i>Cords</i>		
	<i>Sugar Maple</i>		39	<i>Cords</i>		
	Mixed Spruce		77	Cords		
	<i>Black Spruce</i>		6	<i>Cords</i>		
	<i>White Spruce</i>		71	<i>Cords</i>		
	Paper Birch		24	Cords		
	Tamarack		40	Cords		
2	Paper Birch	Sawtimber	2.9	MBF	33.4	\$7,326.35
	Red Maple		7.5	MBF		
	Sugar Maple		2.5	MBF		
	Yellow Birch		2.1	MBF		
	Balsam Fir	Pulpwood	107	Cords		
	Mixed Hardwood		492	Cords		
	<i>Red Maple</i>		315	<i>Cords</i>		
	<i>Sugar Maple</i>		172	<i>Cords</i>		
	<i>Yellow Birch</i>		5	<i>Cords</i>		
	Mixed Spruce		150	Cords		
	<i>Black Spruce</i>		39	<i>Cords</i>		
	<i>White Spruce</i>		111	<i>Cords</i>		
	Paper Birch		21	Cords		
	Quaking Aspen		8	Cords		
	Tamarack		110	Cords		
3	Black Cherry	Sawtimber	2.2	MBF	12.2	\$2,551.50
	Red Maple		1.4	MBF		
	Sugar Maple		9.0	MBF		
	Mixed Hardwood	Pulpwood	56	Cords		
	<i>Black Cherry</i>		4	<i>Cords</i>		
	<i>Red Maple</i>		9	<i>Cords</i>		
	<i>Sugar Maple</i>		43	<i>Cords</i>		
	Mixed Spruce		6	Cords		
	<i>White Spruce</i>		6	<i>Cords</i>		
4	Red Maple	Sawtimber	3.2	MBF	25.1	\$3,093.85
	Sugar Maple		8.5	MBF		
	Yellow Birch		1.4	MBF		
	Mixed Hardwood	Pulpwood	131	Cords		
	<i>Red Maple</i>		34	<i>Cords</i>		
	<i>Sugar Maple</i>		91	<i>Cords</i>		
	<i>Yellow Birch</i>		6	<i>Cords</i>		
	Mixed Spruce		16	Cords		
	<i>White Spruce</i>		16	<i>Cords</i>		
5	Black Cherry	Sawtimber	1.6	MBF	18.9	\$6,361.40
	Red Maple		1.9	MBF		
	Sugar Maple		25.2	MBF		
	Balsam Fir	Pulpwood	11	Cords		
	Mixed Hardwood		124	Cords		
	<i>Black Cherry</i>		2	<i>Cords</i>		
	<i>Red Maple</i>		6	<i>Cords</i>		
	<i>Sugar Maple</i>		107	<i>Cords</i>		
	<i>Yellow Birch</i>		9	<i>Cords</i>		
	Mixed Spruce		5	Cords		
	<i>White Spruce</i>		5	<i>Cords</i>		
6	Black Cherry	Sawtimber	2.1	MBF	38.2	\$10,313.55

**DESCRIPTION OF TIMBER BY PU (PU), CON'T**

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE
6 con't	Red Maple	Sawtimber	15.2	MBF		
	Sugar Maple		33.0	MBF		
	Yellow Birch		2.5	MBF		
	Mixed Hardwood	Pulpwood	240	Cords		
	Black Ash		7	Cords		
	Black Cherry		9	Cords		
	Red Maple		45	Cords		
	Sugar Maple		177	Cords		
	Yellow Birch		2	Cords		
	Mixed Spruce		27	Cords		
	White Spruce		27	Cords		
7	Red Maple	Sawtimber	5.1	MBF	32.7	\$2,815.55
	Sugar Maple		6.3	MBF		
	Yellow Birch		1.2	MBF		
	Balsam Fir	Pulpwood	28	Cords		
	Mixed Hardwood		104	Cords		
	Red Maple		29	Cords		
	Sugar Maple		61	Cords		
	Yellow Birch		14	Cords		
	Mixed Spruce		17	Cords		
	White Spruce		17	Cords		
	TOTAL:			139.3		
TOTAL:			1,964	Cords		

## **Sale Specific Conditions & Requirements**

**Sale Name: Rat Trap**

**Sale Number: 11-007-22 Seq#: 1**

### **1 - Sale Area**

#### **1.2 - Boundaries**

##### **1.2.1 - Painted boundaries (9/19)**

The sale boundary and Payment Unit boundaries are marked and identified by blue and red paint. Exterior sale boundary lines against private property are marked with blue paint. Exterior sale boundary lines against state are marked with red paint. Interior Payment Unit boundaries are marked with red paint. The painted boundary line trees are not Included Timber and are to be protected unless marked with orange paint.

### **2 - Timber Specifications**

#### **2.1 - Included Timber**

##### **2.1.2 - Clearcut unit(s) w/o unmerchantable trees (8/11)**

Within Payment Unit(s) 1 and 2, cut all trees which meet minimum piece specifications in 2.2 Utilization, except oak, hemlock, cedar, and white pine.

##### **2.1.3 - Cut tree marked unit(s) (12/08)**

Within Payment Unit(s) 3-7, all trees are designated for cutting when marked with orange paint above and below stump height, regardless of merchantability.

#### **2.2 - Utilization**

##### **2.2.1 - Utilization (2/04)**

All listed board foot volumes of sawlog size products in this contract have been determined using a top diameter inside bark of 10 inches.

##### **2.2.3 - Stump heights (4/07)**

Stump heights within the Sale Area shall not exceed 12 inches for trees greater than 10 inches at DBH and 4 inches for trees smaller than 10 inches at DBH. A written waiver of this requirement may be obtained if wet summer weather makes winter logging necessary.

##### **2.2.4 - Skidding length (2/14)**

Skidding of unlimbed tops or lengths over 17 feet is not permissible unless approved by the Unit Manager or his/her representative.

##### **2.2.7 - Uncut designated trees (2/04)**

Liquidated damages of \$5.00 per tree will be assessed for every marked tree not cut.

##### **2.2.8 - Utilization and removal (5/14)**

All products meeting standards set forth in General Condition and Requirement 2.2 - Utilization must be removed from the Sale Area. This is because excessive woody debris inhibits regeneration.

##### **2.2.11 - Chipping restriction (9/14)**

If chipping occurs on this sale, then no woody debris present on the ground at the start of the sale may be chipped. In addition, brush or chips may not be stored or stockpiled on-site for more than 30 days.

#### **2.3 - Log Rule**

##### **2.3.1 - Log rule (12/08)**

All board foot volumes of sawlog size products in this contract have been determined by the Scribner Decimal C Log Rule.

### **3 - Payments**

#### **3.4 - Damaged Timber**

#### 3.4.1 - Damaged timber (7/16)

General Condition and Requirement 3.4 Damaged Timber, defines liquidated damages for undesignated live merchantable trees which are cut or injured. In addition, extreme care should be taken to avoid damage to tree seedlings and saplings.

### 4 - Transportation

#### 4.1 - Construction

##### 4.1.1 - Stream crossings, general (3/11)

All stream crossing structures will be temporary and therefore, shall be provided by the Purchaser, and must be removed upon completion of the sale. All permits for stream crossings will be provided by the DNR for crossings located on state land.

##### 4.1.5 - Culverts (5/14)

Roads may require the installation of culverts for cross drainage or at natural drainage-ways. If culverts are needed in these locations, their placement will be specified by the sale administrator, and they shall be installed prior to hauling. The culverts shall be new, corrugated metal or plastic gauge. Culverts will be a minimum of 12 inches in diameter and 24 feet in length. If culverts are removed, fill shall be removed from wetland soils as specified. Soils shall be maintained and left in a non-erodible condition, with water bars, seed, fertilizer, mulch, and slash installed as directed by the sale administrator and as specified in the BMP manual. Stream crossing permits, if needed, will be obtained by the DNR for crossing located on state land.

##### 4.1.6 - Road construction (1/09)

Construction of new roads or improvements of existing roads shall be done in such a way as to minimize the environmental and visual impacts. Merchantable trees shall be cut and utilized unless otherwise directed. Non-merchantable trees shall be severed and laid flat on the ground. Slash shall be scattered, and not left in windrows and kept a minimum of 10 feet back from the road edge, be chipped, utilized, or otherwise removed from the sale. Stumps shall be set upright, not left on edge, and be moved at least 10 feet away from the road edge. Disturbed soil shall be feathered into the woods and not left in berms or windrows.

##### 4.1.7 - Road closure (10/11)

All new roads built into the sale must be blocked to vehicle traffic upon completion of the sale. Overgrown roads that are reopened shall be considered new roads. In general, this will require constructing a four (4') foot high berm of stumps and logs covered with earth. Contact the sale administrator for specific details of design and placement.

#### 4.2 - Maintenance

##### 4.2.4 - Grading (10/16)

For completion of the sale, state forest roads must be graded. In general, this will require a road grader or bulldozer to shape up the roads after forest products have been hauled off site. This includes cleaning of drainage areas, grading, crowning, and filling with gravel, if necessary. The grading equipment to be used must be approved by the Unit Manager or his/her representative.

##### 4.2.5 - Two wheel drive condition (2/04)

All existing trail roads on and adjacent to the sale area must be passable by two-wheel drive traffic for the duration of the sale.

#### 4.4 - Access

##### 4.4.1 - Private property access (3/11)

Permission for access across private land is the responsibility of the Purchaser. Should the Purchaser desire to cross private land, a copy of the written permission from the private landowner may be required by the DNR.

### 5 - Operations

#### 5.2 - Conduct of Operations

##### 5.2.1 - Slash

###### 5.2.1.14 - Chipping of slash (10/08)

If tops are chipped, they must be skidded to the landing separately from the bole section of the tree. Skidding of tops must be done in such a way as to minimize damage to the residual trees.

## 5.2.2 - Hazard Trees/Snags

### 5.2.2.1 - Den trees (10/16)

Obvious hollow and/or den trees shall be protected and left standing unless they are a safety hazard.

## 5.2.3 - Operating Restrictions

### 5.2.3.2 - Operating restrictions (9/11)

Within Payment Unit(s) 1-7 must be completed by June 15 for the harvest areas that were completed during the previous operating season. This restriction is to allow the areas to revegetate before the dry season.

### 5.2.3.3 - Bark slippage restriction (3/09)

Within Payment Unit(s) 3-7, unless changed by written agreement, cutting and skidding are not permitted during the period of April 15 to July 15. This restriction is because of bark slippage.

## 5.2.30 - Landing/road top soil protection (2/15)

Top soil must be removed, stockpiled and saved. Upon completion of the timber sale, soil must be evenly distributed back over the area for revegetation.

## 5.2.32 - Decking/landing restoration (9/13)

All decking and landing areas must have the surface area restored to a condition equal to or better than before. This is to ensure the proper regeneration of the stand. Wood debris, chips, and "cookies" from trimmings must be removed or scattered away from landing and loading areas and may not be windrowed on the edge.

## 5.2.38 - No decking against live trees (2/04)

Cut products may not be decked against unmarked or designated leave trees.

## 5.4 - Soil Protection

### 5.4.1 - Rutting restriction, general (7/16)

Operations are to cease immediately if equipment and weather conditions result in rutting of roads and/or skid trails which is 12 inches or greater in depth and 50 feet in length. The Unit Manager or his/her representative may restrict hauling and/or skidding if ruts exceed the specified depth. With the Unit Manager or his/her representative's approval, the Purchaser may return to the area when the risk of rutting has decreased.

## 5.8 - Protection of Endangered Species

### 5.8.5 - Protection of raptor nests (3/13)

All trees with raptor nests will be protected if found during harvesting operations. Notification will be made to the Unit Manager or his/her representative who will notify the Wildlife Biologist so an on-site evaluation and recommendation can be made, if necessary.

## 6 - Safety and Fire Prevention

## 6.2 - Signing

### 6.2.1 - Road posting (10/20)

The Purchaser is responsible for posting and maintaining caution signs on the Celotex Road prior to beginning operations. The road must be posted at appropriate distances from the Sale Area to warn of logging activity and truck traffic. Signs must be removed when harvest operations are suspended or completed. The Purchaser will provide these signs.





## TIMBER SALE MAP

This information provided by authority of Part 525, 1994 PA 451, as amended.

Sale Number

11-007

Year

2022

Forest Management Unit  
BaragaCounty  
BaragaMapped By Carlson  
Cruised By Baraga Staff

Date

5/31/2022

Page

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of  
1Township  
49NRange  
32WSection(s) and Subdivision(s)  
Sec 16 - NW, E1/2NE, NESW, E1/2SE

Scale

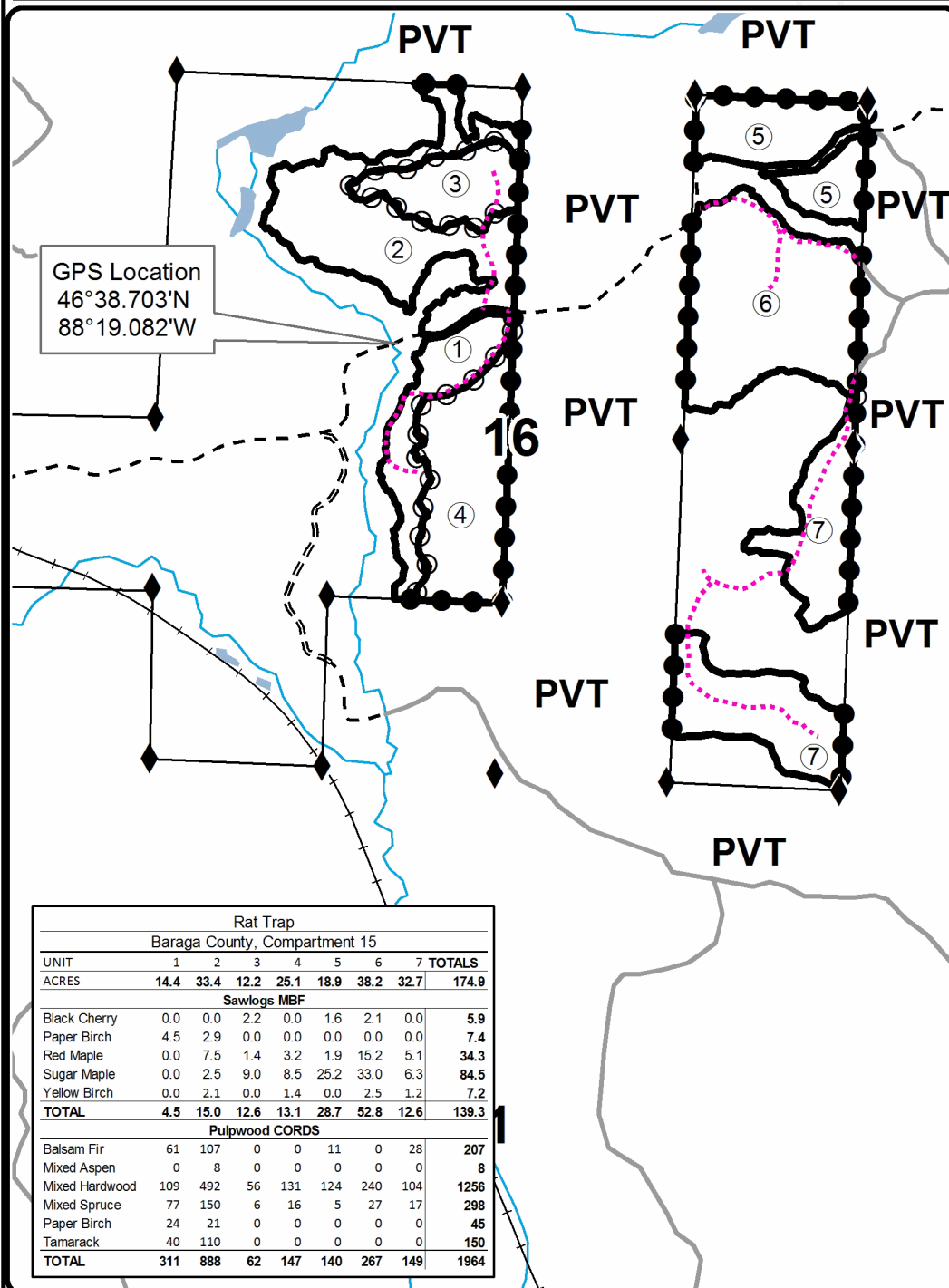
1:15,840

## Cover Type

A = Aspen  
B = Paper Birch  
C = Cedar  
D = Treed Bog  
E = Swamp Hdwoods  
F = Spruce Fir  
G = Grass  
H = Hemlock  
J = Jack Pine  
L = Lowland Brush  
LM = Lowland Mixed  
M = Mpl, Bch, Brch  
MC = Mixed Conifer  
MD = Mixed Deciduous  
N = Marsh  
O = Oak  
P = Lowland Poplar  
Q = Mixed Swamp Conifer  
R = Red Pine  
S = Black Spruce  
T = Tamarack  
U = Upland Brush  
UM = Upland Mixed  
V = Bog or Marsh  
W = White Pine  
X = Non Stocked  
Z = Water

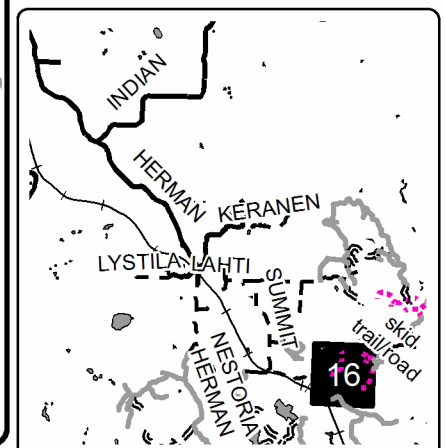
## Density

0 = Non Stocked  
1 = Seedling Sapling Poor  
2 = Seedling Sapling Medium  
3 = Seedling Sapling Well  
4 = Pole Timber Poor  
5 = Pole Timber Medium  
6 = Pole Timber Well  
7 = Saw Timber Poor  
8 = Saw Timber Medium  
9 = Saw Timber Well



## Legend

- ◆ Survey Corners
- == Forest Access Route
- Gravel Road
- Private
- Temporary Management Access
- Lakes and Rivers
- Against State (Red)
- Payment Unit (Red)
- Private Line (Blue)

Locator Map  
1:200,000

Rat Trap								
Baraga County, Compartment 15								
UNIT	1	2	3	4	5	6	7	TOTALS
ACRES	14.4	33.4	12.2	25.1	18.9	38.2	32.7	174.9
Sawlogs MBF								
Black Cherry	0.0	0.0	2.2	0.0	1.6	2.1	0.0	5.9
Paper Birch	4.5	2.9	0.0	0.0	0.0	0.0	0.0	7.4
Red Maple	0.0	7.5	1.4	3.2	1.9	15.2	5.1	34.3
Sugar Maple	0.0	2.5	9.0	8.5	25.2	33.0	6.3	84.5
Yellow Birch	0.0	2.1	0.0	1.4	0.0	2.5	1.2	7.2
TOTAL	4.5	15.0	12.6	13.1	28.7	52.8	12.6	139.3
Pulpwood CORDS								
Balsam Fir	61	107	0	0	11	0	28	207
Mixed Aspen	0	8	0	0	0	0	0	8
Mixed Hardwood	109	492	56	131	124	240	104	1256
Mixed Spruce	77	150	6	16	5	27	17	298
Paper Birch	24	21	0	0	0	0	0	45
Tamarack	40	110	0	0	0	0	0	150
TOTAL	311	888	62	147	140	267	149	1964

0 0.125 0.25 0.5 0.75 1 Miles