

# Ohio Department of Natural Resources

## Division of Forestry

### Annual Work Plan

For

### Vinton Furnace State Experimental Forest

For the Period of

**Fiscal Year 2013**  
(July 1, 2012 to June 30, 2013)



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# OHIO DIVISION OF FORESTRY

## I. STRATEGIC PLAN *(Effective 2008)*

*Our Vision: Ohio's state forests will be the best managed forest lands in the country, and will be widely recognized as such.*

**To fulfill this vision, the Ohio Division of Forestry commits to meeting five objectives. We will:**

- Manage forests to ensure the health and sustainability of forest systems
- Produce high-quality forest products that contribute to local communities
- Provide recreational opportunities that require a large forest land base
- Provide unique forestry education sites and promote outreach and long-term research
- Maintain a highly trained and well equipped work force

**To fulfill these objectives, the Division of Forestry will develop and implement strategies and plans that allow us to accomplish the following goals by 2011:**

- Manage forests to ensure the health and sustainability of forest systems
  - *Implement a proven, verifiable approach to sustainable management*
  - *Manage for site-appropriate, native forest systems and species*
  - *Maintain long-term forest productivity through conservation of soil, water, and forest resources*
  - *Retain or promote stand and landscape level wildlife habitat*
  - *Assess the distribution and impact of non-native invasive species*
- Produce high-quality forest products that contribute to local communities
  - *Base State Forest harvest volumes on the goals and guidelines for each forest system, current stand and forest-wide inventories, and science-based silviculture*
  - *Develop marketing strategies to capture the maximum value of forest products*
- Provide recreational opportunities that are compatible with sustainable forest management
  - *Develop a comprehensive recreation plan for the state forest system*
  - *Build recognition for unique and varied recreation opportunities on state forests*
- Provide unique forestry education sites and promote outreach and long-term research
  - *Support forest research with an emphasis on sustainable forest management (silvicultural, prescribed fire, native systems, etc.)*
  - *Develop opportunities to showcase forest management practices to the general public, private landowners, and forest industry*
- Maintain a highly trained and well equipped work force
  - *Develop a training, continuing education, and/or certification standard for all division staff*
  - *Inventory and evaluate equipment and facilities and develop maintenance and replacement schedules*
  - *Develop equipment and facilities budgets based on current and projected needs*
  - *Ensure all staff have appropriate health and safety training*

## II. Summary of Strategic Plan Actions

- Manage Vinton Furnace State Experimental Forest under the multiple use concept promoting land management, forest sustainability, and back country recreation.
- Implement new policies as presented in the revised Land Management Manual that will support third party certification.
- Continue to develop employee skills and abilities through training thereby improving productivity and efficiency.
- Emphasize research and educational opportunities.

## III. Forest Overview

*History & Description:* Prior to the 1800's, vast forest of oak-hickory and associated species covered Vinton County. Then in the early 1800's, the refinement of native iron ore in charcoal furnaces became a flourishing industry. Between 1818 and 1873, 69 furnaces were built in this region. Production at the Vinton Furnace, as at other furnaces in the area, proceeded unrestricted for a number of years because of the proximity of resources. However, as timber reserves and other resources were depleted, transportation costs for raw materials forced the furnaces to close. As the furnaces became abandoned, much of the timber-exhausted land was put into cultivation and pasture. But the characteristic steep terrain and the thin residual soils of the area proved agriculturally unproductive. By 1910, erosion and depleted fertility made the land not conducive to farming and agriculture. With no feasible alternative employment, tax delinquency increased and a population exodus occurred (1880-1930).

In 1935, under the direction of the US Department of Agriculture and the Ohio Division of Forestry, the Zaleski Land Utilization Project was established. This 46,000-acre project in Vinton County was part of 2,000,000 acres in Southeastern Ohio that was designated an economic problem area by the Federal Government. The objective of the Zaleski Project was to return the land to its most productive capacity by generating a forest community, aiding flood control and preventing soil erosion and by so doing, establishing an economic base to maintain a rural population. The Federal Government, through the Resettlement Administration, acquired 19,000 acres of land within the Zaleski Land Utilization Project and transferred its administration to the Ohio Division of Forestry. This included control of an area south of U.S. 50 known as Raccoon Forest (now a portion the Vinton Furnace State Experimental Forest). In all, the Division administered 22,000 acres of forest-recreation area.

Through the effort of the Works Progress Administration (WPA), many developments and improvements were accomplished. Many acres received timber stand improvement in the form of salvage cutting, thinnings and weed tree and vine removals. Roads, trails and fire breaks were completed, wildlife habitat improvements were initiated, a game refuge was established and numerous waterholes were built on Raccoon Forest.

Since this time, various land acquisitions, transfers and exchanges have occurred. Ownership of the land acquired by the Resettlement Administration was transferred to the Soil Conservation Service, then to the Forest Service and finally, in January of 1958, to the State of Ohio. Further land acquisition and exchanges, including an exchange involving Raccoon Forest to Mead Corporation for a similar holding in Zaleski State Forest.

“In 1952 the Baker Wood Preserving Company bought a tract of land in Vinton County and set aside 1,200 acres for use by the Forest Service as the Vinton Furnace Experimental Forest. A decade later, Mead Paper Company purchased the tract and maintained the relationship with the Forest Service. Many of the studies and demonstrations on the Vinton Furnace State Experimental Forest date from the mid to late fifties and include the comparison of different cutting practices on timber production and species composition. These studies evaluated the effect of the size of the canopy opening on composition of regeneration conversion of dry sites to pine and the effect of understory removal on the growth of the overstory.” (Roush 1999)

Mead Paper Company continued the agreement with the US Forest Service for the Vinton Furnace Experimental Forest for many years. Subsequent purchasers of this tract also honored this agreement. Mead Paper merged with Westvaco in 2001 to form MeadWestvaco. When the company sold its operations to a private holding company in 2005 the land and paper mill operations were split. A new company called Escanaba Timber LLC took ownership of the Vinton. The land changed hands once again to a company called Scioto Land Company. Then in 2006 a Real Estate Investment Trust (REIT) called the Forest Land Group bought the land and held it until the time of the purchase by the State of Ohio.

When MeadWestvaco sold the property, a fiber supply agreement was attached to the deed. The Glatfelter Corporation now holds the recipient portion of the contract. This agreement specifies that the landowner, now the State of Ohio, is required to designate a certain volume of timber harvested each year. The timber is to be paid for at a rate determined in the agreement. The period of agreement is through calendar year 2019. Both parties have agreed tentatively that some of the supply for this agreement may come from other state forests.

The purchase of this tract of land by the State of Ohio was the largest single purchase in State history. And this was for good reason. Since 2000 alone, data collected at the forest has been cited in nearly 200 scholarly papers on forest ecology, forest management, and wildlife. The total purchase price and costs for the Vinton Furnace Experimental Forest was \$15,100,000. Of that amount, only \$3,884,000 came from state Capital funds. The Ohio Department of Natural Resources obtained environmental mitigation funds from private companies and dedicated land conservation funds from the federal government. Together, non-state sources comprised 70% of the funding needed to purchase the Vinton Furnace State Experimental Forest. For every \$1 of state funds more than \$2.5 will come from private and federal sources. In addition, a unique partnership with the USDA Forest Service Northern Research Station will provide continued, non-state funded staffing and maintenance for the property.

Future acquisitions will be dependent upon funding. Land acquisition priorities will be three and four sided in-holdings. Adjacent properties to the current land base will also be a higher priority than disjointed tracts of land.

#### **IV. Resource Management**

*Silvicultural Practices (Scheduled Harvests, Cruising, Marking, TSI, etc.):*

There will be background data assessment for a future forest inventory update. Some field cruising may be completed for the purpose of building a more accurate forest inventory.

*Merchandising:* No merchandising sales are planned at this Forest for this fiscal year; however, the Division of Forestry will continue merchandising a limited portion of its scheduled management activities throughout the state. This effort will consist of hiring a Master Logging Company, through competitive bidding, to cut and deliver tree length logs to a centralized location where Division of Forestry personnel will manufacture them into value added products. The Division's staff will continue to identify sales for merchandizing throughout the year.

*Minerals:* No active leases. The Division of Forestry is currently reviewing and pursuing the potential for oil and gas activity on each state forest. In coordination with other Divisions within the Department of Natural Resources, Best Management Practices have been developed and suitability analyses have also been conducted. During this analysis, specific areas within the land holding Divisions of the Department have been identified as potential locations for the various types of oil and gas activity. Also, the mineral rights for each property

are also being researched and identified in preparation for potential leasing activity. These leases may be with the state or with other private mineral rights owners on state lands. In either case, the Division is fully prepared to manage and implement these activities with the least amount of disturbance necessary to accomplish the task.

*Invasives:* Invasive control of Ailanthus will be a priority due to the area being relatively free of this invasive. Other invasive treatment projects will be carried out as time and resources allow. Since the focus of this forest is research, many areas will be treated as part of a research project or in cooperation with the US Forest Service as part of their maintenance activities. One Japanese Stiltgrass treatment is underway currently treating forest roadsides. This project is being carried out by the US Forest Service.

*Boundary:* Boundary maintenance is an important function in managing the forest. Properly maintained boundaries prevent encroachment from neighboring properties and from state activities encroaching onto neighboring properties. To accomplish this task, Vinton Furnace State Experimental Forest conforms to the Division's boundary maintenance policies. One fourth of the entire forest boundary is inspected and/or repainted each year.

Any evidence of encroachment is reported to the Forest Officer for investigation. The Forest Officer will be responsible for assisting in boundary maintenance as well as surveying an assigned portion of the boundary for law enforcement related issues.

*Licenses/Leases:* The "headquarters area" is leased to the US Forest Service. These buildings are mostly owned by the Federal Government with the exception of the Conference Center. The lease includes provisions for the Forest Service to maintain the five acre area including mowing and building upkeep.

*Insects & Disease:* Not only in the Vinton Furnace State Experimental Forest, but throughout the entire region, monitoring stations are in place for Gypsy Moth, an insect of concern. The US Forest Service also has some studies in place to monitor the effects of insect populations.

*Utilization & Marketing:* Forest products will continue to be offered for sale through both traditional state forest timber sales (stumpage) and merchandising sales. Additionally, firewood permits will be available for sale to the public.

*Research:* Over the years, numerous studies have taken place within the forest with Ohio State University (OSU), Ohio University (OU), and the US Forest Service (USFS). The Vinton Furnace is home to some of the most important research conducted on Central Hardwood Forests. Currently the following studies are active:

Study	Year of Establishment	Responsible Agencies	Purpose
Raccoon Stand Density	1963	USFS	Growth and Yield
Vinton Furnace Stand Density	1963	USFS	Growth and Yield
Ecosystem Management	1994	USFS, OSU, OU	Oak Ecosystem Restoration
Fire and Fire Surrogate	2000	USFS, OU, OSU	Oak Ecosystem Restoration
Shelterwood/Herbicide/Fire	2006	USFS	Oak Reproduction
Bobcat	2009	Div. of Wildlife	Bobcat population monitoring
Non-Native Invasive Plant Species (NNIS)	2010	OU	Effects of silviculture on NNIS
Rattlesnake	2011	Div. of Wildlife, USFS	Rattlesnake population monitoring
Bird Monitoring	2011	Div. of Wildlife, OSU	Breeding bird population monitoring

Also, when the property was purchased, grant agreement and deed stipulations required a research committee be formed by the Division of Wildlife, US Forest Service, US Fish and Wildlife Service and the Division of Forestry. This Research Advisory Committee (RAC) is chaired by the Chief of the Division of Forestry.

The Committee is responsible for:

- Establishing procedures and guidelines consistent with the Agreement.
- Establishing subcommittees to address details associated with research, education and demonstration activities and related proposals or work plans at the VFSEF.
- Reviewing and approving established subcommittee Charters proposed by the Subcommittees.
- Reviewing and approving recommendations associated with research, monitoring, education and demonstration activities proposed for consideration by any subcommittees that it deems in the best interest of the long-term management of the VFSEF, consistent with the Agreement. Approved activities may be subject to conditions established by the Committee.

- Providing mechanisms for soliciting public input on approved research, monitoring, education and demonstration activities and forward such information to the Station Director of the Northern Research Station, the Chief of the Division of Forestry, the Chief of the Division of Wildlife, and the Ohio Field Representative of US Fish and Wildlife Service.
- Reviewing and commenting on Annual Work Plans and 5-Year Forest Management Plans for the VFSEF drafted by the Division of Forestry for consideration and approval by the Chief of the Division of Forestry.

The two subcommittees that have been established are as follows:

Research and Monitoring  
 Demonstration and Education

*Summary (2-3 year projects):* Implement compartment layout and zoning proposals. Implement a stand based cruise schedule. Continue ongoing research as well as continue to develop the Research Advisory Committee.

**V. Maintenance**

*Buildings:* The Zaleski State Forest Headquarters, just north of the town of Zaleski, houses all of the administrative support for the Unit, as well as maintenance services. All buildings at Vinton Furnace are leased to the US Forest Service and they perform all maintenance and upkeep on those buildings as well as within the five acre area listed in the lease.

<b>Building</b>
Headquarters/Office
Training Center
Equipment Barn
Bunkhouse

*Infrastructure (water, wastewater, utilities):* There is a need for a pit latrine toilet at the hunters campsites located on Vinton Furnace. Funding options will be explored and the construction of a pit latrine will be dependent upon funding.

*Vehicles/Equipment:* No vehicles are assigned to Vinton Furnace State Experimental Forest. Refer to Zaleski State Forest Plan.

*Roads:* There are numerous old township roads that are in various stages of abandonment. Other roads include maintained township roads, county roads, and state routes at Vinton Furnace.

The forest roads are graded, mowed, and ditched a minimum of one (1) time a year but will also be completed as necessary. Trash, downed trees and storm debris will also be removed as needed.

*Signage:* Signs will be replaced and repainted as needed.

*Residences:* There is one bunkhouse that is maintained by the USFS.

*Dams:* None

*Capitals Projects:* None

*Summary (2-3 year future projects):* Inventory roadways and identify maintenance needs. Continue to identify projects with priorities focused on public and employee health and safety.

## **VI. Recreation**

*Trails (bridle, backpack, etc.):* There are a few designated foot trails; however, these are also generally Class III Roads as well.

*Campgrounds:* There are three hunters' campsites on the forest. These campsites are open during the deer gun season, extended weekend, and the muzzleloader season. They are also open during spring turkey season. The State Forest Officer issues permits for the hunters to camp in the areas as they arrive. There are no other amenities at the camps. Funding will be explored to construct a pit latrine.

*ATV Areas:* None

*Shooting Ranges:* None

*Grants:* The Forest Manager will explore opportunities for grant monies to cover the cost of installing a pit latrine at the hunter's camp areas.

*Summary (2-3 year future projects):* Develop a plan for improving hunter's camp areas as funding permits. Implement recommendations from trail inspection reports.

## VII. Wildland Fire

*Suppression:* The Division of Forestry has the statutory authority for fire suppression and protection within the hill country of the state. Zaleski State Forest is responsible for these duties in Vinton, Meigs, and Athens Counties. Division employees serve as initial attack resources within the forest boundaries and assist VFD's outside the forest boundaries, when requested. Most requests involve the use of heavy equipment.

*Prevention:* Smokey Bear and other fire prevention programs will be put on as time and resources allow. Two Smokey programs minimum per county will be conducted. Parades, county fairs and school programs will be the main focus so as to gain the largest audience. The Forest Manager and Officer will work to schedule events and programs. Elementary schools would be the focus of the school programs. Three school districts should be visited per year. School districts would then be visited every three years which should allow for all students to see Smokey during their time in school.

*Prescribed Fire:* Vinton Furnace State Experimental Forest is planning to have two (2) prescribed burns this year. One (1) will be approximately 30 acres and the other will be approximately 35 acres, both part of the US Forest Service shelterwood/herbicide/fire study. The Division of Forestry fully acknowledges the use of prescribed fire as a management tool and is currently collecting data across the southern district in order to better implement a prescribed fire program. The data collected and resulting analysis, will present both the effects of past prescribed burns and opportunities for additional prescribed fire. Two types of burns are being assessed. This includes site preparation burns to determine the effectiveness of establishing oak/hickory on that particular stand and release burns to encourage the success of already established oak/hickory due to previous management practices. The results of the data analysis may yield additional prescribed fire opportunity for future fiscal years.

*Inter-Agency Fire Crew:* The Interagency Fire Crew supports the national effort to suppress wildland fire to protect lives, personal property and natural resources. Participation is strictly voluntary, but all employees are encouraged to participate in the program. Zaleski has four (4) employees that have qualified for their red cards this year for the Inter-Agency Fire Crew.

*Training:* Members of the Interagency Fire Crew will attend one (1) interagency refresher class. The Fundamentals of Wildland Fire course will be taught in each county as requested.

*Fire Department Contacts:* Visits should be made to at least one (1) association meeting per month. The Forest Officer will make contact with each fire department, update the Fire Department Information Sheet, document the visit and file a report to the Forest Manager once per year.

*FireWise:* Staff will continue to support the FireWise program.

*FEPP/FFP:* The Federal Excess Personal Property (FEPP) program is a program administered by the Division of Forestry that loans equipment to fire departments for their use in fire control. Division staff a minimum of once each year must inspect loaned equipment.

*Grants:* The Division administers several grant opportunities for volunteer fire companies. Division staff will promote the opportunities to local VFD's.

*Summary (2-3 year future projects):* Continue support of prescribed fire research. Further contacts, training, and communications to the local VFD's. Become more active in fire prevention programs such as FireWise.

## **VIII. Law Enforcement**

*Philosophy/Purpose:* State Forests currently have nine commissioned law enforcement officers and one commissioned manager. The purpose of these positions is to enforce Ohio Administrative Code and the Ohio Revised Code. One very important aspect of the program is resource protection. Forest Officers protect property boundaries from encroachment, recreation resources from undesignated uses, guard against timber theft and watch for watershed degradation. Specific law enforcement polices and procedures are delineated in the Division's Law Enforcement Manual.

*Training:* Commissioned officers will receive the following training: Weapons qualifications, law enforcement in-service training, remain current with CPR and First Aid, and Taser certification. Officers are to complete all Continuing Professional Training (CPT) and LEADS Certification training as mandated by the Ohio Attorney General's Office. Non-mandatory training will be offered to officers as workloads and budgets allow.

*Reporting:* All Forest Officers are to complete and submit annual Criminal Justice Information System (CJIS) reports as required. Officers are required by policy to submit copies of their citation logs to the Division Law Enforcement Administrator twice during the fiscal year. Other reports are to be submitted as required by Department/Division policy and the LE Manual.

*Equipment:* Officer will be issued all equipment listed in the Division's Law Enforcement Manual. Each officer will be expected to properly maintain all issued equipment.

*Patrol Priorities:* Priorities for patrol will be established utilizing the following criteria:

1. Responding to emergencies and help requests within jurisdiction
2. Protect and assist visitors through routine patrol of all facilities and incident investigation
3. Issue warnings and citations for violations
4. Investigate and assign wildfire reports for violations
5. Assist in special projects with other forests and agencies

*Special Projects:* Identify and request special projects to address specific issues and problems to maintain a safe and enjoyable environment for forest users. The Officer at Zaleski leads two (2) special projects per year. Special emphasis will be illegal APV and off road vehicle usage on the forest.

*Other Duties (VFD's, FEPP, court, boundary, etc.):* The Forest Officer will visit each county court system and prosecutors office once per year. These visits will be used to update information on bond schedules, court dates, prosecutor and judge information. An updated information sheet will be submitted to the Forest Manager after each visit.

*Summary (2-3 year future projects):* Continue to focus on projects to protect user safety and positive visitor experiences.

#### **IV. Employee Development**

*Employee List/Vacancies/Table of Organization:*

Forest Manager	Thomas Shuman
Forest Officer	Nicholas Appleman
Forester	Danzil Walker
Forest Technician	Vacant
Forest Technician	Christopher Kerr
Equipment Operator	Clayton Acord
Equipment Operator	Cory Kerr
Equipment Operator	Eric Thomas
Maintenance Repair Worker	Brian Porter

*Training (tuition reimbursement, etc):* Employee development is extremely important. Properly trained employees enable the forest to supply the public with the services they expect. Training programs planned for the year include:

- Monthly Safety meetings for employees.
- Annual CPR training and bi-annual First Aid Training.

- Training necessary for employees to keep their Ohio Commercial Pesticide License.
- All Forest Officers will attend trainings and firearms qualifications as required by Division of Forestry Policy.
- Annual Fireline Refresher and other appropriate fire training classes

*Other Employee Development:* Required personnel will participate in the annual respirator fit test.

## **X. Public Information/Outreach**

*Planned Events:* Contact or personally meet with the county commissioners, township trustees and school boards in Athens and Vinton Counties at least once per year.

Vinton Furnace State Experimental Forest will be represented at the Chillicothe Open House in July.

*Partnerships:* Township Trustees, National Wild Turkey Federation, US Fish and Wildlife Service, local VFD's, Division of Wildlife, Ohio State University School of Natural Resources, Ohio University, US Forest Service, and Hocking Technical College.

*Volunteers:* Volunteer groups to help with projects and maintenance at the forest will always be welcomed.

*Interpretive Programs:* Participation in school conservation programs, as time and funds are available. An additional component of the purchase of this forest is that of education. An education subcommittee under the guidance of the RAC has formed and is currently active with programming over the summer of 2012. This committee will also be tasked with identifying educational opportunities and demonstration areas.

*Summary (2-3 year future projects):* Develop new partnerships with volunteer groups as applicable. Develop educational tours and workshops with coordination of the education subcommittee.

## **XI. Budget**

*Operational Budget (personnel, maintenance):* See Zaleski State Forest Plan for Division of Forestry budgeting information. US Forest Service research and other research operations have separate budgets.

*Revenue:* Revenue from Vinton Furnace is generated from timber sales, firewood permits and special use permit applications. A percentage of this income is returned to the local township, county, and local school district through the Trees to Textbooks Program.

*Summary (2-3 year projected budget):* Future budgets cannot be anticipated and the Division is currently developing the budget for this fiscal year.

## **XII. Safety**

*Safety:* Forest employees participate in monthly training sessions and many other safety oriented discussions in the field. The Division also participates in the Public Employment Risk Reduction Program and will continue to repair minor infractions that resulted from these inspections. Division Staff is also required to attend the Annual Division of Forestry Safety Training. Other safety trainings will be utilized as opportunities arise.

Division staff will be conducting internal hazard and safety assessments and will provide mitigating practices to eliminate or reduce the risk. Forest Staff will also utilize the policies and guidelines contained within the Division Safety Manual to further improve the agency's safety culture.

Any type of emergency (medical, fire, police, etc.) will be acted upon by staff member(s) consistent with their training, experience and ability to act.