Nelson's Consultant Forestry

Date: June 8, 2014

RE: Helenann Kemna Two Wooded Parcels Located in Sections 27 & 32 in Highland Twp.

Malcolm H. Aukerman 350 Poplar St. Newport, IN 47966

Dear Mr. Aukerman:

At your request, I performed two timber inventories forested areas owned by Helenann Kemna located in Sections 27 & 32, Township 19 North, Range 9 West in Highland Township in Vermillion County, Indiana. The purpose of these inventories was to establish a current value of the timber.

Determining true forestland acreage containing merchantable timber was difficult due to areas of "treeless wetlands" in Section 27 and semi-open areas in Section 32. For the purpose of this appraisal, I identified 70 acres of true forestland in Section 27 and 60 acres in Section 32.

There are two generally accepted methods of performing a timber inventory. The first would be a 100% inventory where one goes in and measures every tree. Due to the time commitment to perform this, it is a very expensive. The second method, which is the one I used and more cost effective, is based upon a generally accepted forestry practice using horizontal point sampling method and a 10 factor wedge prism. I took separate sample plots for each Tract. For Tract #1 (Section 27 woods), I took a sampling of data from 25 plot sites representing the 70 acres of measurable trees. The collected information was entered into the "Forestry Inventory 2000" program. For Tract #2 (Section 32 woods), I took 18 plots representing the 60 acres of measurable trees and entered the data into the same "Forestry Inventory 2000" program. This timber inventory program was developed by the Indiana Division of Forestry in cooperation with Purdue University forestry staff.

Property History & Present Condition

Tract #1 (Section 27 Woods) - 70 Acres

This tract consists of an upland flat containing mostly post to pole size trees. There is a large presence of nice young Black walnut trees (8inches to 16 inches in diameter). In addition, there is young Black cherry, Ash, Sugar maple, Honey locust, Hackberry, Elm and some oak species. Little timber has been cut here. Adjacent is the slope going down into the bottoms. Much of the recent timber harvesting took place here. It contains similar species to the upland flat. Then adjacent to the slope is the bottomland wetland. This includes both the forested area west of the crop field and the 8 acres wooded area adjacent to the Wabash river. Little was cut in the bottoms. The soils are poorly drained and thus contain a predominance of bottomland tree species such as Silver maple, Cottonwood, Green ash and Sycamore. This is where the bigger trees reside!

A significant timber harvest took place within the last year. However, most of the cutting took place on the slopes leading down to the bottomland forest.

At this point, please refer to the enclosed copy of the "Summary and Analysis of Forest Inventory 2000 Program" for Tract #1-70 Acre Woods. I would like to highlight some of the more important information from each page.

- Page 1, Tract Summary this table summarizes the per acre board foot volumes and number of trees as identified as leave trees, harvest trees and all trees. By definition, a harvest tree is a tree that could be marked for harvest at this time and a leave tree is one to be left to grow for a future harvest. The total stand board feet per acre is 4,266 bd. ft. of which 1,765 bd. ft. is considered as harvest trees and 2,501 board feet is considered as leave trees. Also of interest, your forest contains 138.7 (4" in diameter or larger) trees per acre of which only 5.1 trees are considered ready for harvest at this time. However, most of the "harvest" trees are located in the bottomland areas and difficult to log except during dry periods.
- Page 2, Summary of Leave Trees shows the volumes in board feet and number of trees by species by acre and total tract. The total volume in board feet for the 70 acre tract for leave trees is 175,089 board feet. Of interest is the fact that Silver maple makes up over 59% of the volume of the leave trees. The other three bottomland wetland species; Cottonwood, Sycamore and Green ash make up an additional 22%. Combined, the bottomland species total 81% of the volume in board feet of the forest species.
- Page 3, Summary of Harvest Trees similar to page 2 except the information reflects harvest trees. Of the 1,765 board feet per acre of trees I have identified as "harvest", Silver maple and Cottonwood comprise over 92% of the volume per acre
- Page 4, Summary and Analysis this is the bottom line page of the inventory. This "Valuation" page is divided into "Per Acre" and "Total Tract" values for both "Leave" and "Harvest" trees. The very bottom of the page summarizes those categories into the "Total Valuation of All Standing Trees". The "Value Per Board Foot" for each species is derived from a composite of recent timber sales I have sold and prices listed in the "Hardwood Review" (a weekly marketing report on hardwood timber prices). As of June, 2014, the per acre value (both "harvest" & "leave") of the timber is \$525.47. The total value (both "harvest" & "leave") of the timber on 70 acres is \$36,782.79.

Tract #2 (Section 32) - 60 Acres

Based upon the residing tree stumps, it appears that a timber harvest took place 20 to 25 years ago and then another timber harvest within the past year.

The woods contains an upland flat bordering North Meridian Road to the west and Jordan Creek to the east. Much of the forest area borders Jordan Creek on both the east and west side.

Please refer to the enclosed copy of the "Summary and Analysis of Forest Inventory 2000, For Leave, Harvest and TSI Trees" for Tract #2 - 60 Acre Woods. I would like to highlight some of the more important information from each page.

Page 1, Tract Summary – this table summarizes the **per acre** board foot volumes and number of trees as identified as **leave trees**, **harvest trees** and **all trees**. The total stand board feet per acre is 3,660 bd. ft. of which 1,271 bd. ft. is considered as harvest trees and 2,388 bd. ft. is considered as leave trees. Also of interest, your forest contains 142.6 (4" in diameter or larger) trees per acre of which only 4.9 trees are considered ready for harvest at this time.

Page 2, Summary of Leave Trees – shows the volumes in board feet and number of trees by species by acre
and total tract. The total volume in board feet for the 60 acre tract for leave trees is 143,301 board feet.
Also of interest is the fact that White ash & Basswood make up around 50% of the volume of the leave
trees.

- Page 3, Summary of Harvest Trees this is similar to page 2 except the information reflects harvest trees.
 Of the 1,271 board feet per acre of trees I have identified as "harvest", White ash comprise 50% of the volume per acre.
- Page 4, Summary and Analysis this is the bottom line page of the inventory. This "Valuation" page is divided into "Per Acre" and "Total Tract" values for both "Leave" and "Harvest" trees. The very bottom of the page summarizes those categories into the "Total Valuation of All Standing Trees". The "Value Per Board Foot" for each species is derived from a composite of recent timber sales I have sold and prices listed in the "Hardwood review" (a weekly marketing report on hardwood timber prices). As of June, 2014, the per acre value (both "harvest" & "leave") of the timber is \$468.89. The total value (both "harvest" & "leave") of the timber on 60 acres is \$28,133.21.

In summary, the current value of timber (both "harvest" & "leave) on both tracts combined is: \$64,916.16 And that represents the value of all trees 12" in diameter or larger on the 130 acres of forest land I was able to measure trees on and I identified as Tracts #1 & #2.

I have enclosed two aerial photos of Tracts #1 & #2 identifying the forestland I inventoried for this report.

If you have any questions or if I can be of further assistance, please let me know.

Sincerely,

Jack E. Nelson Consultant Forester