



## TIMBER SALE PRESCRIPTION

### GENERAL

Date January 15, 2009	Forest, Mineral and Fire Management Unit Traverse City
Timber Sale Number (if applicable) 610210901	Sale Name (or prescription name) Scharmen Road Mix

### LOCAL CONTACT

Name Tim Webb	Telephone (231) 922 - 5280 ext. 6841
Email Address webbtl@michigan.gov	FAX (231) 922 - 1853

**Map of Project Area Attached**

### LEGAL DESCRIPTION

T26N R10W Section(s) 13, 24 Description Sec.13: SWSE; Sec. 24: NE ¼, NW ¼, SW ¼

Year of Entry: 2009 Compartment(s):51 Stand Number(s): 45, 64, 69

### THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 231 Source:  OI  GPS  Other: GIS-based state forest inventory

**Payment will be made on the basis of these estimated acres.**

### TREATMENT & OBJECTIVE

STAND #	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE
45	JP/Oak	205	unmeasured	seed tree harvest	oak/pine savannah
64	Oak	5	50-100	thinning	oak
69	Mixed Decid.	21	50	clearcut w/res.	oak/pine savannah

### PRESCRIPTION

1. stands 45 and 69: mark 20 BA reserve trees
2. stand 64: mark cut trees to release crowns of better quality oak, residual BA 60
3. see attached supplemental prescriptions & specifications for additional details

**Access:** Good access via Fish Creek Road on the west, Scharmen Road on the north, a 2-track abutting the south part of the sale area, and a dirt road/Shore-to-Shore Trail traversing stand 45.

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
locate and paint in the property line forming NE sale boundary	4/30/09

**CONTRACT WORK CAN BEGIN**

Immediately  Date:

**CONTRACT WORK MUST BE COMPLETED BY** Date 8/31/09

**PAINT LINE WORK**

This is included in the bid     This is not included in the bid

**Paint line work to be performed: (See attached map for locations)**

TYPE OF LINE	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Private boundary – by DNR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Blue <input type="checkbox"/> Other:
Sale boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red <input type="checkbox"/> Other:
Sale cutting unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow <input type="checkbox"/> Other:
Stand type line	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow <input type="checkbox"/> Other:

**Exclusions to mark and why**

Sale boundary to be painted red includes 3 reserve areas within stand 45. The overall listed acreage for stand 45 includes these reserve areas, although they will be excluded from the sale.

**Standards for marking lines against private land**

To be done by DNR staff.

**AREA CALCULATION**

This is included in the bid     This is not included in the bid

UNIT	METHOD	STANDARD
Sale	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	PDOP 6 or less
Payment Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	PDOP 6 or less
Stand	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	PDOP 6 or less

**Special Instructions:**

DNR administrator must be provided ArcView shapefiles of the outer boundary of the entire sale area and of the 3 reserve islands (polygon features), and the 4 interior payment unit boundaries (line features). Note that the boundaries between stands 45/64 and 45/69 are also payment unit boundaries, to be painted yellow and GPSed as payment unit lines.

**TIMBER CRUISING SPECIFICATIONS**

This is included in the bid     This is not included in the bid

**Required Basal Area Factor:**     10     20     Other:

**Cruise Line Directions** no specific direction required, but map of plots/course line directions must be provided.

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
stand 45 (excluding reserve islands)	.45/acre, 89 plots	4.7 X 4.7
stand 64	1/acre, 5 plots	3 X 3
stand 69	1/acre, 21 plots	3 X 3
		X
<b>TOTAL NUMBER OF CRUISE POINTS</b>	115	

**Cruise Special Instructions:**

Cruise each species separately per DNR standard method. Also record residual BA by species on each plot.

**Unless otherwise specified, the tally sheets used must be those supplied by the Forest, Mineral and Fire Management Unit.**

**TIMBER MARKING SPECIFICATIONS**

This is included in the bid     This is not included in the bid

Precise specifications to be delineated at pre-work meeting with DNR staff

**Total Merchantable Residual BA (Basal Area):** stand 64: 60 (Minimum 50 to Maximum 70);  
stands 45 & 69: 20 (Minimum 10 to Maximum 30)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre		N/A	
Girdled Trees Per Acre		N/A	
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs (stand 64)	slash on 2 sides, butt mark	10"	8"
Sawbolts			
Pulpwood (stand 64)	slash on 2 sides, butt mark	5"	4"

TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Trees marked to leave – stands 45 & 69	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Green <input type="checkbox"/> Other
Trees marked to cut – stand 64	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Orange <input type="checkbox"/> Other

TALLY INTENSITIES	
SPECIES / PRODUCT	RATIO
N/A	1 :
	1 :
	1 :
	1 :

**SPECIAL MARKING INSTRUCTIONS**  
See attached supplemental prescriptions & specifications.

- Approximate acreage to mark:
- stand 45: 20 BA reserve tree marking, 197 acres (205 acre stand less 8 acres reserve islands)
  - stand 64: cut-tree marking down to residual 60 BA, 5 acres
  - stand 69: 20 BA reserve tree marking, 21 acres

Unless otherwise specified, the tally sheets used must be those provided by the Forest, Mineral and Fire Management Unit.

**RESTRICTIONS**

1. Forest, Mineral and Fire Management Division must to be able to identify who did what on the timber sale.
2. The contractor may not have more than two markers/cruisers in one payment unit without prior approval.
3. Each marker/cruiser should have an assigned area (not strips).

**PAINT**

1. Call Tim Webb at (231) 922-5280 ext. 6841 to make arrangements for paint pickup.
2. Paint will be supplied from the Traverse City DNR Field Office, 970 Emerson, T.C.
3. Contractor's work schedule must coincide with the DNR work schedule for paint supply.
4. The DNR will not be available on weekends or evenings.

**DELIVERABLES**

1. A list of names that marked or cruised each payment unit.
2. A summary of paint used (in quarts).
3. Cruise data for each stand (one summary, regardless of the number of markers) and all of the original cruise sheets; map of numbered cruise plots and course lines.
4. GPS/shapefiles for any GPS work.

## Supplemental Prescriptions & Specifications

### Stand 45

- Predominantly a jack pine stand with a substantial white oak component; also has red pine, red oak, red maple, and bigtooth aspen. Terrain is relatively flat.
- Ages range from about 50 to 70, with some older (100+?) white oak and red pine present.
- Objective is to create a large patch of savannah-like habitat by clearcutting existing trees but retaining a component of mixed species/size residuals, 20 BA (not including dead or sub-merchantable trees), to serve as habitat structure and seed trees.
- Reserve trees should be marked with green paint spots or slashes so as to be visible from any direction, plus a butt mark at the base of the trunk extending down to the soil.
- Reserve trees selected should include a variety of species, sizes, and ages according to the following preferences. Preferences are listed in order from most to least preferred. Some trees of every listed species should be selected, but there should be more of the higher preferences and less of the lower preferences.
  - live cavity trees: these should be marked as encountered regardless of species at a density of 1 to 5 per acre
  - white oak: mark apparently older, larger trees with large crowns, regardless of stem quality; also some younger pole to small sawlog sized trees
  - red pine: mark trees that appear to be from older age classes with relatively thick bark; also mark some individuals from all other size/age classes
  - white pine: few if any within the stand, but if encountered, mark mature trees over 12" dbh
  - red oak: mark some mature trees with healthy, well-formed crowns
  - jack pine: mark an occasional tree or small group of trees if they appear to be healthy and from the younger ages
  - aspen and red maple: not preferred, but an occasional tree could be included in small clumps along with preferred species or marked as reserve if a valuable cavity tree
- Distribution of reserve trees: in general, the reserve trees should be evenly distributed throughout the stand. Mark individual trees and some small clumps of 2-6 trees. Preferentially select healthy, well formed oak and pine within 50 feet of roads and trails as available for aesthetic benefits.

### Stand 64

- This stand is similar in many respects to stand 45, but is predominantly white oak with a component of red oak, red maple, and white pine, with little or no jack pine.
- Age of overstory trees appears to be mostly over 100, with an understory of oak and white pine seedlings and saplings.
- Objective is to maintain a moderately stocked stand of good quality mature oak, also retaining apparently older, large crowned remnant oak. Thin to release crowns of better quality oak on at least 2 sides, and to allow release/development of understory oak and white pine. The target residual BA is 60 (not including dead or sub-merchantable trees) with a relatively even distribution throughout the stand.
- Cut trees should be marked with orange paint slashes on 2 opposite sides of each tree, plus a butt mark at the base of the trunk extending down to the soil.
- Trees to be marked for removal should focus on oak in the 70-100 year old range, plus additional trees of any size/species as needed to reach the target BA.
- Live cavity trees should be retained, up to 5 per acre.

### Stand 69

- This stand is similar in many respects to stand 45, but with a predominance of deciduous species and only a small component of jack pine.
- Prescription and specifications are the same as for stand 45 except there is no preference to mark any jack pine as reserve trees.