RESOURCE MANAGEMENT GUIDE

Yellowwood State Forest Compartment **8** Tract **2**
Total Tract acreage: 47 acres Commercial Acres: 37 Date: 12/9/08
Forester: L. Burgess

Location

Located in Section 7 Township 9N, Range 2E of Brown County. The tract is located from a firetrail access road off Tulip Tree Road.

History

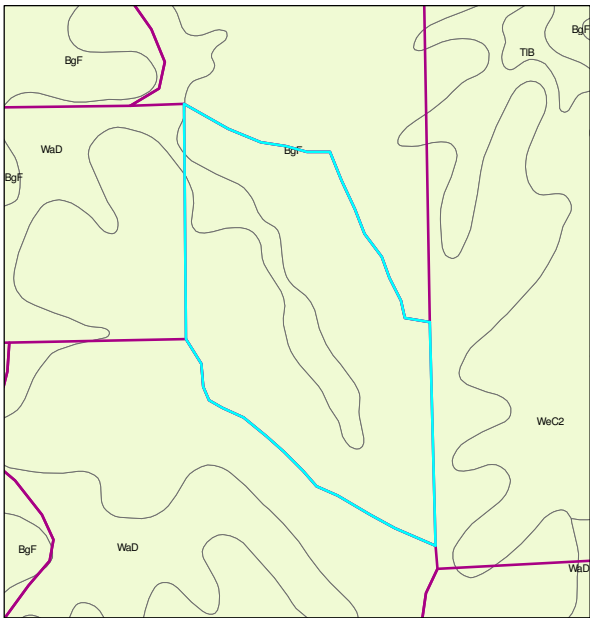
1975 January: TSI by CETA forester over 47 acres
1976 June: Timber cruise 24,606 bf leave, 52,939 bf harvest
1984 March: Pre-harvest recon. No 86-87 harvest recommended.
1990 May: Tract inventory & mgmt. plan 9,282 bf/ac total, 2,938 bf/ac harvest
1990 October: Haul roads and log yards constructed.
Firewood thinning – 102 TSI trees
Cable gate installed
1991 March: Timber sale 46,352 bf in 219 trees, 46 culls
1992 February: Harvest completed
1993 July: Replaced cable gate with barrier posts

Topography, Geology and Hydrology

The tract is comprised of about 15% ridgetop and the remaining acreage is east, northeast, west and southwest facing slopes, average steepness of 20%. The tract drains into two mapped intermittent stream within the North Fork Salt Creek-Jackson Creek watershed (Yellowwood Lake watershed). During the inventory it was noted that the June 2008 heavy rains had eroded the stream bank.

Soils

Berks-Trevlac-Wellston complex (**BgF**) 20 – 70 percent slope. Severe limitations noted for logging due to slope. Comprises ~15% of tract acreage.
Wellston-Berks-Trevlac complex (**WaD**) 6 – 20 percent slope. Slight to moderate limitations. Comprises 85% of tract acreage.



Access

A firetrail off Tulip Tree Road provides access into Tract 2.

Boundary
The tract borders private property to the west and east, and state forest along north and south tract boundaries. The eastern edge of tract is just east of the mapped intermittent stream. The western tract boundary lies along the drainage falling into a mapped intermittent.

Wildlife
Wildlife resources in this tract are abundant. Common species which are present include: Squirrels, white tailed deer, turkey, various small furbearing animals, and a variety of songbirds. An official wildlife review was completed on the tract. This review focuses on wildlife habitat, looking at what is present in the tract and what can be created through management activities. The inventory for this tract included recording structural habitat features at each data point; these records include snag (dead, standing tree) and cavity tree counts. The results of this collected data for snag counts are included on the bat guidelines form for this tract.

Communities
A Heritage database review was submitted for this tract. No RTE or species of special concern were noted within tract on the review. Timber rattlesnake, bobcat, worm-eating warbler, Butternut (*Juglans cinerea*) trees, dry-mesic upland forest, and trailing arbutus were noted within the Heritage database review in nearby acreage.

Exotics
No exotics were noted during the inventory. Any discoveries of such will be noted for treatment within the post-harvest TSI request.

Recreation
This tract is used for hunting.

Cultural
No sites noted within the tract during inventory.

Tract Prescription and Proposed Activities

The tract was divided into 2 strata for inventory summary purposes.
Strata 1: 37 acres mixed hardwoods suitable for harvest
Strata 2: 10 acres not considered for harvesting (during current inventory cycle) due to either steep slope, proximity to riparian area or current stocking (one point was taken in log yard of 1991 harvest).

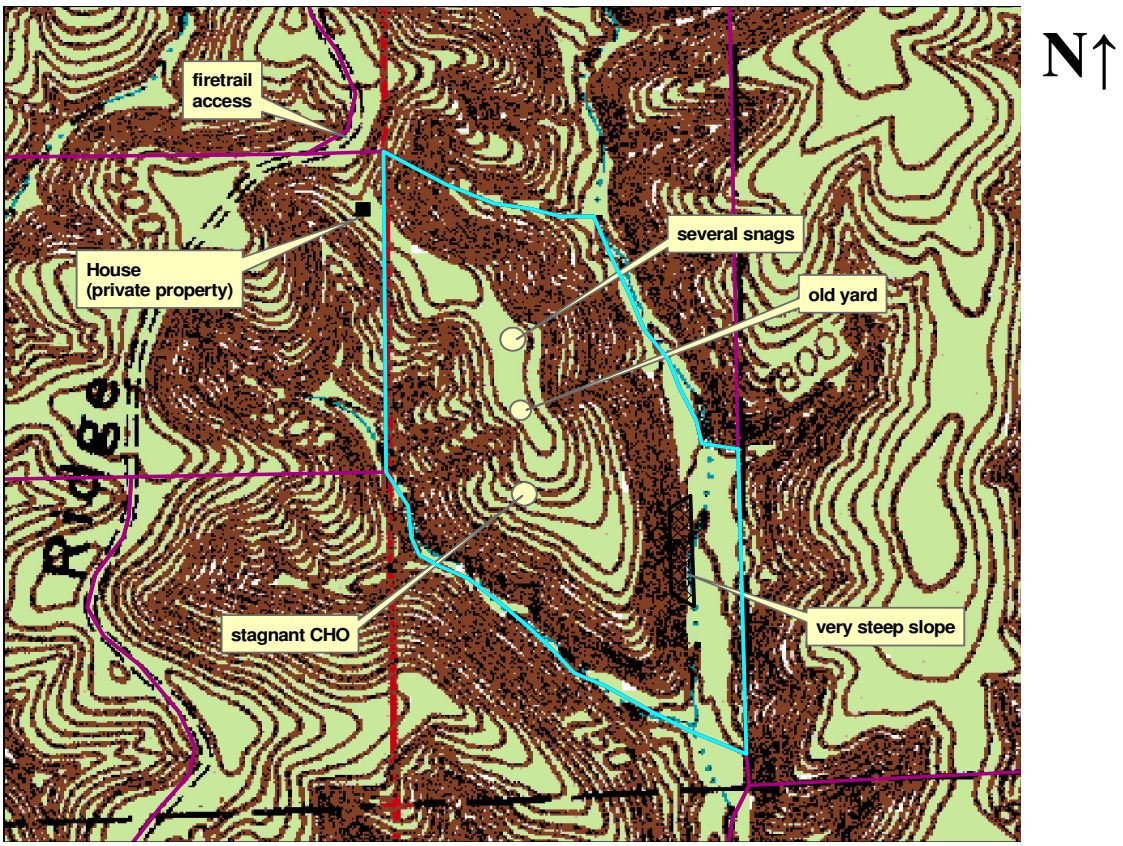
Strata 1	Volume est.	Basal Area(sq.ft./ac)
Harvest:	2,410 bd.ft./acre	31
Leave:	3,850 bd.ft./acre	67
Total:	6,260 bd.ft./acre	98
Strata 2		
Total:	3,480 bd.ft./acre	73

Inventory results list BLO and CHO (in descending order) as the top harvest volume species. Top volume leave species are WHO, CHO and YEP.

Overall this tract has mixed hardwood composition. The tract holds some nice WHO, many of which would be the focus of release efforts. Some large saw timber REO are present with some over-mature and likely to be taken with a harvest. The tract would benefit from a harvest including single tree selection as well as regeneration of at least two portions located within the central portion of the tract. These areas could be connected by including the southern log yard within the opening. The area would likely be conducive to maintaining oak in the tract because oak saplings are well represented.

Harvest operations from 1991 have benefited this tract. Observations during the inventory of the tract noted the good release work of some nice WHO and CHO. Many high quality stems were retained. Harvest marking for FY2009-10 will continue to retain many of these quality trees. Single tree selection will be used to further release some stems and regeneration openings will be utilized in areas to re-establish stands within the tract. One area noted for regeneration is a stagnant stand of CHO (just southwest off the ridgetop) with CHO saplings present as well as the previously noted mixed oak stand with several snags and good oak regeneration (this stand could also be marked as a shelterwood rather then an opening).

The inventory was based on approx.1 point per 2 acres.



The marking objective will be the removal of mature/over-mature stems, as well as those of low quality in an effort to improve the overall health, vigor and composition of the stand. The reduction of stocking levels should provide space for pre-selected crop trees to move forward into the next cutting cycle. Species composition will likely become more diverse and less susceptible to insect and disease infestation a common problem with homogeneous stands. These management techniques will improve the overall health, vigor and quality of the residual stand, while utilizing stems dropping out due to natural mortality, overstocking or maturity. TSI should follow to reduce stocking in some areas of high basal area with pole size stems and release crop trees not successfully released during the harvest.

Wildlife will benefit from this harvest as well. Additional sunlight penetrating the forest floor will simulate the development of new ground flora, subsequently increasing nesting and foraging habitat. This is essential for both game and non-game species as well as continued forest development. TSI will increase snags per acre while diversifying diameter distributions of both snags and growing stock trees.

Proposed Activities Listing
Timber marking, harvest and TSI planned in 2010/2011
TSI will include treatment of any invasive exotics discovered.
Stand Re-inventory work 2028

To submit a comment on this document, click on the following link:
http://www.in.gov/surveytool/public/survey.php?name=dnr_forestry

You **must** indicate "Yellowwood C8 T2" in the "Subject or file reference" line to ensure that your comment receives appropriate consideration. Comments received within 30 days of posting will be considered.