RESOURCE MANAGEMENT GUIDE

Yellowwood State Forest Compartment **5** Tract **7**
Tract acreage: 90 acres Date : 8/8/07
Forester : L. Burgess
(based on 4-11-06 recon. Original inventory by Jacob Haugham 3/16/06)

Location

Located in section 33 Township 9N, Range 2E and Sections 3 and 4 Township 8N Range 2 E of Brown County. The tract is located off Bond Cemetery Road. The tract adjoins state forest to the south and east.

History

Past management includes Dec.1987 tract inventory and management guide. March 1988 construction of log yard and skid trails followed by 1988 timber sale of 93,162 bd.ft. in 399 trees and 152 culls completed October 1989. Seven rick of firewood were cut for Visitor Center use in Dec. 1989 and firewood was cut from log yard Sept. 1990.
TSI 1989.

Topography, Geology and Hydrology

The tract is comprised of about 45% ridgetop and the remaining acreage is primarily east and west facing slopes, average steepness of 30%. The eastern section of tract drains into a mapped intermittent stream within the North Fork Salt Creek-Jackson Creek watershed.

Soils

Berks-Trevlac-Wellston complex (BgF) 20 – 70 percent slope. Severe limitations noted for logging due to slope. Comprises 35% of tract acreage.
Stonehead-Trevlac silt loam (SxD2) 10-20% slopes, eroded. Slight limitations noted for logging areas and skid trails. Moderate limitations noted for landings and haul roads due to slope. Comprises 30% of tract acreage.
Stonehead silt loam (SwC2) 6-10% slopes, eroded. Slight limitations noted for logging areas, skid trails and haul roads. Moderate limitations noted for landings due to slope. Comprises 30% of tract acreage.
Beanblossom channery silt loam (Be) nearly level. Slight limitations; moderate flood risk. Comprises less than 1-acre. Comprises 5% of tract acreage.

Access

Hauling access is limited from this tract. The 1988 timber sale utilized a log yard off Bond Cemetery Road which required crossing a mapped blue-line streambed. Another alternative would require extending the haul road into Tract 16 (to the north) and utilize the haul road used by the Tract 1 & 16 harvest (2007-08).

Boundary

Boundary marking is up-to-date for this tract. The state-painted, western boundary line bordering private property will be honored for this tract's management activities.

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. Snags, commonly known as dead, standing trees, were inventoried as well. This snag information was used to complete a bat management guideline form.

Communities
A Heritage database review was submitted for this tract. No RTE or species of special concern were noted within tract on the review. However, two butternut trees (*Juglans cinerea*) were noted during inventory. One 20″ dia. and one 18″dia. with no cankers noted (see map for details).

Exotics
Japanese honeysuckle and an extensive area of multiflora rose were noted within the tract. See map for details.

Recreation
This tract is used for hunting due to good access.

Cultural
Cultural resources may be present on the tract but their location is protected. Adverse impacts to significant cultural resources will be avoided during any management or construction projects.

Tract Prescription and Proposed Activities

Harvest Volume est. 1,486 bd.ft./acre.
Leave Volume est. 3,399 bd.ft./acre
Total tract volume est. 4,885 bd.ft./acre.

Overall this tract has oak-hickory composition. WHO is common throughout the tract. The inventory results indicate this tract would sustain and benefit from a harvest this cycle to remove those stems exhibiting damage and decline. Recommendation is for an intermediate harvest utilizing single-tree selection predominately across the tract. Regeneration openings may be utilized in areas to re-establish stands within the tract especially those areas with past fire damage. Two regeneration openings from 1988 harvest are dominated by YEP – these openings are each approx. ½ to 1 acre and will be included in post-harvest TSI . Creation of additional regeneration openings would best be located where pre-existing oak regeneration is occurring. Some areas indicating past fire damage might also be good candidates for regenerating. It was noted during the inventory that some gaps in the canopy were still apparent from the 1988 harvest on the southwest facing slope of the tracts central ridge (see map).

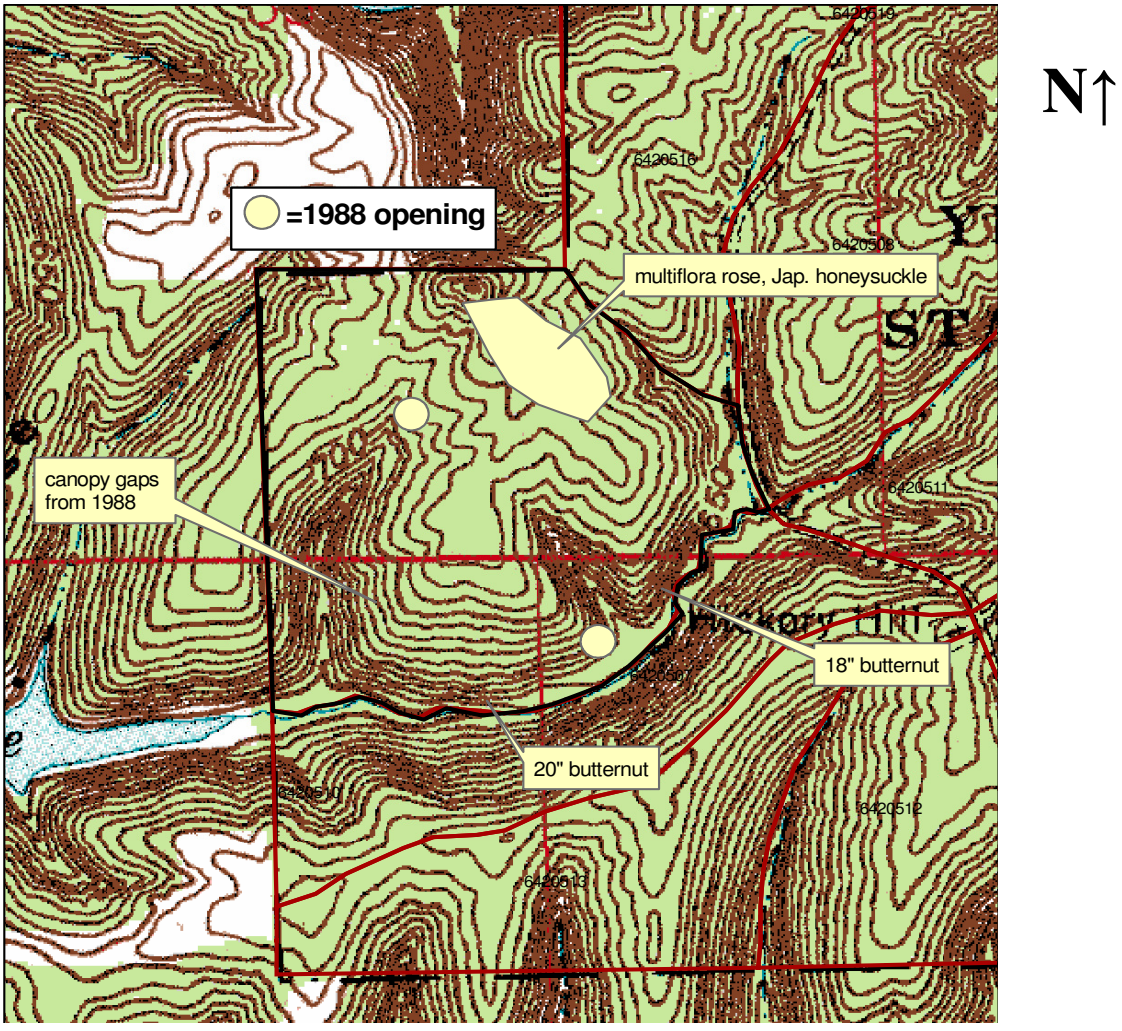
During the April 2006 recon of this tract several standing dead/dying large sawtimber WHO were noted in the southeast. Likely some of these stems can be salvaged with a

harvest. Another area on tract's east side has storm damage from 5-10 years ago including many large BLO with damaged tops, butts and some snags.

The 4+ acres of degraded ridgetop with extensive multiflora rose, Japanese honeysuckle and grapevine should be included in TSI efforts to facilitate the potential for regenerating trees on this acreage.

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

Timber marking is planned for 2008/09 (The preliminary harvesting date of 2006-07 has been prolonged due to the Purdue research forest units inserted into management timelines for 2007-08).



The marking objective should be the removal of low quality and less desirable stems in an effort to improve the overall health and vigor 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 Harvest planned in 2008/2009
Timber Stand Improvement work during 2007/2008. Including treatment of any invasive exotics noted/discovered.
Stand Re-inventory work 2026

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 C05 T07" 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.