

**Resource Management Guides
Ferdinand State Forest
30-day Public Comment Period (March 19, 2025 – April 17, 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 Ferdinand State Forest.

Compartment 6 Tract 9
Compartment 6 Tract 10

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.

Ferdinand-Pike State Forest
Forester: Rusty Ahrndt
Management Cycle End Year: 2044

Compartment: 06 Tract: 09
Date: 8/7/2024 Acres: 114
Management Cycle Length: 20 years

Location

Tract 9, also known as 6310609, is in Section 29, T3S, R3W in Clark Township of Perry County, Indiana. It is located roughly 5.3 miles east of Ferdinand, Indiana, and 6.0 miles north of Bristow, Indiana.

General Description

This tract is entirely forested and contains ridges that generally run north – south with slopes ranging from 0% to 50%. There is a central ridge that runs roughly through the center of the tract, and it is along the top of this ridge that fire lane 20 is located. There are two mapped streams; one of which delineates much of the southern boundary and flows from the north-east to the southwestern corner where it meets the other mapped stream. The second mapped stream flows roughly from north to south through the eastern portion of the tract. The tract is split between approximately 53 acres of oak-hickory and 48 acres of mixed-hardwood cover types with around 13 acres of planted pine.

History

- 1939 - The 220-acre area that includes tract 6310609 today was deeded to the State of Indiana on September 17th by Mary Guntel for the price of \$1.00.
- 1950 - The State planted eastern white pine, red pine, and Jack pine on the “Guntel Farm.”
- 1968 - A 47 foot x 45 foot x 7 foot waterhole was constructed as a Pittman-Robertson project.
- 1973 - Forester Bill Hahn conducted the first resource inventory in March (2,806 board feet (BdFt)/acre, estimated for 60 acres of commercial hardwoods).
- 1981 - Foresters Janet Eger and Ben Hubbard conducted a timber sale on February 19. W. H. Worley purchased an estimated 80,474 BdFt in 401 trees from 55 acres for \$10,175.00.
- 1982 - Post-harvest TSI was completed on March 12th on the 55-acre harvest area by YACC labor.
- 1996 - Forester Doug Brown conducted a pine sale on May 16. Kenneth Jackson purchased an estimated 33,297 BdFt in 392 trees and 4 culls from roughly 4.0 acres for \$3,995.64.
- 1996 - A snowstorm damaged a roughly 7-acre area of Jack and red pine in tract 6310609 in March.
- 1997 - The 7-acre opening created by the snowstorm was combined with the 4-acre white pine opening for TSI and a grouse management area was created in January. Forester John Zvirblis conducted a forest inventory in March and found there to be an estimated 5,748.5 BdFt/acre total volume with 2,144.4 BdFt/acre harvest volume for 88 acres of commercial hardwoods.
- 1998 - Forester Doug Brown conducted a timber sale on April 23rd. Waninger Timber Company purchased an estimated 173,693 BdFt in 751 trees and 63 culls for \$88,500.00.
- 2001 - Post-harvest TSI was completed in November on 73 acres.

- 2015 - A tract forest inventory was completed on July 21st by Jacob Henry and resource management guide was written by A. Smith on October 21st.
- 2024 – A tract forest inventory was completed on August 7th by J. Housinger.

Landscape Context

This tract is bordered by state forest to the south and the northeast. Privately owned agricultural land lies to the east of the tract and privately owned forest and agricultural fields lie to the west and northwest of the tract.

Topography, Geology and Hydrology

This tract is topographically variable with ridgetops, bottomland areas and slopes ranging from 0 to 50 percent. Water features include the two mapped intermittent streams that run from north-east to south-west across the tract, and the man-made waterhole for wildlife. Runoff from this tract flows into Hurricane Creek and the Anderson River.

Soils

Soils within the tract include the following (also refer to the attached soils map):

Adyeville-Wellston-Deuchars silt loams (AbvD2) complex contains Adeyville, Wellston, and Deuchars soils. They occur on 8 to 20 percent slopes and are eroded. The depth to the water table is greater than 80 inches for the Adyeville and Wellston soils but only 24 to 36 inches for the Deuchars soils. Available water capacity is low (about 4.1 inches) for Adyeville, moderate (about 8.8 inches) for Wellston, and moderate (about 9.0 inches) for the Deuchars soils. The site index for northern red oak for Wellston soils is 81 and 90 for Deuchars soils.

Adyeville-Tipsaw-Ebal complex (AccG) complex contains Adeyville, Tipsaw, and Ebal soils. They occur on 20 to 50 percent slopes and are very rocky. The depth to the water table is greater than 80 inches for the Adyeville and Tipsaw soils but only 24 to 36 inches for the Ebal soils. Available water capacity is low (about 4.1 inches) for Adyeville, low (about 3.3 inches) for Tipsaw, and moderate (about 7.2 inches) for the Ebal soils. This soil type is moderately well to somewhat excessively well drained and has a high to very high runoff class. The site index for black oak for Tipsaw soils is 70 and 80 for Ebal soils.

Apalona-Zanesville silt loams (AgrC2) contains Apalona and Zanesville soils. They occur on 6 to 12 percent slopes and are eroded. The depth to the water table is 15 to 26 inches for the Apalona soils and 19 to 28 inches for the Zanesville soils. Available water capacity is low (about 4.0 inches) for the Apalona soils and low (about 4.9 inches) for the Zanesville soils. This soil type is moderately well drained and has a high runoff class. The site index for Apalona soils is 60 for white oak.

Ebal-Deuchars-Kitterman complex (EabD2) contains Ebal, Deuchars, and Kitterman soils. They occur on 12 to 24 percent slopes and are eroded. The depth to the water table is about 24 to 36 inches for Ebal and Deuchars soils and 12 to 24 inches for Kitterman soils. Available water capacity is moderate (about 7.5 inches) for Ebal, moderate (about 9.0 inches) for Deuchars, and low (about 4.1 inches) for the Kitterman soils. This soil type is moderately well drained and has

a high to very high runoff class. The site index for Ebal soils is 80 for black oak, 90 for northern red oak for Deuchars soils, and 57 for white oak for the Kitterman soils.

Gatchel loam (GacAW) is an occasionally flooded soil for a very brief duration occurring on 0 to 2% slopes. It is a somewhat excessively drained soil with a depth of more than 80 inches to the water table. Available water capacity is moderate at about 6.1 inches. The site index is not given for Gatchel loam soils but common trees to manage for are baldcypress, bitternut hickory, Blackgum, green ash, pin oak, red maple, shingle oak, and swamp white oak.

Access

The tract is easily accessible from Calvert Road (formerly Otto Road), by Fire Lane 20. Fire Lane 20 runs north-south through tracts 6310610 and 6310609.

Boundary

This tract is bound to the north by a ridge top that is shared with tract 6310610 and a meandering barbed wire fence. The south boundary is identified by a mapped intermittent stream and is shared with tract 6310608. The east boundary is delineated by the tree line, meandering barbed wire fencing, and one corner stone with a Perry County survey marker. The west boundary is indicated by meandering barbed wire fencing and one corner stone. The private property boundary lines need to be better identified and indicated in the field prior to any timber management activities.

Ecological Considerations

The habitat within the tract should be suited for a wide variety of species. Habitat includes mature closed canopy forest, a patchwork of young trees on old openings and some relatively intact planted pine stands.

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 nearly dead 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. Current assessments indicate the abundance of these habitat features are below the recommended maintenance levels. It is important to note that these are compartment level guidelines and that even though the estimated tract data does not quite meet all target levels, it is likely that suitable levels are present for these habitat features in the surrounding landscape. The prescribed management will maintain or enhance the relative abundance of these features.

There is a sandstone rock outcrop on the steep west slope along the north-south side drainage. No invasive species were noted during the inventory, although some invasives may be present due to being found in neighboring tracts.

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

There are no designated recreational trails in this tract, but Fire Lane 20 does provide hike-in access. Likely recreational activities in this tract include hunting, hiking, birding, and wildlife viewing.

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

Mesic Oak-Hickory stratum/cover type

This stratum is the largest stratum found in the tract and covers 53 acres. Inventory data shows 105 trees per acre, 101.4 square feet per acre of basal area, and 4,512 board feet per acre in these areas. This corresponds to a stocking level of about 78%. There are opportunities for thinning and crop-tree release in areas populated by this cover type. Due to the lack of widespread advanced oak regeneration, treatment is recommended to encourage reproduction of oak and hickory in appropriate areas with existing oak and hickory in the overstory. Areas that already contain advanced oak regeneration should be targeted for release. The understory is composed of the typical American beech and maple mix in many areas. Disturbance such as removal of mid-story combined with prescribed fire would encourage oak and hickory regeneration. Inventory data indicated residual stocking reduction to about 57% in these areas.

Mixed Hardwood stratum/cover type

This stratum covers 48 acres of the tract. This area included the typical mature sawtimber oak-hickory species mix seen elsewhere on the forest. Inventory data indicates 108 trees per acre, 82.8 square feet of basal area per acre, and 5,032 board feet per acre in these areas. This corresponds to a stocking level of about 79%. Red maple and sugar maple are the primary sawtimber species in this area, but other common species included yellow poplar, American beech, pignut hickory and white oak. Most plots in this stratum were prescribed thinning during the inventory. The understory is composed of the typical American beech and maple mix in many areas. Inventory data indicated residual stocking reduction to approximately 45% on the Gingrich Stocking Chart.

Conifer stratum/cover type

This stratum covers about 13 acres of the tract. The inventory data show 110 trees per acre, 94.7 square feet of basal area per acre, and 6,799 board feet per acre in these areas. Virginia, shortleaf and eastern white pine were the species noted during inventory. Some of the pine was previously salvaged in 1996 due to storm damage. The remaining pine has varying amounts of windthrow damage and hardwood succession. Regeneration or patch cut openings are prescribed in areas of primarily pine where appropriate, to accelerate the conversion from pine to native hardwoods.

The current forest resource inventory was completed on 08/07/2024 by J Housinger. A summary of the estimated tract inventory results are in the table below.

Tract Summary Data (trees >11”DBH):

Species	# Sawtimber Trees	Total Bd. Ft.
White oak	1,331	298,580
Eastern white pine	472	116,770
Yellow poplar	267	69,570
Pignut hickory	450	56,630
Red maple	656	55,620
Sugar maple	571	44,240
Northern red oak	154	39,810
American beech	328	31,830
Black oak	125	21,970
American sycamore	78	10,770
White ash	78	7,640
Virginia pine	98	7,090
Black cherry	19	4,910
Pin oak	18	2,650
Shagbark hickory	29	2,470
Shortleaf pine	21	2,460
Scarlet oak	41	1,550
American elm	24	1,350
Total:	4,760	775,910

Summary Tract Silvicultural Prescription and Proposed Activities

A timber harvest is prescribed for this tract, to include portions of the mixed hardwood, oak-hickory, and conifer cover types. Estimated harvest volume would be between 250 and 350 MBF according to inventory data. The harvest would utilize single-tree and group selection, and patch-cut openings or shelterwoods where the conditions and overstory support the prescription. This harvest could be combined with C06T10 (6310610) due to the adjacent location and common fire lane for access. Problem occurrences of invasive species should be treated prior to harvest operations if needed. TSI should be done after the harvest where needed along with an assessment of invasive species for follow-up treatment. Prescribed fire could be used to encourage regeneration of shade intolerant species while controlling shade tolerant species.

Proposed Activities Listing

Proposed Management Activity

Mark timber

Timber harvest with C06T10

Prescribe fire

Invasive species control

Post-harvest TSI

3-year regeneration review

Next forest inventory

Proposed Date

2025-2026

2026-2030

2025+

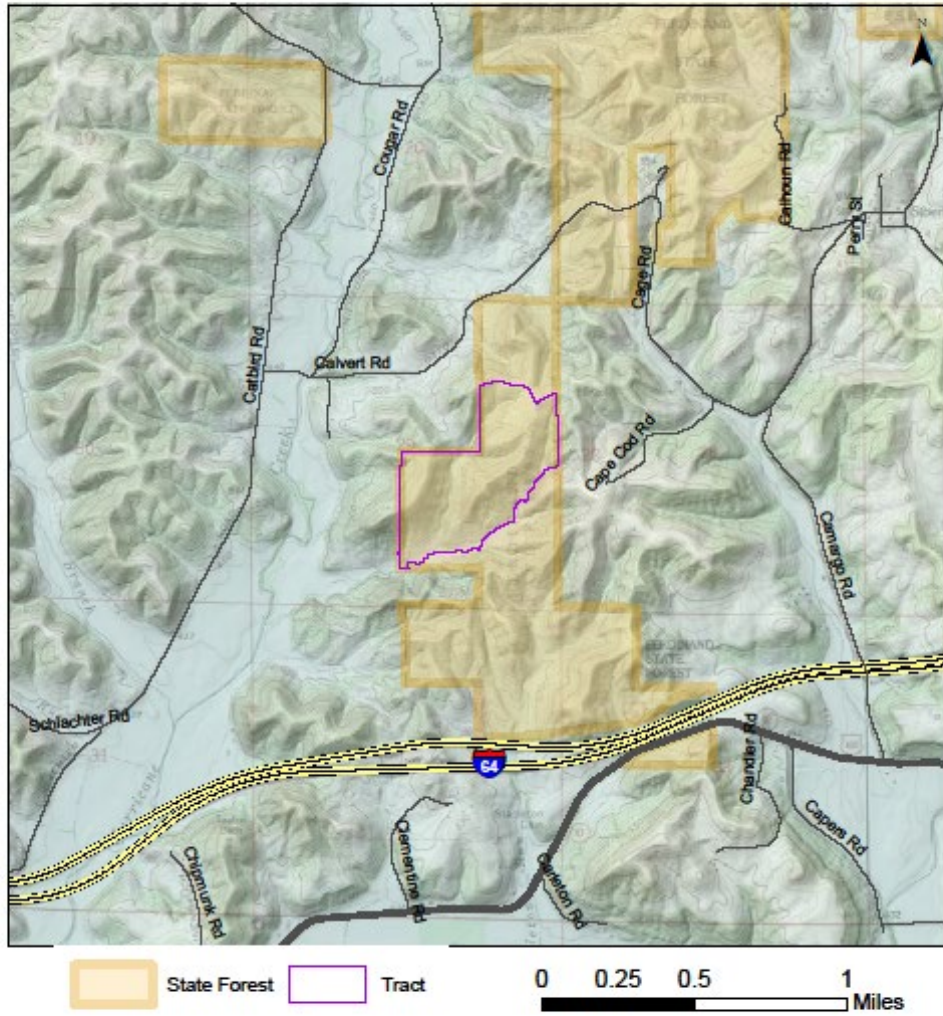
2025+

within 2 years of harvest

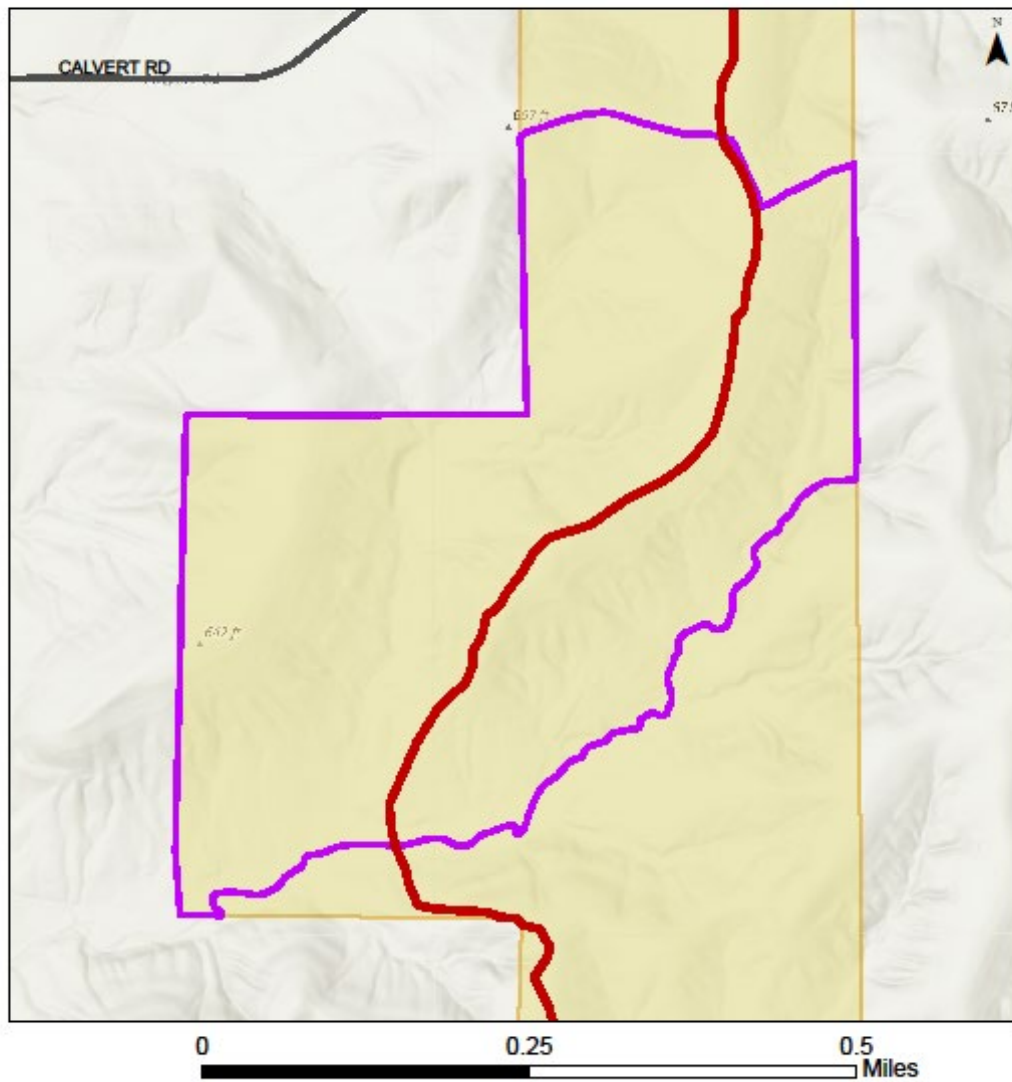
Three years after harvest

2044

Ferdinand State Forest
Location Map
Compartment 6 Tract 9








Ferdinand State Forest Compartment 6 Tract 9 Tract Map



- Fire Lane
- Tract boundary
- State Forest

Ferdinand State Forest Compartment 6 Tract 9 Cover Types Map



-  Tract Boundary
-  Mapped Streams
-  Mesic Oak-Hickory
-  Mixed Hardwoods
-  Conifer

0 0.13 0.25 Miles

Ferdinand-Pike State Forest
Forester: Rusty Ahrndt
Management Cycle End Year: 2044

Compartment:06 Tract:10
Date: 12/18/2024 Acres: 95
Management Cycle Length: 20 years

Location

Tract 10, also known as 6310610, is in Sections 21 and 29, T3S, R3W in Clark Township of Perry County, Indiana. It is located approximately 5.5 miles East of Ferdinand, Indiana, and 6.6 miles north of Bristow, Indiana.

General Description

This tract is entirely forested and contains ridges that generally run north-south with slopes ranging from 0% to 50%. The tract is divided into two portions that are only connected by the northeastern corner of the southern portion contacting the southwestern corner of the northern portion. The ridgetops are mostly comprised of old fields that have filled in naturally or been planted to pine. It consists of approximately 95 acres with roughly 18 acres of planted pine, 26 acres of mixed hardwoods, and 51 acres of oak-hickory forest.

Tract 6310610 is composed predominantly of upland hardwoods. Mostly oak-hickory with some mixed hardwoods, and scattered pine plantings. The dominant overstory timber species on most of the tract include white oak, black oak, yellow poplar, sugar maple and pignut hickory. The area that was planted to conifers is dominated by a mix of pine species. The most common species of post/pole sized trees were sugar maple, yellow poplar and red maple.

History

- 1939 – The state purchased 80 acres from Perry County for \$320.00 on July 6th and 220 acres from Mary Guntel for \$1.00. These acquisitions include portions of the southwest half of tract 6310610.
- 1950 - The State planted eastern white pine, red pine, and Jack pine on the “Guntel Farm.”
- 1972 - The last section of tract 6310610 was purchased from Edward and Nellie Kline on April 8, when the State acquired 17 acres for the price of \$1.00.
- 1973 - Forester Steve Brandsasse conducted the first forest inventory in April (1,866 board feet (BdFt)/acre total volume estimated for 44 acres of commercial hardwoods).
- 1981 - Forester Janet Eger conducted a timber sale on July 23. Indiana Hardwoods purchased an estimated 60,455 BdFt in 346 trees from 30 acres for \$8,360.00.
- 1982 - Post-harvest timber stand improvement (TSI) was completed on January 29 on the 30-acre harvest area by Young Adult Conservation Corps (YACC) labor.
- 1997 - Forester John Zvirblis conducted a forest inventory in December and found there to be an estimated 6,906.5 BdFt/A total volume with 2,386.7 BdFt/A harvest volume for 70 acres of commercial hardwoods.
- 2000 - Foresters Gretchen Herbaugh and Doug Brown conducted a timber sale on April 18. Rasche Brothers Logging purchased an estimated 72,491 BdFt in 328 trees and 47 culls for \$32,850.00.
- 2003 - Post-harvest TSI was completed in November on 34 acres.
- 2010 - Doug Brown treated a small patch of ailanthus roughly 0.1 miles from the gate on fire lane 20 on September 7th.

- 2015 - A forest inventory was completed on July 30th by Jacob Henry and a Resource Management Guide was completed by A. Smith on October 10th.
- 2024 – A forest inventory was completed on the 17th of July by J. Housinger.

Landscape Context

State forest borders the tract to the south and to the north. Privately owned agricultural land lies to the west of the tract and, to the east the land is predominantly privately owned forest with some agricultural fields.

Topography, Geology and Hydrology

This compartment is topographically variable with ridgetops, bottomland areas and slopes that vary from long and gentle to abrupt and steep. Signs of past soil erosion exist under the pine plantings. There are two mapped intermittent streams in the southern portion of the tract and runoff from this tract drains into Hurricane Creek to the west or into the Anderson River.

Soils

Soils within the tract include the following (also refer to the attached soils map):

Adyeville-Wellston-Deuchars silt loams (AbvD2) complex contains Adeyville, Wellston, and Deuchars soils. They occur on 8 to 20 percent slopes and are eroded. The depth to the water table is greater than 80 inches for the Adyeville and Wellston soils but only 24 to 36 inches for the Deuchars soils. Available water capacity is low (about 4.1 inches) for Adyeville, moderate (about 8.8 inches) for Wellston, and moderate (about 9.0 inches) for the Deuchars soils. The site index for northern red oak for Wellston soils is 81 and 90 for Deuchars soils.

Adyeville-Tipsaw-Ebal complex (AccG) complex contains Adeyville, Tipsaw, and Ebal soils. They occur on 20 to 50 percent slopes and are very rocky. The depth to the water table is greater than 80 inches for the Adyeville and Tipsaw soils but only 24 to 36 inches for the Ebal soils. Available water capacity is low (about 4.1 inches) for Adyeville, low (about 3.3 inches) for Tipsaw, and moderate (about 7.2 inches) for the Ebal soils. This soil type is moderately well to somewhat excessively well drained and has a high to very high runoff class. The site index for black oak for Tipsaw soils is 70 and 80 for Ebal soils.

Apalona-Zanesville silt loams (AgrB) contains Apalona and Zanesville soils. They occur on 2 to 6 percent slopes and is considered prime farmland. The depth to the water table is 17 to 28 inches for the Apalona soils and 21 to 30 inches for the Zanesville soils. Available water capacity is low (about 4.4 inches) for the Apalona soils and moderate (about 6.3 inches) for the Zanesville soils. This soil type is moderately well drained and has a medium runoff class. The site index for Apalona soils is 60 for white oak.

Apalona-Zanesville silt loams (AgrC2) contains Apalona and Zanesville soils. They occur on 6 to 12 percent slopes and are eroded. The depth to the water table is 15 to 26 inches for the Apalona soils and 19 to 28 inches for the Zanesville soils. Available water capacity is low (about 4.0 inches) for the Apalona soils and low (about 4.9 inches) for the Zanesville soils. This soil type is moderately well drained and has a high runoff class. The site index for Apalona soils is 60 for white oak.

Ebal-Deuchars-Kitterman complex (EabD2) contains Ebal, Deuchars, and Kitterman soils. They occur on 12 to 24 percent slopes and are eroded. The depth to the water table is about 24 to 36 inches for Ebal and Deuchars soils and 12 to 24 inches for Kitterman soils. Available water capacity is moderate (about 7.5 inches) for Ebal, moderate (about 9.0 inches) for Deuchars, and low (about 4.1 inches) for the Kitterman soils. This soil type is moderately well drained and has a high to very high runoff class. The site index for Ebal soils is 80 for black oak, 90 for northern red oak for Deuchars soils, and 57 for white oak for the Kitterman soils.

Gatchel loam (GacAW) is an occasionally flooded soil for a very brief duration occurring on 0 to 2% slopes. It is a somewhat excessively drained soil with a depth of more than 80 inches to the water table. Available water capacity is moderate at about 6.1 inches. The site index is not given for Gatchel loam soils but common trees to manage for are baldcypress, bitternut hickory, Blackgum, green ash, pin oak, red maple, shingle oak, and swamp white oak.

Access

The northern portion of tract 6310610 is easily accessible from Calvert Road by Fire Lane 19 whereas the southern portion is accessible from Fire Lane 20.

Boundary

The southern portion of tract 6310610 is bound to the south by a shared ridge top with tract 6310609 and there is a partial barbed wire fence denoting the southern boundary of the northern portion. The north boundaries are indicated by Calvert Road and an old roadbed. The east boundaries are indicated by barbed wire fencing, a corner stone at the section corner, and a corner stone along the most eastern boundary line. The west boundaries are indicated by partial barbed wire fencing and a tree line. The private property boundary lines need to be better identified and indicated in the field prior to any timber management activities.

Ecological Considerations

No observations on wildlife were noted during the forest inventory although tract 6310610 has an abundant supply of food resources such as soft and hard mast and the mapped intermittent streams provide a water source for wildlife during non-droughty times of the year. The previous management guide mentions that songbirds, frogs, woodpeckers and eastern box turtles have been observed in the tract.

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 nearly dead 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. It is important to note that these are compartment guidelines and that even though the estimated tract data does not quite meet all target levels, it is likely that suitable levels are present for these habitat features in the surrounding landscape. The prescribed management will maintain or enhance the relative abundance of these features.

The invasive plants noted in the inventory were in the northern portion and include autumn olive, multiflora rose, and ailanthus. These invasive species seemed to be light.

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 or communities were 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

There are no designated recreational trails within this tract. However, the fire lanes are likely used for hunting, mushroom hunting, hiking, bird watching, and wildlife viewing.

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

The current forest resource inventory was completed on 12/18/24 by Forester Jamie Winner. A summary of the estimated tract inventory results are located in the table below.

Tract Summary Data (trees >11”DBH):

Species	# Sawtimber Trees	Total Bd. Ft.
White oak	916	214,766
Black oak	543	109,003
Eastern white pine	255	79,766
Loblolly pine	548	75,959
Yellow poplar	386	74,157
Shortleaf pine	318	61,319
Pignut hickory	406	42,185
Sugar maple	438	36,933
Northern red oak	102	21,955
Bitternut hickory	165	15,252
Shagbark hickory	65	11,927
American sycamore	63	8,036
Virginia pine	77	7,562
Red maple	142	4,994
Black cherry	38	3,103
Pin oak	6	2,795
American beech	44	2,741
Scarlet oak	7	2,410
Persimmon	48	2,030
Black gum	26	592
Total:	4,593	777,485

Mesic Oak-Hickory stratum

Forestland classified in this stratum/cover type covers approximately 51 acres. Inventory data indicates 102 trees per acre, 100.2 square feet of basal area per acre, and 7,865 board feet per acre in these areas. This corresponds to a stocking level of 80%. Most areas within this stratum were prescribed a single-tree selection harvest. Inventory data indicated a reduction of stocking to approximately 60% after a harvest.

A common trend in this stratum is the transition from oak-hickory to mixed hardwoods over time. The oak-hickory timber type provides significant wildlife and timber resource value. The retention of species in this stratum is important in the Division of Forestry's strategic direction for state forests. A light thinning and midstory removal is recommended to remove shade tolerant species with the aim of releasing and perpetuating the oak and hickory. Nevertheless, long-term planning should include more significant types of disturbance. Prescribed fire and shelterwood treatments are good silvicultural tools to accomplish this objective.

Mixed Hardwoods stratum

Forestland classified in this stratum covers approximately 26 acres. Inventory data indicates 112 trees per acre, 85.6 square feet of basal area per acre, and 5,679 board feet per acre. This corresponds to a stocking level of 70%. Most areas within this stratum could be prescribed a single-tree selection harvest and/or light thinning. Inventory data indicated a reduction of stocking to approximately 60% after a harvest.

Conifer stratum

Forestland classified in this stratum covers approximately 18 acres. Inventory data indicates 113 trees per acre, 104 square feet of basal area per acre, and 8,200 board feet per acre in these areas. This corresponds to a stocking level of 80%. Areas within this stratum were identified for the creation of regeneration/patch-cut openings to promote the regeneration of native hardwoods. Inventory data indicated a reduction in stocking to approximately 50% after a harvest. Some healthy white pine may be retained if determined to have residual wildlife benefit.

Summary Tract Silvicultural Prescription and Proposed Activities

As outlined in the tract subdivision descriptions, a harvest is prescribed across most of this tract. A timber harvest can be expected to remove 300-400MBF. There will be variability in the marking process to include single-tree and group selection, patch cut openings, and no harvesting in areas depending on current conditions and stocking. Objectives will include removal of poor form and declining timber, reduction of high stocking where needed, release of higher value trees from competition, release of oak regeneration already present, and maintenance and release of oak and hickory species where present. This will include planning for a prescribed fire to promote the long-term species diversity of the tract and continued presence of oak and hickory. Pre-harvest activities could include limited vine control and invasive species control. Management of this tract could be included with 6310609 due to adjacent location and common fire lane for access.

Proposed Activities Listing

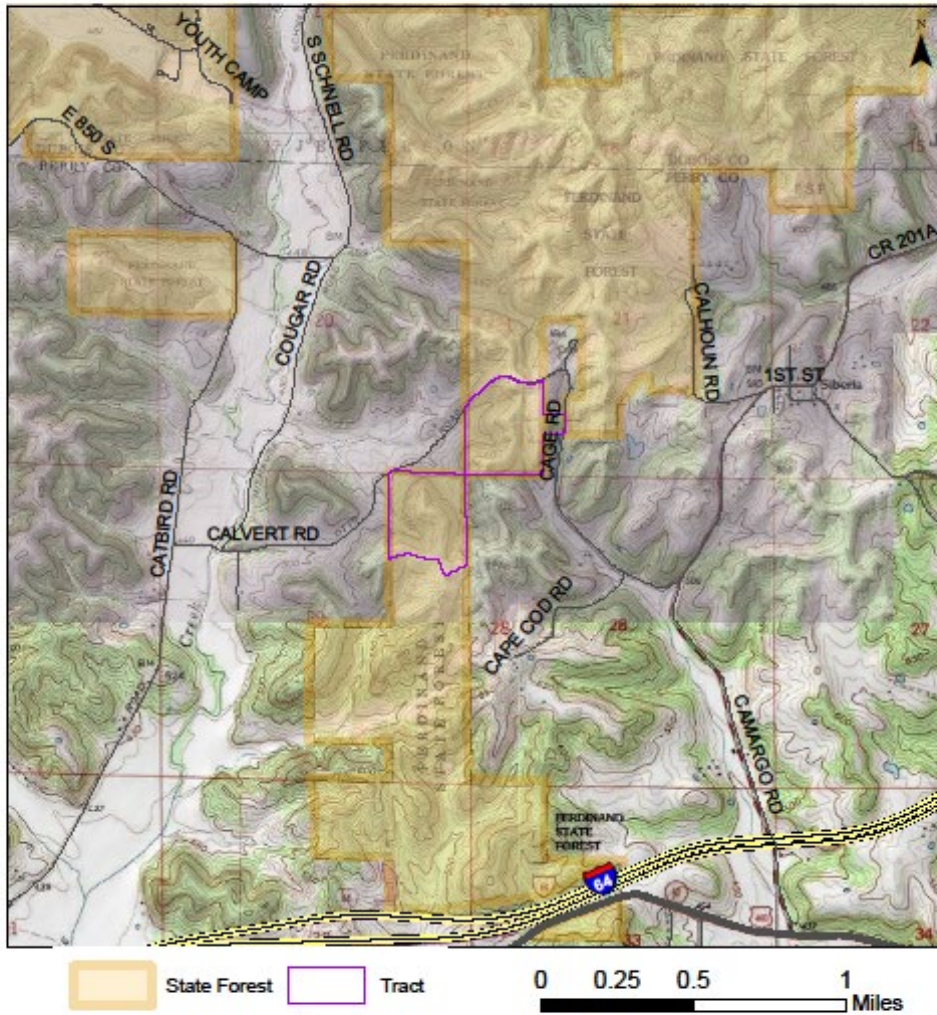
Proposed Management Activity

Marking timber
Timber harvest with C06T09
Prescribed fire
Invasive species control
Post-harvest TSI
3-year regeneration review
Next forest inventory

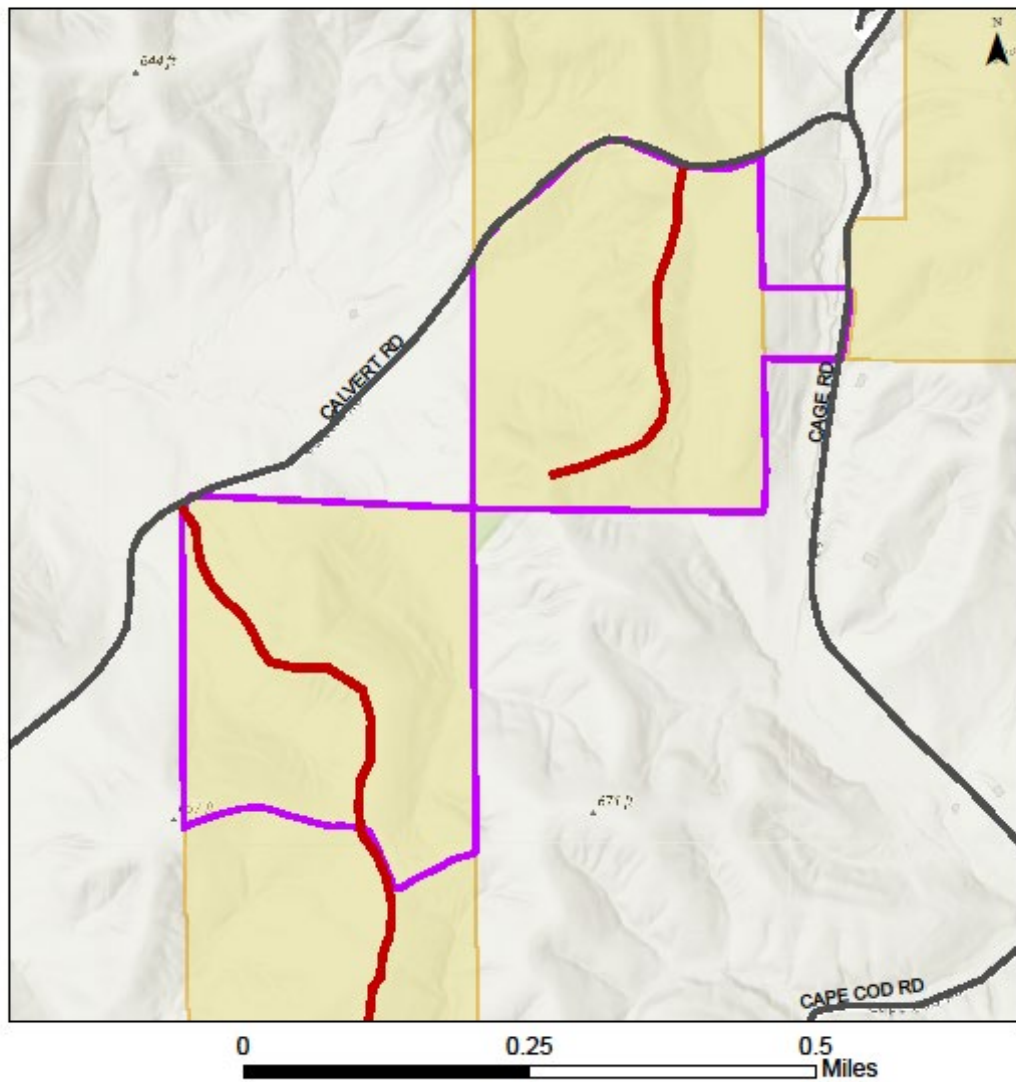
Proposed Date

2025-2026
2026-2030
2025+
2025+
Post-harvest
Three years after harvest
2045

Ferdinand State Forest
Location Map
Compartment 6 Tract 10

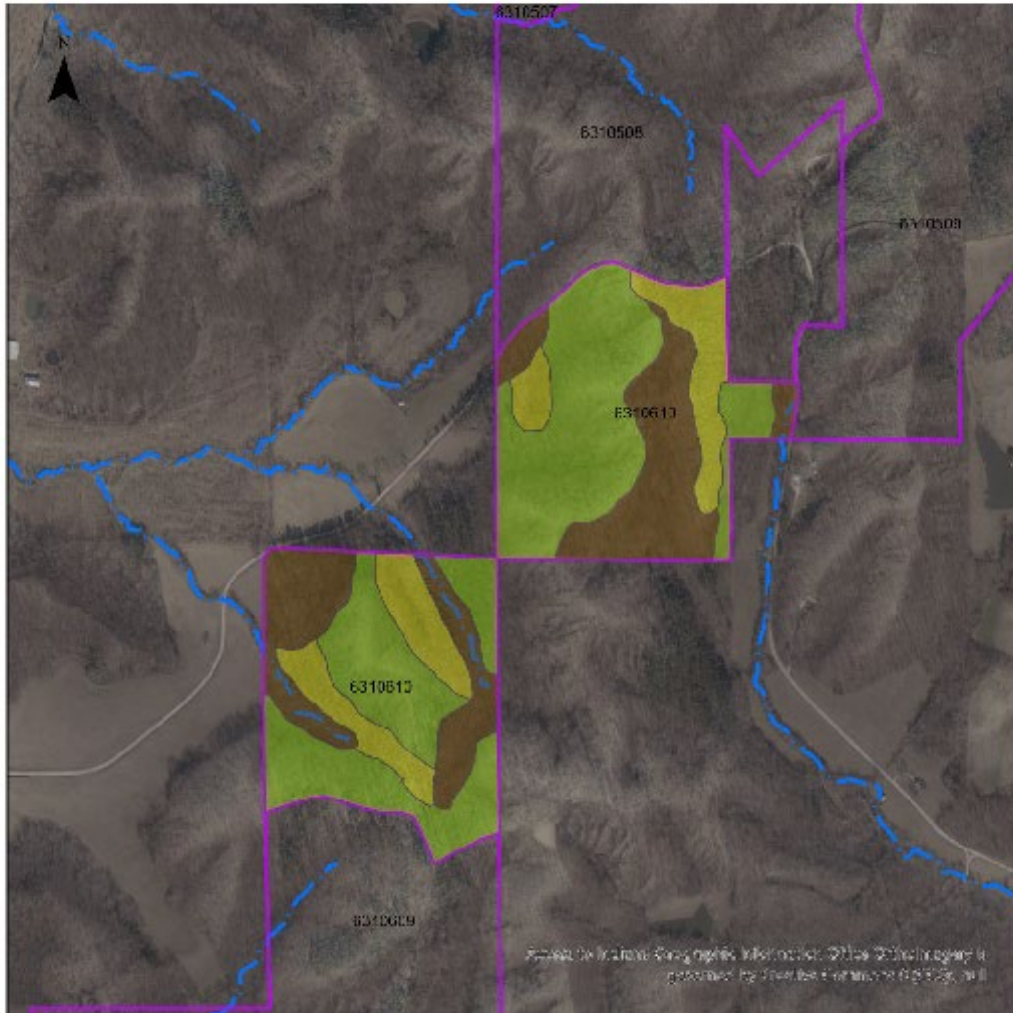







Ferdinand State Forest Compartment 6 Tract 10 Tract Map



- Fire Lane
- Tract boundary
- State Forest

Ferdinand State Forest Compartment 6 Tract 10 Cover Types Map



-  Tract Boundary
-  Mapped Streams
-  Mesic Oak-Hickory
-  Mixed Hardwoods
-  Conifer

0 0.13 0.25
Miles