Indiana Department of Natural Resources
Division of Forestry

Indiana Department of Natural Resources

Resource Management Guides
Harrison-Crawford State Forest
30-day Public Comment Period (August 25, 2025 – September 23, 2025)

The Indiana State Forest system consists of approximately 160,251 acres of primarily forested land distributed across the state. These lands are managed under the principle that we're stewards of this land for the future. This work is guided through legislation and comprehensive scientific national and international forest certification standards which are independently audited to help insure long-term forest health, resiliency, and sustainability.

Resource management guides (RMGs) are developed to provide long-term, scientific forest management planning tailored to each forest compartment (300-1,000 acres in size) and tract (10 - 300 acres in size). There are 1,590 tracts across the state forest system statewide. Annually, 50-100 tracts are reviewed, and these guides are developed based on current assessments. Through science-based management practices, we prescribe management actions on select tracts every 15-25 year, diversifying the forested landscape and sustaining ecosystems.

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

Compartment 5 Tract 1
Compartment 10 Tract 1

To submit a comment on this document, go to:

https://www.in.gov/dnr/forestry/state-forest-management/public-comment/submit/

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:

https://www.in.gov/dnr/forestry/state-forest-management/public-comment/

Note: Some graphics may distort due to compression.

Harrison Crawford State Forest	Compartment 05	Tract 01
Daniel Martin	Date 6/17/2025	Acres: 66
Management Cycle End Year 2045	Management Cycle Length 20 years	

Location
Tract 1, also known as 6340501, is primarily in Section 17, T2S, R2E, in Crawford County, Indiana. The tract is approximately a mile and a half west of Milltown, Indiana.

General Description
This tract has a central ridge with both a north and south slope. The north central slope meets a drainage and another short, south facing slope at the north end of the tract. The southern central slope ends at a drainage, although the tract continues a short distance up another north facing slope where it meets private property. The entire tract is forested consisting primarily of mixed hardwoods with lesser amounts of mesic oak-hickory and conifer. The tract has stabilized and somewhat recovered from past agricultural use, though there remain signs of degraded site productivity in localized areas of the tract. Mortality was observed in several oak trees.

History
- 1952 All 66 acres purchased from Senn.
- 1953 10 acres planted in either a pine mix or a locust and oak mix throughout the tract.
- 2024 Forest Inventory completed, and this guide is written from that inventory.

Landscape Context
The surrounding landscape is primarily privately owned forest, residential, and agriculture lands.

Topography, Geology and Hydrology
Sloping is mostly mild, with some of the slope area cut up with stabilized past agriculture erosion gullies. Sandstone can be found on higher elevations, underlain with limestone. This tract has both a north and south facing slope, both slopes drain into unnamed drainages within the tract. Located in the tract may be karst features which will be buffered according to the 2022 Best Management Practices (BMP) field guide. The two main unnamed drainages through the tract flow into Whiskey Run Creek about a mile downstream, which eventually meets Blue River another mile downstream, upstream from Milltown, Indiana.

Soils
There are nine (9) unique soil types in this tract.

5 acres of Haymond silt loam, 0 to 2 percent slopes, frequently flooded, brief duration
1 acres of Elkinsville silt loam, 2 to 6 percent slopes
4 acres of Adyeville silt loam, 18 to 25 percent slopes, eroded
5 acres of Corydon stony silt loam, 20 to 60 percent slopes
14 acres of Haggatt silty clay loam, 12 to 18 percent slopes, severely eroded
28 acres of Wellston silt loam, 12 to 18 percent slopes, severely eroded
4 acres of Apalona silt loam, 6 to 12 percent slopes, eroded
Less than 1 acre of Gatchel loam, 1 to 3 percent slopes, occasionally flooded, very brief duration
5 acres of Apalona silt loam, 2 to 6 percent slopes

Access
Access to the tract is off Speed Road. Currently, there is only a small area to park along the county road. Improvements to the existing fire lane would allow better access to the tract.

Boundary
All tract boundaries are property boundaries. The east boundary is clearly defined by an old fence line and a field. There is a native stone corner marking the southeast corner. The southern boundary is also clearly defined by a fence line and metal posts. The southwest corner is marked with a rebar. A portion of the western line has little evidence but with the southwest corner clear and a field starting halfway up the western line the remainder of the line can be approximated. The northern line is poorly defined; this is in part due to two angled lines and a lack of evidence.

Ecological Considerations
This tract included a variety of habitat types in mixed hardwoods and oak to provide hard mast food sources for game and non-game species, some of which might include but not limited to white-tailed deer (*Odocoileus virginianus*), eastern wild turkey (*Meleagris gallopavo*), and squirrels (*Sciurus spp*.). Various signs of reptiles, amphibians and birds were present. The conifer component would likely provide dense cover to protect from predators as well as thermal cover in the winter months.

The Division of Forestry has developed compartment level guidelines for important wildlife structural habitat features such as snags and legacy trees. Snags are standing dead or dying trees. Snags provide value to a stand in the form of habitat features for foraging activity, den sites, decomposers, bird perching, and bat roosting. Snags eventually contribute to the future pool of downed woody material, which provides habitat for many ground-dwelling species and contributes to healthy soils. Legacy trees are live trees of a certain species and diameter class, that have potential future value to various wildlife species, if retained in the stand.

In the compartment that includes this tract, inventory data indicate snag densities exceed Division of Forestry (DoF) targets in all size classes. In the largest size class (>=19" dbh) inventoried density exceeds even the "optimal" target. Additionally, legacy tree densities exceed DoF compartment-level targets in all size classes by a comfortable margin.

There are various invasive species present such as Japanese stilt grass and wineberry. Pre- and post-harvest invasive species control should take place to remove or minimize the effect of these species. There may be other invasive species present that were not seen during inventory that should be treated as well.

A formal Ecological Review process, which includes a search of Indiana's Natural Heritage Database, is part of the management planning process. If Rare, Threatened or Endangered species were found to be associated with this area, the activities prescribed in this guide will be conducted in a manner that will not threaten the population viability of those species or communities.

Recreation
The primary recreation use in this tract is hunting. There are no developed recreation trails or

other facilities within the tract. For public safety, recreational activities in the tract would be temporarily restricted during active management.

Cultural
Cultural resources may be present, but their location(s) is protected. Adverse impacts to significant cultural resources will be avoided during any activities.

Tract Subdivision Description and Silvicultural Prescription
There are three cover types (i.e., stands) located in this tract consisting of mixed hardwoods, mesic oak-hickory, and conifer. These stands have varying degrees of maturity and harvest history, originating prior to state ownership (before 1952).

Throughout the tract, single-tree and group selection, and patch-cut openings may be applied for multiple reasons such as overstory mortality, vigorous natural regeneration in the understory, or poor-quality trees. Openings would provide early seral habitat in addition to the release of the desired trees. An estimated 5-15% of the tract could have these openings as they would need to be large enough to achieve the desired effect of both habitat and regeneration providing adequate sunlight for long enough to allow regenerating trees to become part of the canopy.

For multiple reasons, low quality or understory trees might not be removed during the harvest. For this reason, post-harvest timber stand improvement (TSI) would reduce poor quality or competing trees favoring oak and other desired species.

TSI can include cutting, girdling, and herbicide application to low value trees as well as potentially using prescribed fire. If a prescribed burn is planned in this area, a burn plan will be written and followed. Burns would be administered during the dormant season and in accordance with all prescribed fire guidelines. During post-harvest TSI any invasive species, if not already treated prior to the harvest, should be treated.

The current forest resource inventory was completed on 6/17/25 by forester Daniel Martin. A summary of the estimated tract inventory results are located in the tables below.

Tract Summary Data (Trees > 11" DBH)

Category	Estimate
Tract Acres (Forested)	66
Gingrich Stocking Percent (%)	105%
Trees Per Acre	149
Basal Area Per Acre (SQFT)	131
Volume Per Acre (BDFT)	11,110

Tract Summary Data (trees >11"DBH):

Species	# of Trees	Total Bdft
Yellow Poplar	1,185	286,210
Black Oak	299	115,310
White Oak	261	77,390
Sugar Maple	593	43,800
Eastern White Pine	282	40,930
American Beech	162	30,970
Northern Red Oak	121	22,300
Eastern redcedar	468	17,920
Shortleaf pine	124	16,070
Sassafras	190	14,570
Shagbark hickory	247	14,060
Black Cherry	79	9,620
American Sycamore	14	8,410
Pignut Hickory	100	8,270
Chinkapin Oak	91	7,490
Black Walnut	31	6,160
Red Maple	34	5,900
Red Elm	47	3,790
Honey Locust	21	2,650
Virginia Pine	37	1,170
Total:	4,386	732,990

Stand 1: Mixed Hardwoods – 51 acres.
This cover type is fully stocked and is the largest cover type in the tract. This cover type is varied with the most abundant species being yellow poplar making up 48% of the volume in the stand. Black oak is the second most common species making up 12% of the volume.

Given the current condition and stocking level an improvement harvest would thin the stand, capture mortality, remove low quality trees, and release crop trees. If a harvest is conducted, the species composition of the site would remain the same with much of the residual volume being yellow poplar.

Stand 2: Mesic Oak Hickory – 9 acres.
This cover type is the second largest cover type in the tract and is over stocked. Black oak is most of the volume in this stand making up 33% of the stand total. The next most abundant species is white oak which accounts for 25% of the volume in this stand. The mortality of red oak and black oak were noted throughout the stand; there were varying degrees of mortality in white oak as well. The natural regeneration throughout the stand consists primarily of young sugar maples and American beech competing with oak and hickory saplings.

The objective for this cover type is to provide multiple economic and ecological services. Specifically, a quality hardwood timber stand, dominated by oak and hickory, while providing hard mast and early to mid-seral habitat for wildlife.

Given the current stand conditions and stocking level an improvement harvest would capture mortality and remove low quality trees to release the natural oak regeneration in the understory and other future crop trees. If a harvest were conducted, the species composition of the site would remain the same with the majority of the volume being in black and white oaks.

In areas with particularly vigorous oak regeneration or inadequate quality overstory, group selection or patch-cut may be applied. Any patch-cut openings would provide larger areas of early seral habitat in addition to the release of desired trees.

Stand 3: Conifer – 6 acres
The conifer cover type consists of primarily eastern white pine. Other pine species are intermixed throughout the previous cover types. This cover type is overstocked and consists of 47% white pine with the second most abundant species being yellow poplar which accounts for 20% of the volume present. The hardwoods are largely in transition zones or the subcanopy. A row thinning is recommended for the white pine to uniformly reduce the stocking and volume present. If every third row is selected for harvest, stocking can be reduced to a more sustainable level while still being fully stocked. Species other than the dominant pines can be singly selected for harvest where necessary.

Summary Tract Silvicultural Prescription and Proposed Activities
Due to the current stocking and overall condition of the tract, an improvement harvest is recommended and could be administered as early as this year or 2026. Overall, the tract volume would be reduced between 30-50%. This reduction would largely be done by single-tree and group selection with the possibility of some patch-cut openings; however, a row thinning would likely be best for the conifer cover type. TSI would be recommended both before and after the harvest to treat invasive species and remove desired unmerchantable trees.

This harvest will largely not change the overall composition of the tract. The forested areas will remain forested retaining the current dominant species present.

Hunting opportunities should be improved by the maintenance of early successional habitat and the recruitment of hard mast producers such as oak and hickory to provide deer and small mammal browse.

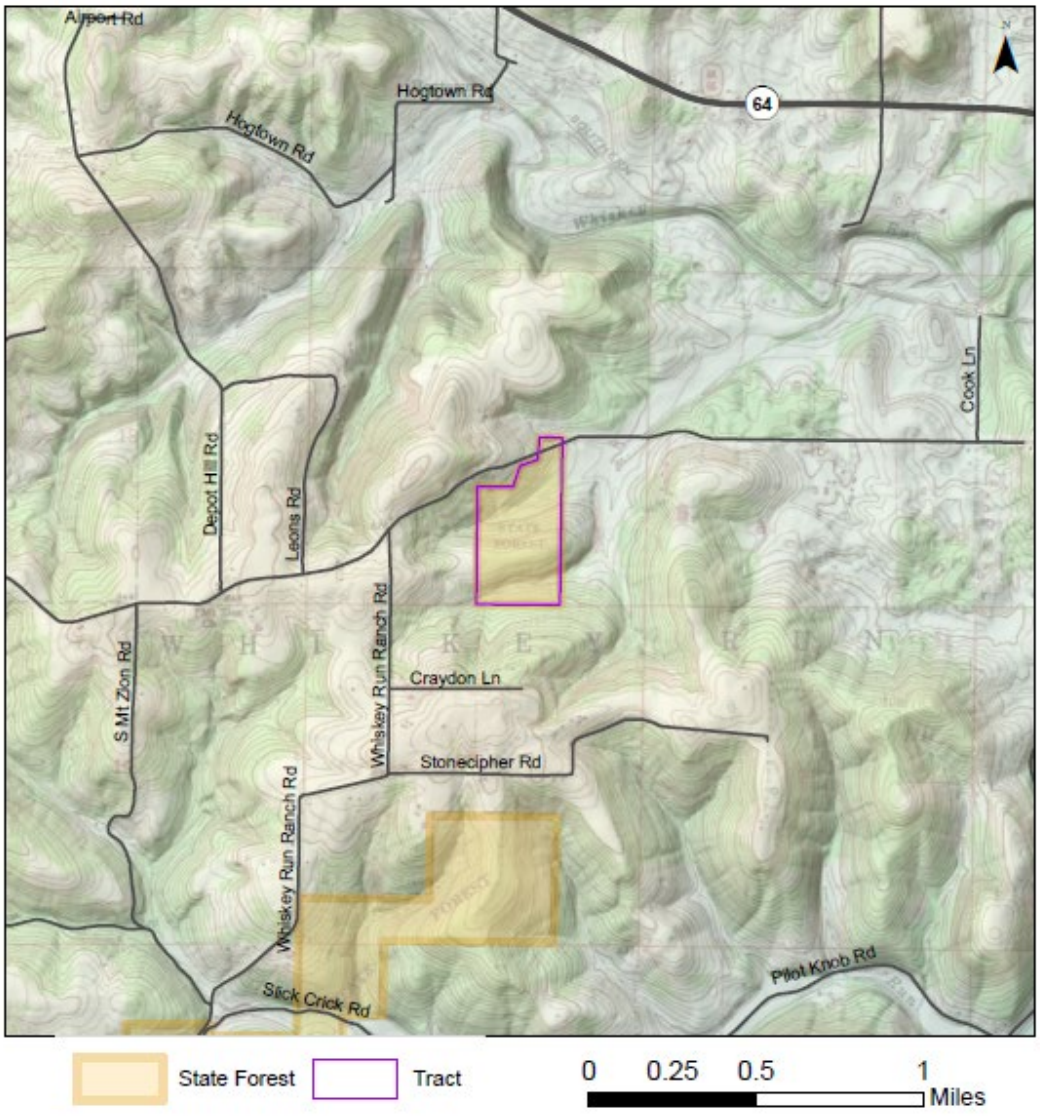
BMPs will be followed throughout the harvest to ensure any management activities impact to soils is limited. Soil disturbance will largely be confined to the log yard and main skid trails. The BMPs will also ensure water quality is not permanently affected. The following of these BMPs will be contractually required of management operators.

Once the harvest is complete, post-harvest TSI should be conducted and the tract visited in three years following the harvest to ensure proper regeneration and growth is occurring in any patch-cut and throughout the tract. In about 10-15 years, any created patch cut should be evaluated and have crop tree release completed, as well as any vine or invasive work done. In about 20 years the tract should be revisited for another forest inventory, and new management guide.

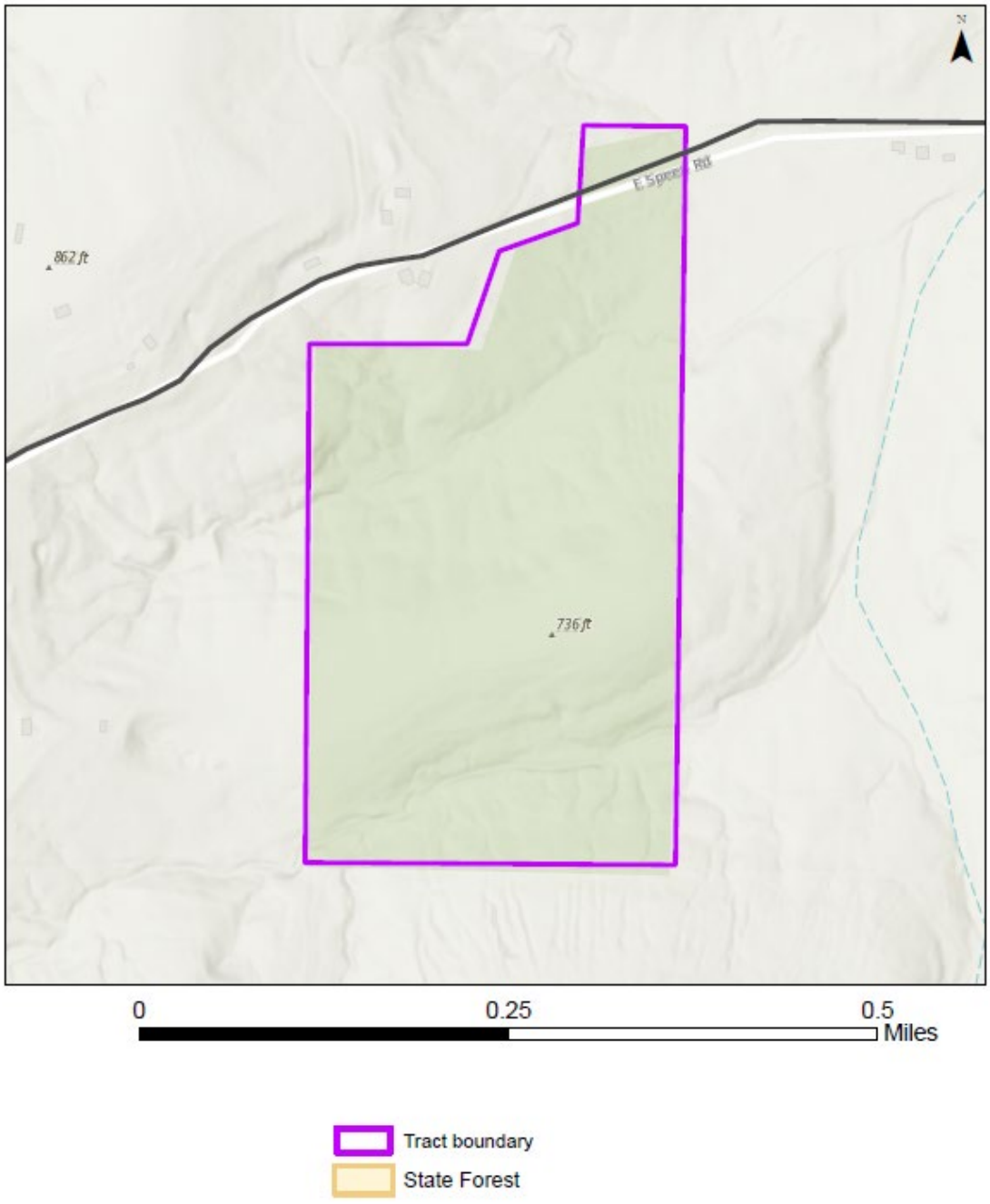
Proposed Activities Listing

Proposed Management Activity	*Proposed Date*
Fire lane maintenance	2025 - 2027
Pre-harvest TSI and invasive species work	2025-2027
Timber harvest	2026-2028
Post-harvest TSI and invasive work	One to two years after harvest
3-year regeneration review	Three years after harvest
Crop tree release in patch-cuts	10-15 years after harvest
Next forest inventory	2045

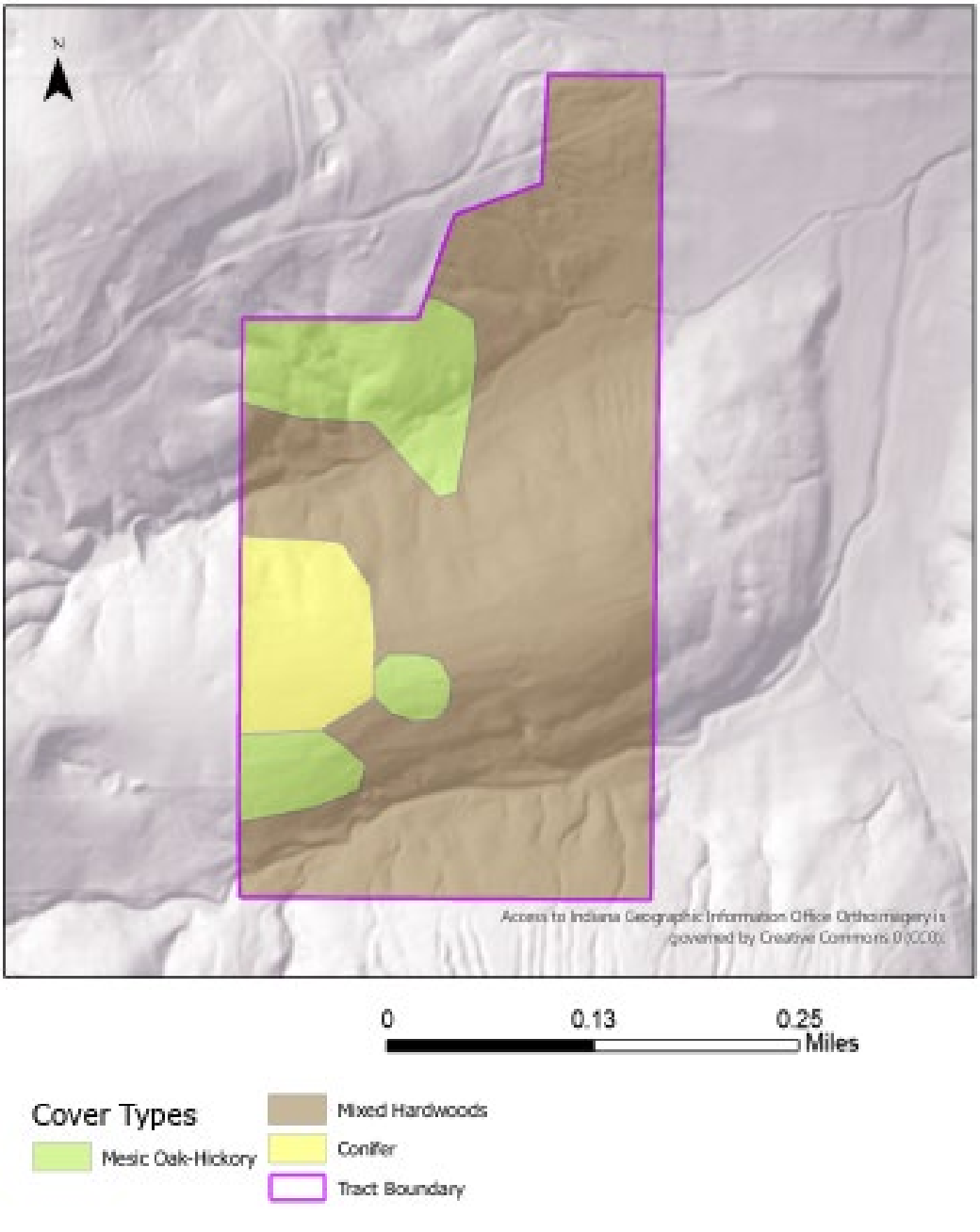
Harrison-Crawford State Forest
Location Map
Compartment 5 Tract 1



Harrison-Crawford State Forest
Compartment 5 Tract 1
Tract Map



Harrison-Crawford State Forest
Compartment 05 Tract 01
Cover Type Map



Harrison Crawford State Forest | Compartment 10 | Tract 01
Daniel Martin | Date 5/15/2025 | Acres: 159
Management Cycle End Year 2045 | Management Cycle Length 20 years

Location
Tract 1, also known as 6341001, is in Section 16, T3S, R2E, in Crawford County, Indiana. The tract is approximately three miles east of Carefree, Indiana.

General Description
This tract is fully forested and consists of two cover types: mixed hardwoods and mesic oak-hickory. Primarily, it consists of a central ridge running north to south and having east and west aspects. There are several acres south of Dry Run Creek, with a northerly aspect. The tract illustrates a varied past use with varied age classes and species compositions.

History

- 1939 - 80 acres purchased from Bye, which constitute the central portion of the tract.
- 1940 - 112 acres purchased from Saltsgaver, which 17 acres constitute the west portion of the tract.
- 1941 - 40 acres purchased from Bye, which 26 acres constitute the eastern portion of the tract.
- 1975 - 334 acres transferred to the Indiana Department of Natural Resources (IDNR) from Indiana Department of Transportation after the construction of I-64, which 35 acres constitute the southern portion of the tract.
- 1987 - Forest inventory conducted by Bob Carr.
    - Total basal area /acre – 88.7 square feet (sq.ft).
    - Total board feet (BDFT) /Acre – 3,412
    - Total BDFT – 537,468
    - Top 5 species by volume

Species	BDFT
White Oak	181,708
Black Oak	138,054
Yellow Poplar	65,391
Sugar Maple	44,731
Pignut Hickory	24,035

- 1987 - Timber sale conducted on 95 acres in the central part of the tract.
    - Number of trees – 972
    - Number of culls – 130
    - Total volume sold – 185,393 BDFT
    - Top 5 species by volume

Species	BDFT
White Oak	62,685

Black Oak	48,664
Yellow Poplar	14,425
Scarlet Oak	12,830
Sugar Maple	12,719

- 2010 - Forest inventory conducted by Christine Martin.
    - Total basal area /acre – 92.8 sq.ft.
    - Total BDFT /Acre – 4,541
    - Total BDFT – 699,370
    - Top 5 species by volume

Species	BDFT
White Oak	114,165
Yellow Poplar	75,954
Black Oak	65,639
Northern Red Oak	63,063
Pignut Hickory	60,749

- 2025 - Forest Inventory completed, and this guide is written from that inventory.

Landscape Context
The landscape to the south of this tract is primarily forest, owned and managed by the IDNR Division of Forestry (DoF). The adjacent region to the north, east and west is a mixture of forests, farmland (mostly pasture and hay), and residences, as well as additional Harrison-Crawford State Forest land. The I-64 corridor runs along the south edge of the tract. A high-tension power line runs through the tract with a right of way of about one acre. Within a mile, there is a commercial limestone quarry; and Wyandotte Caves is located about two miles south of the tract. Within two and a half miles, there is a developed area at Carefree, Indiana, serving interstate travelers and trucking. Just north of this area is a manufacturing plant.

Topography, Geology and Hydrology
Most of the tract is along a north-south running ridge, with slopes running down to the two branches of Dry Run Creek and a mapped intermittent stream along the eastern boundary that feeds into Dry Run Creek. As the name suggests, the stream channels through this tract only flow during and briefly after heavy rain events. The primary aspects are south, west, and east. Sloping is moderate. Change in elevation is around 250 feet. Parent material should be typical of the area, with sandstone in the higher elevation and limestone beneath. Evidence of karst topography (depressions and sinkholes) is present.

Soils
There are eight (8) unique soil types in this tract.

13 acres of Apalona silt loam, 6 to 12 percent slopes, eroded
17 acres of Haymond silt loam, 0 to 2 percent slopes, frequently flooded, brief duration
29 acres of Adyeville silt loam, 18 to 25 percent slopes, eroded
54 acres of Wellston silt loam, 12 to 18 percent slopes, eroded
20 acres of Wellston silt loam, 12 to 18 percent slopes, severely eroded

14 acres of Tipsaw-Adyeville complex, 25 to 75 percent slopes
3 acres of Elkinsville silt loam, 6 to 12 percent slopes, eroded
9 acres of Gatchel loam, 1 to 3 percent slopes, occasionally flooded, very brief duration

Access
This tract has three public roads providing various access opportunities. To gain management access to the main part of the tract, a short fire lane could be established off East Shafer Ridge Road to avoid a log yard directly next to a public road. Some areas south of East Shafer Ridge Road may require crossing Dry Run Creek.

Boundary
Devils Hollow Road makes up part of the western boundary, the other parts are formed by property boundaries that are not well defined. The eastern boundary is internal to Harrison-Crawford State Forest and mostly follows Ruel Road, with a short segment following East Shafer Ridge Road. The southern boundary follows the interstate right of way. The northern edge of this tract borders private land and has markers at each corner of state property.

Ecological Considerations
The Division of Forestry has developed compartment level guidelines for important wildlife structural habitat features such as snags and legacy trees. Snags are standing dead or dying trees. Snags provide value to a stand in the form of habitat features for foraging activity, den sites, decomposers, bird perching, and bat roosting. Snags eventually contribute to the future pool of downed woody material, which provides habitat for many ground-dwelling species and contributes to healthy soils. Legacy trees are live trees of a certain species and diameter class, that have potential future value to various wildlife species, if retained in the stand.

In the compartment that includes this tract, inventory data indicate snag densities exceed DoF targets in all size classes. Additionally, legacy tree densities exceed DoF compartment-level targets in all size classes by a comfortable margin.

Ailanthus was noted in some areas of the tract. Pre- and post-harvest invasive control should take place to remove or minimize the effect of these species. There may be other invasives present that were not seen during inventory, those should be treated as well.

A formal ecological review process, which includes a search of Indiana's Natural Heritage Database, is part of the management planning process. If rare, threatened or endangered species are found to be associated with this area, the activities prescribed in this guide will be conducted in a manner that will not threaten population viability of those species or communities.

Recreation
The primary recreation use in this tract is hunting. There are no developed recreation trails or other facilities within the tract. For public safety, access to the tract would be temporarily restricted during active management.

Cultural
Cultural resources may be present, but their location(s) is protected. Adverse impacts to significant cultural resources will be avoided during any activities.

Tract Subdivision Description and Silvicultural Prescription
There are two cover types in this tract consisting of mixed hardwoods, and mesic oak-hickory. These stands (i.e., cover types) have varying degrees of maturity and harvest history.

Throughout the tract, single-tree and group selection, and patch-cut openings may be applied for multiple reasons such as overstory mortality, vigorous natural regeneration in the understory, or poor-quality trees. Openings would provide early seral habitat in addition to the release of the desired trees. An estimated 5-15% of the tract could have these openings as they would need to be large enough to achieve the desired effect of both habitat and regeneration providing adequate sunlight for long enough to allow regenerating trees to become part of the canopy.

For multiple reasons, low quality or understory trees may not be cut during the harvest. A post-harvest timber stand improvement (TSI) effort would help reduce poor quality or competing trees and favor oak or other desired species.

TSI can include cutting, girdling, and herbicide application to low value trees and perform thinning, vine and invasive control. Prescribed fire may be an additional tool used to achieve management objectives such as encouragement of oak regeneration and removal of unwanted shade tolerant species such as sugar maple and American beech. If a prescribed burn is planned in this area, a burn plan will be written and followed.

The current forest resource inventory was completed on 5/15/25 by forester Daniel Martin. A summary of the estimated tract inventory results are located in the tables below.

Tract Summary Data (Trees > 11" DBH)

Category	Estimate
Tract Acres (Forested)	159
Gingrich Stocking Percent (%)	105%
Trees Per Acre	190
Basal Area Per Acre (SQFT)	124
Volume Per Acre (BDFT)	8,359

Tract Summary Data (trees >11"DBH):

Species	# of Trees	Total BDFT
White oak	1,726	393,980
Black oak	948	182,400
Yellow Poplar	2,017	299,300
Sugar Maple	649	61,030
Pignut hickory	1,417	152,720
Red Oak	363	77,840
Black gum	88	6,090
Black cherry	67	1,550
Black Walnut	439	35,750
Eastern Red Cedar	870	52,160
Red Elm	38	3,260
Virginia Pine	30	6,210
Chinkapin Oak	88	7,720
American Sycamore	124	20,130
Red Maple	167	7,200
Shumard Oak	50	2,830
Shingle Oak	17	6,510
Sassafras	88	7,000
Bitternut Hickory	30	5,400
Total:	9,216	1,329,080

Stand 1: Mixed Hardwoods – 111 acres.
This cover type is fully stocked with yellow poplar making up 36% of the volume and white oak as the second most abundant species consisting of 14% of the volume in the stand. This stand had many smaller diameter trees with some areas of almost pure yellow poplar. While white oak is the second most dominant species by volume, the canopy is dominated by smaller and more abundant hardwoods such as sugar maple and American beech and a large amount of American beech poles in the midstory.

Given the current condition and stocking level an improvement harvest would thin the stand, capture mortality of dying trees, remove low quality trees, and release crop trees. If a harvest is conducted, the composition of the site would remain the same with much of the residual volume being yellow poplar.

Stand 2: Mesic Oak-Hickory – 48 acres.
This cover type is over stocked. White oak is most of the volume in this stand making up 49% of the stand total. The next most abundant species is black oak which accounts for 23% of the volume in this stand.

The objective for this cover type is to provide multiple economic and ecological services, specifically a quality hardwood timber stand, dominated by oak and hickory, while providing hard mast and early to mid-seral habitat for wildlife.

Given the current stand conditions and stocking level, an improvement harvest would thin the stand, capture mortality of dying trees, remove low quality trees, release crop trees, and release advanced natural oak regeneration in the understory, where applicable. If a harvest is conducted, the composition of the site would remain the same with the majority of the remaining volume being in white oaks.

In areas with particularly vigorous advanced oak regeneration or with an inadequate quality overstory, a patch-cut opening may be applied. These openings would provide early seral habitat in addition to the release of the desired trees.

Summary Tract Silvicultural Prescription and Proposed Activities
Due to the current stocking and overall condition of the tract an improvement harvest is recommended. A harvest could occur as early as this year or 2026. Overall, the tract volume would be reduced between 30-50%. This management would largely be done by single-tree and group selection; however, patch-cut openings may occur in areas where the conditions support the need for an opening. TSI would be recommended both before and after the harvest to treat any invasive species and remove desired unmerchantable trees.

This harvest will, largely, not change the composition of the tract. The forested areas will remain forested, retaining the current dominant species present. Hunting opportunities should be improved by the creation of early successional habitat and the recruitment and enhancement of hard mast producers such as oak and hickory, providing forage benefits for a wide variety of wildlife and insects.

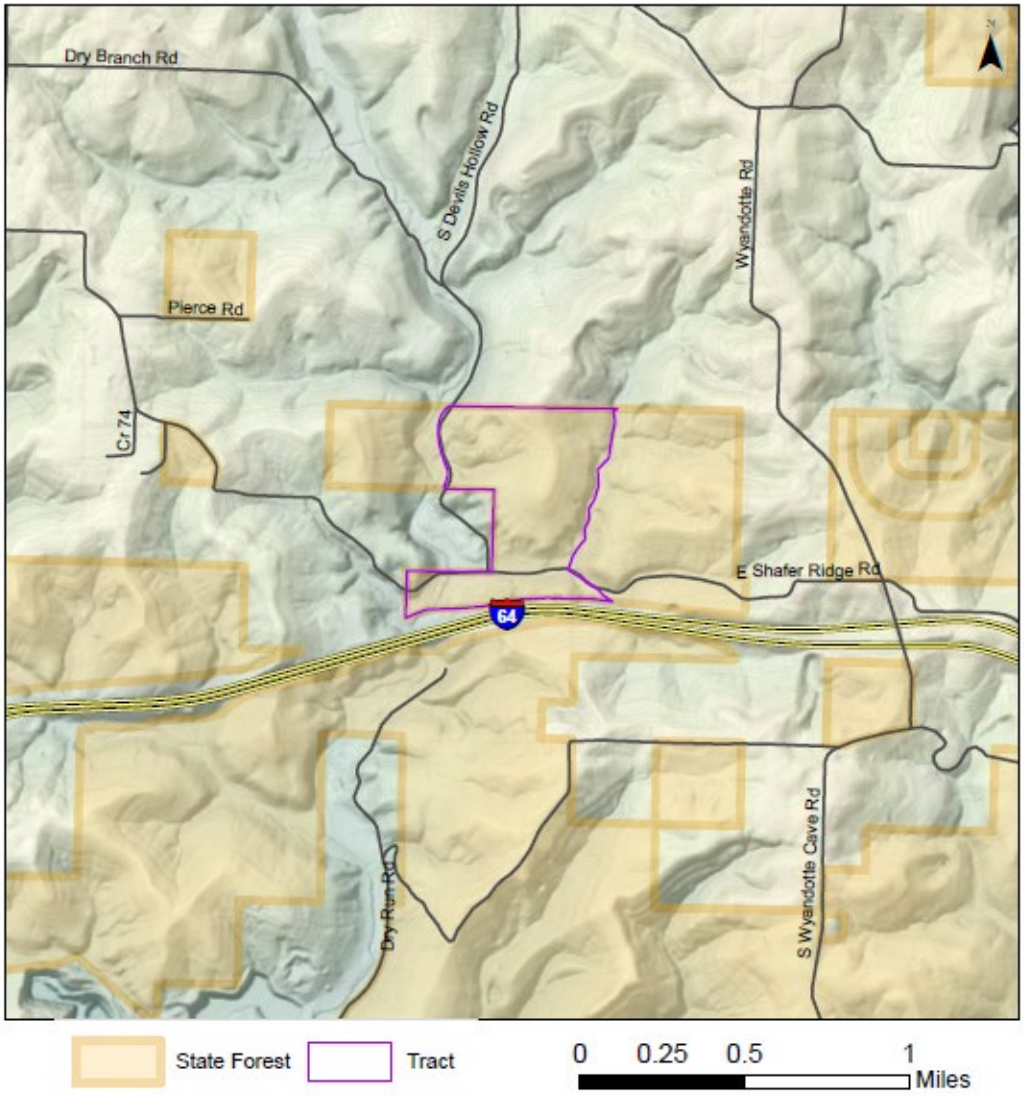
Best management practices (BMPs) will be followed throughout the harvest to ensure any management activities impact to the soil is limited. Soil disturbance will largely be confined to the log yard and main skid trails. The BMPs will also ensure water quality is not permanently affected. The following of these BMPs will be contractually required of management operators.

Once the harvest is complete, post-harvest TSI should be conducted. The tract should be visited in three years following the harvest to ensure proper regeneration in any patch-cuts established and to ensure other management efforts in the tract are successful. In around 10 years, any patch-cuts that were created should be evaluated and crop tree release work and other needs, such as vine or invasive species control work done at that time. In about 20 years the stand should be revisited for another inventory and new management guide.

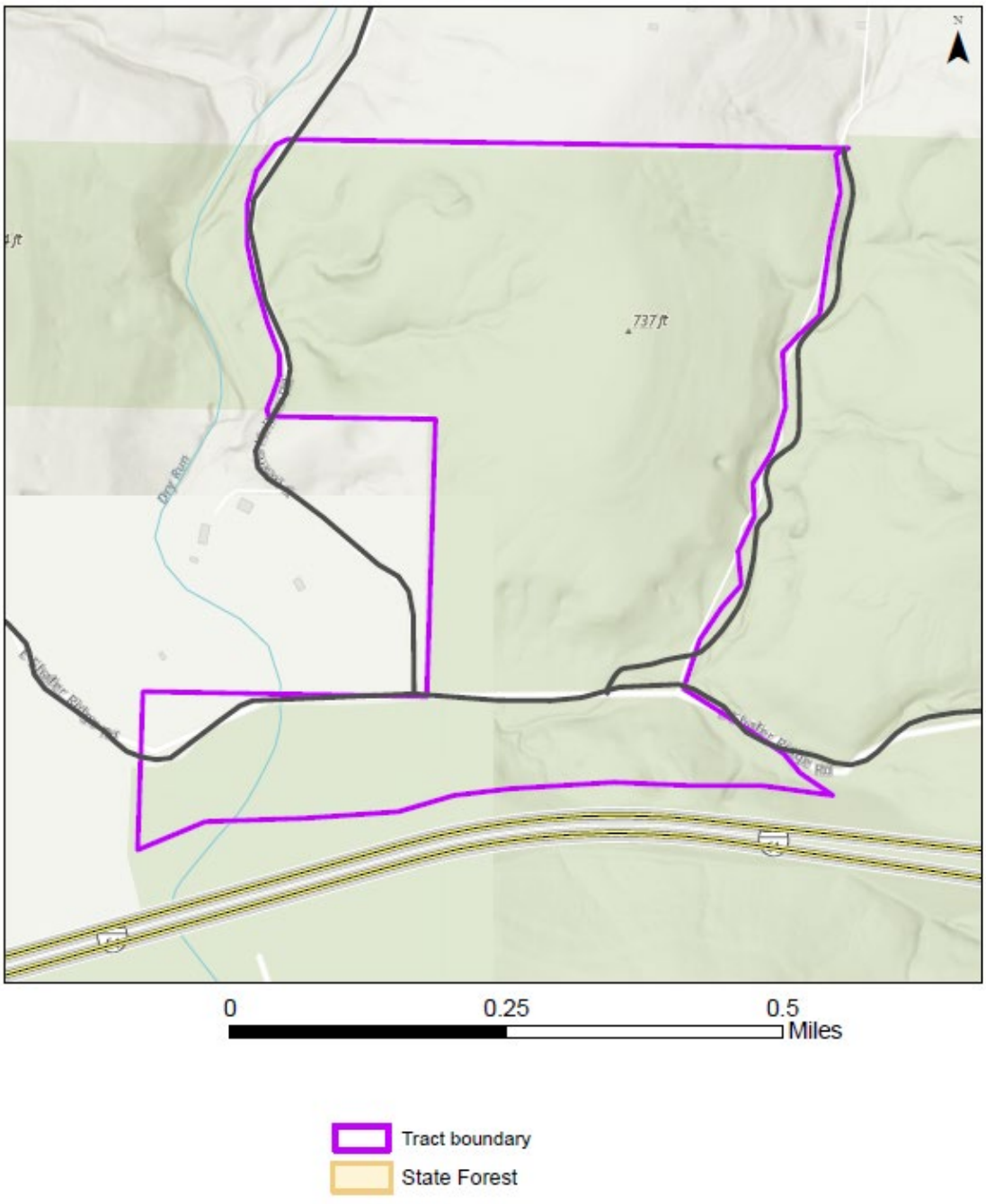
Proposed Activities Listing

Proposed Management Activity	*Proposed Date*
Fire lane maintenance	2025 - 2027
Pre-harvest TSI and invasive species work	2025-2027
Timber harvest	2026-2028
Post-harvest TSI and invasive species work	1-2 years after harvest
3-year regeneration review	Three years after harvest
Crop tree release in patch-cuts	2036-2038
Next forest inventory	2045

Harrison-Crawford State Forest
Location Map
Compartment 10 Tract 1



Harrison-Crawford State Forest
Compartment 10 Tract 1
Tract Map



Harrison-Crawford State Forest
Compartment 10 Tract 01
Cover Type Map