

DATE: 1/22/2020

FOREST STEWARDSHIP PLAN

Prepared by Greg Heidebrink, District Forester
621 Beck St., Charles City, IA 50616
641/228-6611

LANDOWNER:

River Bend Wildlife Area
Floyd CCB
1227 215th St.
Rockford, IA 50468

TELEPHONE: 641-756-3490

LOCATION: Sec. 1, St, Charles W Township, T95N-R16W, Floyd Co.

TOTAL ACRES: 18 acres

LANDOWNER'S OBJECTIVES: Improving the quality of the property for wildlife (Birds, highest priority), recreational opportunities and as an investment for the future.

Property Description-

River Bend Wildlife Area is owned by the Floyd County Conservation Board (CCB). This area is right along the Cedar River on the west side of Charles City. I have broken the 18 acres into 3 stands based on past management, location on the landscape and current cover. These stands are outlined on the attached aerial photo.

History-

River Bend Wildlife Area was donated to the county in November of 1966 as a bird sanctuary.

Soils -

The main soils on this property are Shellwood, Spillville and the DuPage-Shellwood-Calco Complex. The Shellwood and Spillville are somewhat wet but are fairly productive soils. The DuPage-Shellwood-Calco Complex is fairly wet and can pond some water. This soil type will have some limitations.

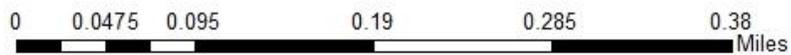
Herbicide use -

Any time you use herbicides on your property, you need to be aware that the "LABEL IS ALWAYS THE LAW". If any of the recommendations in this plan are contrary to the herbicide label, you must follow the label!

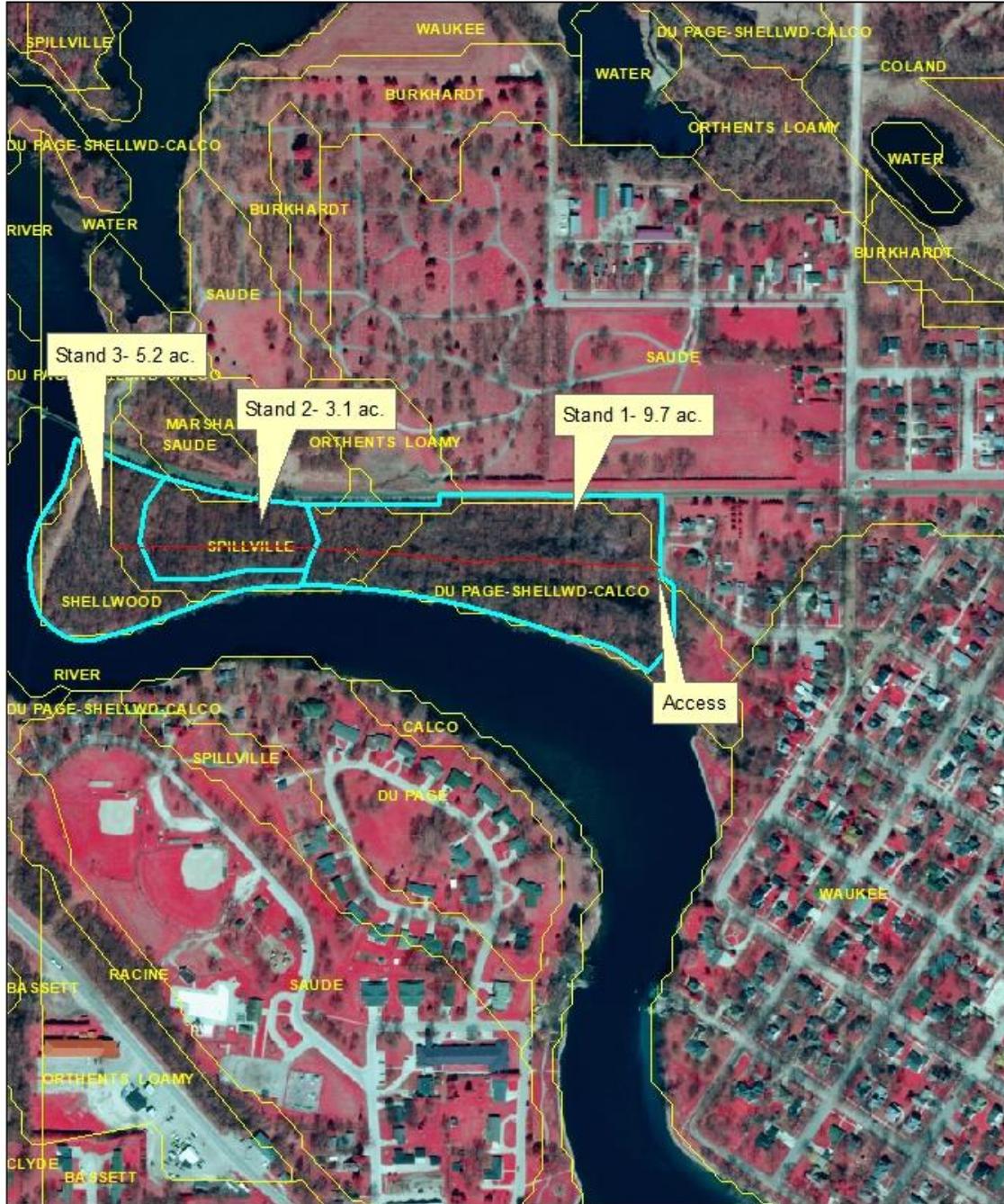
Floyd CCB
Stewardship Plan
River Bend
18 acres



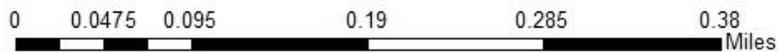
Section 1 St. Charles W Twsp.
Floyd Co.
T95N-R16W



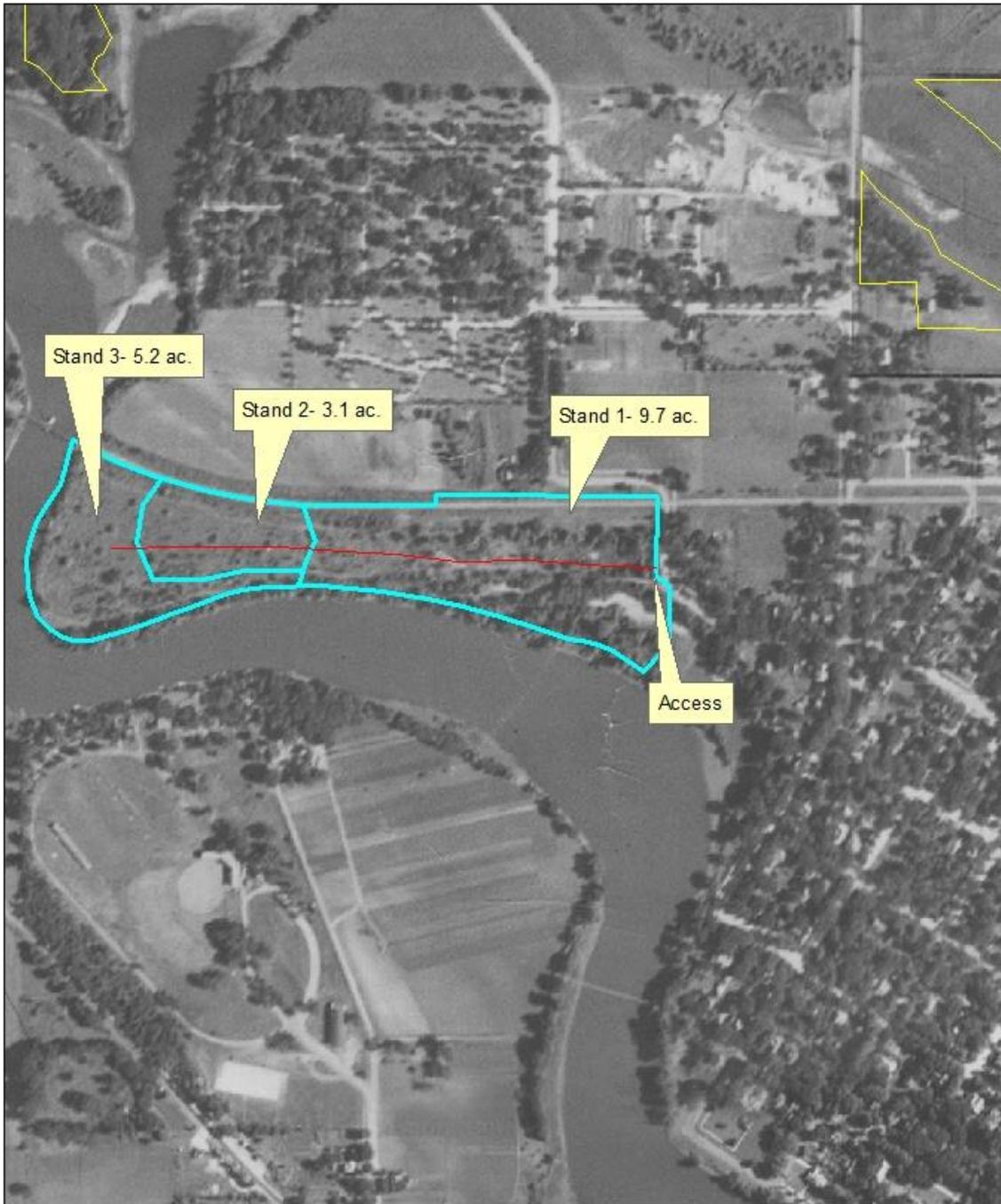
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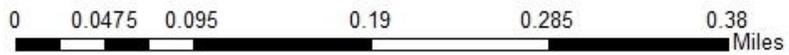
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TIMBER MANAGEMENT

DESCRIPTION AND RECOMMENDATIONS FOR INDIVIDUAL STANDS

I will describe each stand and suggest ways the timber quality and health could be improved. Good forest management will result in better wildlife habitat, improved erosion control, and higher quality timber in the future.

Buckthorn- There is some buckthorn on this property. This plant is very invasive and will have to be considered before doing any work on any stand.

Stand 1: 9.7 acres

Stand 1 is a mix of medium to large silver maple, cottonwood, ash, basswood, hackberry, sugar maple, black locust, honey locust, black walnut, elm and boxelder. This area is being managed on an uneven age system. Make sure to kill all buckthorn and honeysuckle!

Uneven-age management can be implemented to manage shade tolerant species. To do this, the timber is selectively harvested to remove mature, damaged, and defective trees. Because large trees are always present in the timber, only species that can grow in the shade can reproduce. Hard maple and basswood can be managed on an uneven-age system of management. Uneven-age management involves maintaining a good distribution of all tree sizes in your timber. It is critical that following a selective harvest, the undesirable trees are killed so that this seed source is removed. This will insure that you have high quality trees ready to replace the older trees as they are harvested. I would start with the weeding on this area and look at a harvest down the road.

Uneven age management areas will provide continuous tracts of woodland with minimal disturbance. Large tracts of uneven age management can provide necessary habitat for neotropical migratory bird species such as cerulean, hooded, Canada, and Kentucky warblers. Selective harvesting will create small openings in the canopy, which will increase ground cover, and enhance stand structure. Den trees will be left to provide cavities for wildlife such as woodpeckers, bats, and squirrels. This includes the Northern myotis and red squirrel which are species of greatest conservation need. Timber stand improvement and selective harvesting will create woody debris on the forest floor for reptiles and amphibians.

1. Selective Harvest – 9.7 acres

You should harvest the declining and over mature trees in this stand. Any tree that you think will be healthy in 15 to 20 years should be left.

2. Timber Stand Improvement (TSI) – 9.7 acres

Following the harvest, the elm, ironwood, boxelder, buckthorn, honeysuckle and bitternut hickory should be removed to reduce the competition for the desirable shade tolerant species in the understory. The trees can be cut and the stumps treated with picloram, tryclopyr or a 50 % solution of glyphosate to prevent resprouting. Wet the outer rim of fresh cut stumps. This can be done anytime except spring during heavy sap flow. Any desirable trees that are poorly formed or damaged should be coppiced (cut off at ground level) but not treated with herbicide.



Stand 2: 3.1 acres

Stand 2 is an area of mainly large walnut trees with a few ash, basswood and black oak. I would like to manage this area on an even age system by harvesting most of the mature trees in this stand and then planting desirable seedlings in the understory. I think you will have no problem getting walnut to natural seed back in but it would be nice to add some oak for diversity. Walnut is not a great wildlife species. Make sure to kill all buckthorn and honeysuckle!

Even age management is essential for wildlife species depending on oak/hickory forests. Even though large blocks of forest are needed on some Wildlife Management Areas for some wildlife species, each stage of an even age stand provides habitat for wildlife. For example, regenerating stands (1-10 years old) benefit the same species of birds as does early successional stands, golden-winged warbler, blue-winged warbler, black-billed cuckoo, yellow-billed cuckoo, Eastern towhee, along with American woodcock.

Sapling to small pole sized stands between 10 and 20 years old, may be used by black and white, Kentucky, and worm eating warblers. From age 20-60 years, pole to medium size trees tend to be used by canopy nesters such as scarlet tanagers, wood thrushes, and ground nesters such as ovenbirds and black and white warblers.

Mature stands of 60 to 125 years of age are used by birds such as the wood thrush, Acadian flycatcher, ovenbird, worm eating warbler, and scarlet tanagers.

1. Clearcut Harvest – 3.1 acres

Almost all trees 14 inches and larger in diameter will be marked and scaled for volume. The trees should be advertised to the timber buyers on a lump sum, sealed bid sale.



2. Post-Harvest Treatment – 3.1 acres

All trees 1” and larger in diameter should be cut down. The stumps of undesirable species should be treated with picloram, triclopyr or a 50 % solution of glyphosate to prevent resprouting. Desirable trees should be cut as close to the ground as possible and not treated so that they resprout. If you want to leave a few of the remaining old oak trees, that is fine but do not plant underneath them.

3. Tree Planting – 3.1 acres

The areas should be replanted with red oak, swamp white oak and bur oak seedlings. Large stock, 18 to 30 inches tall should be planted. Plant the trees roughly on a 40 feet apart in the openings. You will need 75 to 100 seedlings for this area.

I suggest that you place a cage around each of these seedlings to protect them from deer. I would use 4-foot-tall welded wire with 2 in by 4 inch openings. Cut the wire in 4 foot lengths to make each cage.

Stand 3: 5.2 acres

Stand 3 is similar to stand 2 in the fact that it is made up of a lot of walnut, but these trees seem to be a little younger. I would like to selectively harvest this stand only taking out the poorest trees. I think with small openings we will get the walnut and some shade tolerant species to seed back into this area.

Any time you open up a stand like this you run the risk of some wind damage so we will need to be cautious in which trees to take out. The following steps are suggested.

1. Selective Harvest – 5.2 acres

You should harvest the declining and over mature trees in this stand. Any tree that you think will be healthy in 15 to 20 years should be left.

2. Timber Stand Improvement (TSI) – 5.2 acres

Following the harvest, the elm, ironwood, boxelder, buckthorn, honeysuckle and bitternut hickory should be removed to reduce the competition for the desirable shade tolerant species in the understory. The trees can be cut and the stumps treated with picloram, triclopyr or a 50 % solution of glyphosate to prevent resprouting. Wet the outer rim of fresh cut stumps. This can be done anytime except spring during heavy sap flow. Any desirable trees that are poorly formed or damaged should be coppiced (cut off at ground level) but not treated with herbicide.

GENERAL COMMENTS

Tree planting and timber stand improvement will qualify for cost-sharing under the REAP or EQIP program. You must apply at the NRCS office and receive approval before beginning any of the work to be eligible. You will be asked to sign a 10 to 20-year maintenance agreement if you participate in the either program. The maintenance agreement simply means you will maintain the practice for life of the agreement.

If you apply for cost-sharing assistance, the work must be completed according to the plan. Failure to follow the plan may result in you not being eligible for cost-sharing assistance. The plan can be modified, but any changes must be approved by me before any work is completed.

Forest Natural Resources Enhancement and Protection

Protect Special Sites & Social Considerations

Special site- Historical and cultural sites such as old home sites or old cemeteries are a look into the past and can give insight to past management of your land. These areas should be identified so that they can be protected from future management activities or disturbances.

Adjacent stand or ownership concerns- It is important for you to consider how management activities on your property will affect your neighbor's property and goals. This includes locations of harvests, timber stand improvement activities, fencing issues, access and viewshed.

Recreation- Woodland management can decrease the short term aesthetic and recreational values your property but over the long run you will improve the health of your forest which will in turn provide a more diverse forest, better wildlife cover and better hunting opportunities.

Access- Use your management activities to improve the access to your property. The better access you have, the more time you will spend on the area.

Air, Water, and Soil Protection

What goals do you have, or what steps will you take to conserve, protect and enhance your forest's air, water and soil resources?

Soil protection- Use Best Management Practices to anytime you are implementing any forest management activities.

Roads- Follow best management practices when working with or building new roads. <http://www.na.fs.fed.us/spfo/pubs/stewardship/accessroads/accessroads.htm>

Streams, wetlands, ponds, lakeshore- Woodlands and tree plantings greatly improve water quality. Trees reduce erosion and filter silt and chemicals from the water entering the streams. It is wise to maintain a good tree buffer along your streams and plant trees in areas that will help reduce soil erosion and improve water quality. Trees can be harvested in buffers along rivers and streams, but it should be a selective harvest that maintains good tree cover.

Wetlands are excellent filtering systems that are important to maintaining good water quality. Wetlands also provide good habitat for a variety of wildlife species. If possible, do not route roads through wetlands and maintain a good buffer of trees and grasses around the wetland area.

Fish, Wildlife and Biodiversity

Describe the resources on your property and the activities you are planning to accommodate your goals.

Fish & Wildlife- Most forest wildlife needs can be met through good forest management. When managing for one of two specific animals, it is important to know their needs and manage for these things, but it is also important to recognize what your actions are doing to other plants and animals in the area. The entire forest community should be looked at when making these management decisions.

Native Prairies/ Savannas -

Native prairies are a mixture of native grasses and forbs (wild flowers). The major grasses are big bluestem, little bluestem, Indian grass, and sideoats grama. Common forbs are bee balm, black-eyed Susan, gray headed coneflower, hoary vervain, New England aster, partridge pea, and purple cone flower. Native prairies provide excellent wildlife habitat for game and non game species. The tall grasses will stand up throughout the winter and provide winter protection. Native prairies are also very attractive and will give you different colors throughout the year as the different species of flowers bloom.



Consider establishing native prairie on your property to add diversity. There also may be small prairie remnants in undisturbed areas. These can often be improved by removing the woody species and burning periodically.

State and Federal threatened or endangered species - plants or animals- No Rare, Endangered and Threatened plants, animals and communities were found when walking your property. If you suspect that you may have a Rare, Endangered or Threatened plant, animal or community you should get in touch with your local DNR Forester or Biologist and avoid and management activities or disturbances that could affect them in an adverse way.

Management of Forest Resources

Protection from Pests- Implement harvest and timber stand improvement methods to insure proper stocking and forest health.

Reforestation and Afforestation- Plant trees where appropriate to reduce erosion, increase wildlife diversity and provide recreational opportunities.

Prescribed Fire/Burns- Prescribed fire is a great tool for managing your woodlands but must be used with forethought, purpose and caution. Fire is not a one size fits all solution and must be used in the proper setting with specific goals in mind.

Management Plan Implementation Constraints- Possible constraints include, lack of cost share funds, availability of contractors and lack of landowner's time and funds.

Other

EXPLANATION OF TIMBER MANAGEMENT PRACTICES:

Protection:

The most important step in managing your timber is to prevent grazing by livestock. Livestock trample and eat the young seedlings and damage the older trees. The result is a gradual deterioration and clearing of the timber. Soil compaction and removal of the duff layer stresses the trees and makes them more susceptible to insect and disease attack. Areas not grazed will qualify for the Forest Reserve Law. The law exempts your land from annual property taxes. You can apply at the county assessor's office before April 15th.

Timber Stand Improvement:

Timber stand improvement (TSI) is the removal of undesirable or low value trees. Removing these unwanted trees will provide more space and sunlight for desirable trees to grow. Timber stand improvement is a "weeding" to increase the growth of your forest.

Weed Tree Removal-

In older timber, the undesirable species can be killed to encourage the natural reseeding of desirable species. The removal of the "weed" trees allows sunlight to reach the ground so that seedlings can become established. The undesirable species can be killed standing by cutting flaps in the trunk and applying Tordon RTU or Pathway into the cuts. The cuts must be in a circle around the trunk and overlapping. The trees can also be cut off and the stumps treated with Tordon RTU or Pathway to prevent resprouting. Wet the outer rim of freshly cut stumps. The work can be done anytime except spring during heavy sap flow.

Desirable trees that are poor formed or damaged should also be removed. These trees should not be treated with herbicide. The stumps will resprout and produce another tree. Cut the stumps close to the ground so that the sprout will originate near the ground.

Crop-Tree Release-

In pole-sized stands (4-10" dia.), potential crop trees can be selected and released. At maturity, there is room for 35-50 trees per acre. Now you can select the trees you want to comprise your future stand of mature trees and thin around them to give them more growing space. Select a crop tree every 30-35 ft. apart. Remove trees with crowns that are touching or overtopping the crowns of your crop trees. Crop trees can be selected based on criteria that meet your objectives. Normally, the crop trees will be a desirable species, show good form without large side limbs, and be free of major defects. Species normally favored are black walnut, red oak, white oak, white ash, basswood, cherry, and hard maple.

Walnut Pruning-

Walnut trees that are 2-12" in diameter can be pruned to promote veneer quality trees. You should prune during the dormant season. Limbs less than 1 inch in diameter are providing foliage which produces food for the tree and should be left. When the limbs approach 1 1/2 to 2" in diameter, they should be removed. Do not remove over 1/3 of the live crown in any one year. At least 50% of the total height of the tree should be maintained in live crown.

Harvest:

Uneven-Age Management:

Uneven-age management can be implemented to manage shade tolerant species. The timber is selectively harvested to remove mature, damaged, and defective trees. Because large trees are always present in the timber, only species that can grow in the shade can reproduce. Hard maple and basswood can be managed on an uneven-age system of management. Uneven-age management involves maintaining a good distribution of all tree sizes in your timber. It is critical that following a selective harvest, the smaller trees are thinned to remove the trees damaged by logging, poor formed trees, and low value species. The thinning following the harvest insures that you have high quality trees ready to replace the older trees as they are harvested.

Even-Age Management:

Even-age management involves a clearcut at some point in the stands rotation. Clearcutting creates full sunlight to the ground. All trees 2" and larger in diameter are felled. Oak, ash, hickory, and walnut require full sunlight to grow. Even-age management must be applied to successively manage these species. Clearcutting creates stands of trees all the same age. The trees compete equally for sunlight and are forced to grow straight and tall, resulting in high quality timber. Clearcutting also provides excellent browse and cover for wildlife.

Marketing Your Timber Properly

There is no known value for trees. The trees are worth what you can get a timber buyer to put on a check. You can follow proper steps to insure that this price is reasonable and fair market value.

The first step is to mark each tree with paint that you wish to sell. This gives control over what is harvested from your woods. It also allows you to solicit bids on the same trees. It's helpful to have the trees scaled to estimate board feet volume so that you and the loggers have an estimate of what is for sale. This may entice more timber buyers to look at your trees.

The trees should be advertised to many timber buyers on a lump sum, sealed bid sale. You should receive a minimum of 3 bids to insure a fair price, but the more the better. The successful bidder should make full payment before the trees are cut and enter into a timber contract. The contract is your protection for how the logging operation is to take place.