

**Resource Management Guides (amendments to original)  
Martin State Forest  
30-day Public Comment Period: September 9, 2020 – October 8, 2020**

The Indiana State Forest system consists of approximately 158,000 acres of primarily forested land. These lands are managed under the principle of multiple use-multiple benefit to provide forest conservation, goods and services for current and future generations. The management is guided by scientific principles, guiding legislation and comprehensive forest certification standards which are independently audited to help insure long term forest health, resiliency and sustainability.

For management and planning purposes each State Forest is divided into a system of compartments and tracts. In general terms compartments are 300-1,000 acres in size and their subunits (tracts) are 10 - 300 acres in size. Resource Management Guides (RMGs) are then developed for each tract to guide their management through a 15-25 year management period. There are approximately 1,600 tracts in the State Forest system. During annual planning efforts 50-100 tracts are reviewed and RMGs developed based on current conditions, inventories and assessments.

The RMGs listed below and contained in this document are part of the properties annually scheduled forest inventories under review for Martin State Forest.

Compartment 5 Tract 6 (amendment)  
Compartment 8 Tract 8 (amendment)

**To submit a comment on this document, go to:**

[www.in.gov/dnr/forestry/8122.htm](http://www.in.gov/dnr/forestry/8122.htm)

You must indicate the State Forest Name, Compartment number and Tract number 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 and review posted at

<http://www.in.gov/dnr/forestry/3634.htm>.

Note: Some graphics may distort due to compression.

Compartment 5 Tract 6  
Resource Management Guide Amendment

June 22, 2020

This amendment is written to adjust the silvicultural prescription. The RMG did not prescribe a management harvest at that time. Despite data to support a harvest, the prescription was to allow the tract to grow several additional years based on observed conditions.

A recent review of the tract indicates conditions have reached the need for management. The canopy has closed and stocking levels have tightened. Black oaks throughout the stand are dying or showing signs of decline with some scattered red oak as well. In some areas of the tract there are nice pole sized white oak which are in need of release. There are a couple pockets of decent oak regeneration which need released from competing saplings and overstory trees to promote advancement into the canopy.

A review of inventory information and field observations indicates stocking level are high and the tract is now ready for a silvicultural treatment. This amendment recommends removal volume in the oak-hickory forest type to be between 1,200-2,500bdft/acre. The harvest should be focused on improving the stand through selective harvest using single tree section to release remaining trees to promote growth and reduce stress. Group selection or patch-cut openings should be established in areas determined at time of marking which have good oak regeneration present. Use of an oak shelterwood is another option in these areas focused on the removal of shade tolerant poles and seed sources for shade tolerant species to promote mid tolerant species such as oak and hickory. These methods should be focused on areas where red and black oak are found to promote their regeneration since overstory decline has been observed throughout the tract. If applicable, prescribed fire could be used to reduce the shade tolerant saplings to allow better light penetration and promote germination of less shade tolerant species. This could be an application used in pre or post-harvest treatment.

Furthermore, during the inventory some multiflora rose and Japanese stiltgrass were noted in the tract. The stiltgrass was mostly located along fire lane 6 and other skid trails. The multiflora rose is located along fire lane 6 as well but also along some ridges in the western portion of the tract. Both species should be treated prior to a harvest. Invasive species control should be continued post-harvest as part of regular management. Post-harvest timber stand improvement (TSI) should be conducted in established openings to release future crop trees and new openings to complete them. If an oak shelterwood is established any remaining pole/sapling shade tolerant species should be removed during post-harvest TSI to promote and release mid tolerant species such as hickory and oak.

Compartment 8 Tract 8  
Resource Management Guide Amendment

May 20, 2020

This amendment is written to adjust the silvicultural prescription. The guide did not prescribe a harvest at the time of development due to access concerns. Upon review of this tract during the planning for an adjacent tract observations indicate the oak hickory forest type in the western portion of tract 8 should be thinned. This would be accomplished through an improvement harvest. Notable amounts of declining black oak were observed that will likely die over the next few years. Further, there is high stocking at a Basal Area of 129, which according to the relative density chart is overstocked. An improvement harvest using single tree and group or patch-cuts would reduce stocking to acceptable levels and capture mortality and improve the overall tract vigor and health. The harvest would focus on declining and poor formed trees. Estimated volume with the oak-hickory forest type is 7,929 bdft per acre with an estimated harvest volume between 1,500 – 3,000 bdft per acre. Only the western portion of the tract is covered by this amendment. The other forest types of mixed hardwoods and bottomland hardwoods are not ready for a harvest at this time. Conducting this type of a harvest in this western part of the tract will increase the overall health of the tract and enhance and promote the growth of crop trees. Additionally, by harvesting this portion of tract 8 at the same time as the adjacent tract concern with access is resolved as well as minimizing multiple entries into the area by use of the same landing and skid trails.

Furthermore, the entire tract would benefit from post-harvest TSI which would focus on release of future crop trees while maintaining stocking since not all forest types were overstocked. TSI would address any remaining vines issues.