DNR Indiana Department of Natural Resources

Eric J. Holcomb, Governor
Cameron F. Clark, Director

James Potthoff, District Forester
Jasper – Pulaski State Tree Nursery 15508 W 700 N Medaryville, IN 47957
Phone: 219-843-4827 Email: jpotthoff@dnr.in.gov

April 7, 2017

RICHARD HINES
10918 S SPRINGBORO RD
BROOKSTON, IN 47923

Dear Rich,

Enclosed you will find the Stewardship Plan and Reinspection Report for your 33.19 acre property in White County Indiana.

Please read the plan over and call me with any questions you may have. Once you've read the management plan over and approve it, please sign and date the "Acknowledgements" sheet and send it back to me. Signing this sheet does not commit you to any course of action; rather it simply states that the plan is acceptable to you and meets your current needs.

Also enclosed is a letter from the State Forester and a survey form. Any information you can provide on how to improve our service to you or make it more useful will be greatly appreciated. Our goal is to provide useful information in an efficient and cost effective manner and hope that your comments will lead to better service in the future.

Please give me a call if you have any questions or concerns.

Sincerely,

James Potthoff

STEWARDSHIP PLAN & CLASSIFIED FOREST AND WILDLANDS REINSPECTION

Prepared for: RICHARD HINES
10918 S SPRINGBORO RD
BROOKSTON, IN 47923

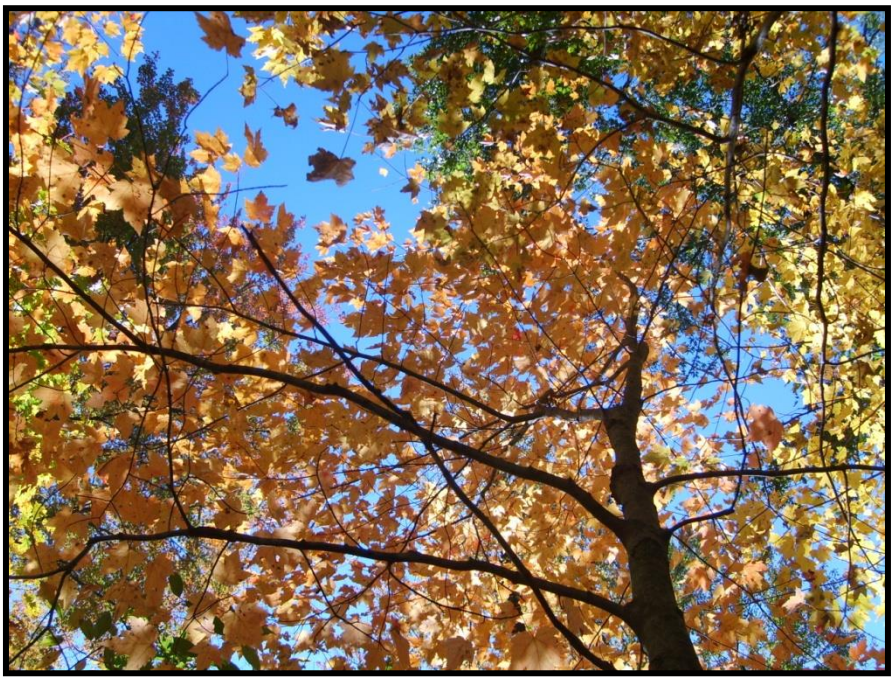
Date of this inspection: 3/29/2017

Date of last inspection: 3/30/2012

Green Certification Status: CERTIFIED

Was the landowner or his/her representative present for the reinspection? YES

Is corrective action required? NO



Section 20, T25N, R03W, Prairie Township, White County

33.19 Acres Classified Forest and Wildland
Parcel ID: 91-0049

Mission Statement

The Indiana Department of Natural Resources' Division of Forestry promotes and practices good stewardship of natural, recreational and cultural resources on Indiana's public and private forestlands. This stewardship produces continuing benefits, both tangible and intangible, for present and future generations.

Prepared by:
James Potthoff, District Forester
15508 W 700 N
Medaryville, IN 47957
219-843-4827
jpotthoff@dnr.in.gov

Date Prepared: 4/7/2017
Plan Expires after 10 Years

The stewardship goals for this property are:

- To produce syrup from sugar maple and walnut
- To improve timber production
- To improve firewood production

PROPERTY OVERVIEW

PROPERTY ACCESS AND FOREST ROADS & TRAILS: This property can be accessed from Springboro Road via the driveway. It can also be accessed from SR 18 via a gravel lane. There is a network of trails throughout the property suitable for ATVs.

BOUNDARY MARKINGS: The borders of this stand are marked by Springboro Road, SR 18, the Tippecanoe River, old wire fencing and the tree line. See the map for more details.

TOPOGRAPHY AND SOILS: The majority of this property consists of bottomland along the river that is relatively flat and low. The western side of this property, however, rises up to a high ridge overlooking the rest of the property. The slope is steep and contains a few small ravines.

The soils on this site are well suited for timber production though the slopes are highly eroded. Fortunately, the trees present are adapted to these conditions and appear to be growing well.

WATER RESOURCES: Forest and natural areas like this one are extremely good at filtering pollutants (fertilizers, pesticides, sediment, etc.) from flowing water. They also do a great job holding the soil in place along streams and on steep slopes. This prevents severe erosion and loss of your topsoil. By following basic Best Management Practices (BMP's), you can reduce the amount of pollutants and sediments entering nearby streams and rivers. BMPs are especially important during timber harvesting operations. For more information on BMPs, go to www.DNR.in.gov\forestry.

PAST USE OF PROPERTY: This property was historically farmed and/or grazed at some point in the past. Once those practices stopped, the site was allowed to regenerate naturally back to a forest.

A walnut plantation was established on site about 20 years ago. It has been thinned periodically. More recently, a lot of invasive removal work has been done, focusing on bush honeysuckle for the most part. Tapping for syrup in sugar maple and walnut has also started on site in the last few years. A network of trails has been established throughout the site.

PREHISTORIC & HISTORIC FEATURES: Most land parcels within the State of Indiana may be environmentally suitable to contain archaeological deposits but have not been investigated in order to verify the presence or absence of cultural deposits. Indiana Code 14-21-1 provides protection to archaeological sites and cemeteries on both private and public

land by prohibiting digging anywhere with the intent to recover artifacts and disturbing the ground within 100 ft. of a cemetery without an approved plan from the IDNR – Division of Historic Preservation and Archaeology. In addition, if archaeological artifacts (an object made or modified prior to 1870), features (non-portable evidence of human occupations, such as a well), or human remains are uncovered during ground disturbing activities, state law requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. Landowners who need to report archaeological sites or who are interested in learning more about cultural sites should contact the Division of Historic Preservation and Archaeology at 402 W. Washington St., Rm. W274, Indianapolis, IN 46204, 317-232-1646, dhpa@dnr.in.gov, or at http://www.in.gov/dnr/historic/index.htm.

UNIQUE ANIMALS, PLANTS, & HABITATS: The DNR Natural Heritage Data Center is a program designed to tract Indiana's special plants, animals, and natural communities. It was contacted on the date this plan was written and there were no recorded rare plants, wildlife, or unique communities on or in the immediate vicinity of your property. This does not eliminate the possibility of species of concern existing on your property. Often, features on private lands, in particular, are missing from the database. You can find more information on this subject at the Division of Nature Preserves' website: http://www.in.gov/dnr/naturepreserve/4725.htm

WILDLIFE RESOURCES: This property provides shelter and food for many types of wildlife. White-tailed deer is one species that is abundant in this area. The large numbers of deer can have a negative effect on forest regeneration since they eat nearly all of the seed produced and seedlings that manage to germinate. Managing the deer herd, especially the doe population, will help keep the population at a sustainable level.

EXOTIC AND INVASIVE SPECIES CONCERNS: This stand contains a small population of bush honeysuckle, multiflora rose, tree-of-heaven and phragmities.

Bush honeysuckle is an invasive exotic shrub that is extremely shade tolerant and will spread throughout the entire understory of this stand. As it spreads, it will create a very thick canopy that will shade out the forest floor making it nearly impossible for native trees to grow. As the larger trees die out over time, there won't be any small trees to replace them.

Phragmities is a reed-like plant that grows in shallow water. It spreads very rapidly and can completely take over a pond or lake. It usually takes over areas where cattails and native wetland plants grow.

Tree-of-heaven is another problem species. It is an invasive exotic tree that tends to grow in open areas. It grows extremely fast (9' per year) and can take over a large, open area very quickly. It produces no food for wildlife and the wood is extremely low in value. Over time, it can take over a forest and make it impossible for native trees to regenerate and grow.

Multiflora rose is an invasive exotic shrub that spreads through open areas like this property. It is extremely thorny and birds spread it widely. If it is let to grow, it will spread throughout the understory of this stand making it extremely difficult to access to the property or for trees to regenerate. Eliminating it from the property will allow the native plants to germinate and grow.

PROPERTY SETTING AND REGIONAL CONSERVATION CONCERNS: Urban sprawl is reducing tracts to unmanageable sizes. The sprawl introduces non-native species that are often invasive and crowd out native plants and animals. In addition, the increased roof and road area increase runoff in the short term and reduce water flow during dry periods. At the same time increased flow of polluted runoff from roads and parking areas is increased and the buffering of the water channels by vegetation is reduced.

FOREST RESILIENCE AND CARBON SEQUESTRATION: Harvesting and regenerating forests can also result in net carbon sequestration in wood products and new forest growth.

CONSERVATION-BASED ESTATE PLANNING: The first step to ensuring the personal and family legacy of you land is to talk about its future. This includes the co-owners, heirs, or others affected by the transfer of ownership. Common legacy tools include Family Partnerships; Gift or Sell to Heirs; Land Trusts; Last Will and Testament; Limited Liability Company (LLC); and Conservation Easement among others. Each method of transfer has its advantages and drawbacks. Discussion of this tools with the future owners is necessary to ensure the land is conserved for future generations.

AREA DESCRIPTION AND MANAGEMENT RECOMMENDATIONS

RESOURCE DESCRIPTION: This stand is composed of black walnut, white oak, red oak, sugar maple, buckeye, cottonwood, hackberry, black cherry, black locust, boxelder, elm, silver maple, ash (dead), sycamore and other assorted species.

This stand contains trees in all size classes including seedling, sapling, post and pole along with small, medium and large sized saw logs. The overstory contains a number of large open grown oak, walnut and maple, mostly on the hillside. The rest of the overstory consists of post sized silver maple, walnut, cottonwood, sycamore in the flat areas that were farmed in the past. The understory contains mostly sugar maple on the slope while the flat land has a lot of buckeye present.

The timber quality of the trees in this stand is fairly good. Most of the trees are tall and straight with few lower branches. These characteristics correspond to higher value timber. Some of the older trees, however, tend to have many large lower branches and appear to be hollow and/or crooked. These trees have limited value as timber though they do produce large amounts of seed for wildlife and for tree regeneration.

This stand is somewhat overstocked. The trees are competing heavily with each other for resources including water, nutrients and especially sunlight. This competition is having a negative effect on tree growth, seed production and the overall health and vigor of the stand. The dense canopy in this stand is making it impossible for shade intolerant species like oak, cherry and tulip to regenerate on this site. Instead, shade tolerant species like sugar maple and buckeye are taking over the understory. Over time, the shade intolerant overstory trees

will die off and the shade tolerant species will take their place. This will have a negative impact on tree diversity, timber value and wildlife value of the site.

The walnut plantation on the north side of the property contains mostly post sized trees though there are a few smaller trees that have become suppressed. The general timber quality of this plantation is good though there are a few trees that have poor form due to deer browse and storm damage. The planting is fully stocked currently.

DESIRED FUTURE CONDITION:

The desired future condition is to sustainably manage this stand for syrup, timber and firewood production.

ACTIVITIES TO ACHIEVE DESIRED FUTURE CONDITION:

Create and Maintain Roads and Trails: Establishing and maintaining a network of roads and trails in this stand will make maintenance and enjoyment much easier. The trails could be anything from simple walking paths, somewhat wider trails for ATV's, or roads suitable for four wheeled drive vehicles. These trails will allow you to easily access your property, which will make working on it and enjoying it much easier.

Avoid making trails in perpetually wet areas. This can lead to rutting and severe erosion. Also avoid using heavy equipment on this site unless the ground is hard and dry or frozen.

Exotic Removal: This stand contains a small population of invasive species. Removing these exotic species from the site will help ensure the long term health and viability of this stand.

Removing exotics from any property is extremely time consuming and labor intensive. Usually, the best strategy in removing the exotics is to first prevent them from infesting areas where they aren't present now. These areas will be the "front line" of the removal process. Preventing them from taking the property completely over is the first step in controlling the exotics.

After you've established a "beach head" or "front line", start methodically removing exotics from a single area adjacent to it. Take it one acre at a time and systematically remove any exotics present from one end of your property to the other. Some areas may be harder than others but continue the process as needed.

The last step in removing exotics is to monitor areas you have already treated. It is highly likely that these exotics will come back to the site. Removing them while they are small is much easier and cheaper than waiting until it becomes an infestation.

Removing exotics in this way makes it easier to do and also allows you to look back on the progress you have made. Exotics are capable of replacing this forest but with some work and time, this forest will be here well into the future.

It is extremely important that the exotics are removed from this site **BEFORE** any thinning or harvesting is done. Otherwise, the increased sunlight in the understory will promote the spread of the exotics, making it even more difficult to remove them from the site.

Using a combination of techniques to remove exotics, called Integrated Pest Management, usually provides the best results. There are a number of different ways to

remove exotics, including cutting (mechanical), spraying (chemical) and releasing predators (biological). Each one of these "tools" should be evaluated and the method(s) that best suits the site and situation should be used.

Timber Stand Improvement: The trees in this stand are competing fairly heavily with each other for available resources, including water, nutrients and especially sunlight. This competition is having a negative effect on tree growth and hard mast (nut) production.

TSI is the process of selecting future "crop" trees and then deadening the lower quality trees that are competing with them. It's very similar weeding a garden. Removing the weeds will allow your vegetables to grow much faster and produce more fruit. The same applies to trees. Removing lower quality trees will allow the higher quality trees to grow faster and produce more seed.

If nature thins this forest over time, the lower quality trees tend to slow the growth of the hardwoods. Having a forester choose which trees to keep and which to deaden will ensure that the forest is growing well and any future harvest will happen sooner rather than later.

TSI also involves removing grapevines from "crop" trees. The vines slow the trees growth and can lead to tree death if enough snow and ice collect in the canopy of the tree. Grapevines can be left in low quality trees since they do provide a good food source for many types of wildlife.

Classified Program: Under the program you receive a significantly lowered property tax assessment, a periodic forester inspection, and an option to participate in and sell forest products as being 'green certified'. In return, you agree to care for the land and its resources according to program standards and the approved plan tailored to your objectives and property resources.

In the case of storm, fire, pest outbreak, or other widespread damage, consult with your forester to adjust management activities and recommendations to put the property back on track to meet goals.

CONTACTS

This plan offers general guidelines to manage your natural resources and some recommend or required action to take. The use of a professional forester is encouraged as you undertake significant or unfamiliar land management actions. This is especially true with timber resources, where missteps can have consequences lasting decades. A list of consultant foresters and industry foresters is available at http://www.findindianaforester.org/

Wildlife biologist can help refine plans and provide detailed guidance where needed for specific wildlife issues and habitats of interest. You can reach your District Wildlife Biologist, Megan Dillon at 765-320-0517.

MANAGEMENT PROJECT SUMMARY

SCHEDULED YEAR	AREA NAME or NUMBER	PROJECT DESCRIPTION	ACRES	Importance
2017-27	Whole Site	Exotic Removal	33.19	High
2020	Woods	Timber Stand Improvement	33.19	Medium
2022	Whole Site	Classified Reinspection	33.19	Required
				N/A
				N/A

ADDITIONAL RESOURCES:

The links listed below will provide more detailed information about subjects listed in this plan.

- Bush Honeysuckle Fact Sheet – IPSAWG
  - www.in.gov/dnr/files/Bush_Honeysuckle.pdf
- Tree of Heaven Fact Sheet – NPS
  - http://www.nps.gov/plants/alien/fact/pdf/aial1.pdf
- Phragmities Fact Sheet – IPSAWG
  - www.in.gov/dnr/files/Phragmites.pdf
- Multiflora Rose Fact Sheet – NPS
  - http://www.nps.gov/plants/alien/fact/romu1.htm
- Why Should I Care About Invasive Plants? – Booklet
  - http://bugwoodcloud.org/mura/mipn/assets/File/InvasivesBrochure.pdf
- Midwest Invasive Plant Network Control Database
  - http://mipncontroldatabase.wisc.edu/
- FNR-IDNR-414 Forest Improvement Handbook
  - https://www.extension.purdue.edu/extmedia/FNR/FNR-IDNR-414.pdf
- The Consultant Forester – Stewardship Note
  - www.in.gov/dnr/forestry/files/theconsultantforester.pdf
- Indiana Forest and Woodlands Owners – Brochure
  - http://www3.ag.purdue.edu/fnr/ifwoa/Pages/default.aspx
- Directory of Professional Foresters
  - http://www.findindianaforester.org/

The following questions deal with requirements established by the Classified Forest & Wildlands Act and the standards set by the Department of Natural Resources:

1. Is the acreage correct?	**YES**	**6. Any evidence of dumping of material observed?**	**NO**
2. Are Classified Forest & Wildland signs posted?	**YES**	**7. Is the management plan being followed?**	**YES**
3. Any evidence of grazing observed in Classified area?	**NO**	**8. Was any insect, fire, disease, or soil damage observed?**	**NO**
4. Any unauthorized buildings observed?	**NO**	**9. Are any special permits needed?**	**NO**
5. Any evidence of haying or harvesting of crops observed?	**NO**	**10. Any other violations noticed?**	**NO**

Is there any corrective action needed? NO

If YES, please describe:

I have personally examined the above tract(s) of Classified Forest & Wildlands and certify that the information herein contained is correct to the best of my knowledge.

SIGNED: James Potthoff **DATE: 4/7/2017**

James Potthoff, District Forester

Forestry DNR INDIANA

ACKNOWLEDGEMENTS

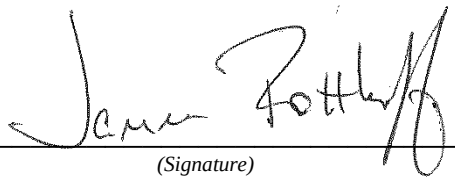
I have reviewed the attached Stewardship Plan dated 4/7/2017, and agree with its recommendations for reaching my management objectives. If enrolled in the Classified Forest and Wildlands Program, I agree to follow this plan as written, unless circumstances arise that amendments need to be made to meet ownership and program objectives. The administrating State District Forester must agree upon the plan amendments.

Landowner's Name: HINES, RICHARD

County: White

Landowner's Acceptance: _____
(Signature)

Date Signed: _____

District Forester: 
(Signature)

Date Signed: 4/7/2017

Please sign this page and return it to:
James Potthoff, District Forester
15508 W 700 N
Medaryville, IN 47957

MANAGEMENT PROJECT SUMMARY & ACTIVITY TRACKING LOG

SCHEDULED YEAR	AREA NAME or NUMBER	PROJECT DESCRIPTION	ACRES	IMPORTANCE	DATE COMPLETED	ACRES COMPLETED	CHEMICALS USED	COMMENTS	NON-NATIVE PLANTS USED
2017-27	Whole Site	Exotic Removal	33.19	High					
2020	Woods	Timber Stand Improvement	33.19	Medium					
2022	Whole Site	Classified Reinspection	33.19	Required					
				N/A					
				N/A					

If planning an activity not on this list, please contact your District Forester