ARKANSAS FORESTRY COMMISION

P. O. BOX 669
Waldron, Arkansas 72958

John T. Shannon, R.F.
State Forester

May 18, 2005

[redacted]
Waldron, Arkansas 72958

Dear [redacted]

We have completed and are enclosing you Forest Stewardship Management plan for your 240 acres that is located in Scott County. The purpose of the Stewardship Program is the multiple use management of the resources that is available on your property. By following the recommendations in this plan, you will be integrating the management of these resources and practice good forest stewardship. We appreciate your participation in the Arkansas Forest Stewardship Program.

Arkansas Forest Stewardship Program seeks to recognize individuals' outstanding achievements in the field of preserving our natural resources by designating qualified individuals as Forest Stewards and providing a sign for your property. Our recommendations are based on our visits to the property and on discussions with you concerning your objectives. These are simply management suggestions, and any decision concerning timber harvesting or management expenditures should be at your discretion. However, the requirements to be recognized as a Forest Steward are the implementation and completion of the management recommendations. We hope that, by you following your plan, you will become eligible for this honor. Due to the amount of work that has already been completed on the property prior to your purchase, we are going to recommend that you be certified as a Forest Steward.

This property will re re-evaluated in five years to evaluate future management needs.

The wildlife recommendations for your property were completed by Mr. Jeff Henderson, a wildlife biologist with that Arkansas Forestry Commission. I will also include other information that I have.

This Forest Stewardship Plans covers your property that is located in the Southeast ¼ and the South ½ of the Northeast ¼ of Section 24, Township 2 North, and Range 29 West of Scott County Arkansas.

The predominate soil type that is on your property is that of the Carnasaw-Shelless complex. This series consists of deep, well drained, very slow permeable soils on gently sloping to

steep hill sides, mountainsides, and ridges. The native vegetation was hardwood or mixed pine and hardwood forest. The site index for this association of soils is 65 to 70 for Shortleaf and Loblolly Pine. Site Index is a term that is used to describe the growing potential of the type of soil for the area. It is expressed as a number. This number represents what is expected the pine trees to grow in a 50 year period.

The tract, as soon on the enclosed maps, is divided up into three areas.

Area # 1 is approximately 96 acres. This area was previously harvested several years ago. There are scattered hardwoods remaining on the tract. It is our recommendation that the area be injected with a suitable herbicide, and then hand planted using either Improved Shortleaf or Improved Loblolly pine on an 8 X 10 spacing. At this time we do not believe that a prescribed burn in needed on this area. We feel that if the remaining stems are injected, it will be suitable to hand plant.

Area # 2 is approximately 54 acres. This area has also been recently harvest, but there are more stem remaining than on the other area. For this tract, we would recommend that the remaining merchantable trees be removed, and then injected with a suitable herbicide. The area would then be planted using the same spacing as described above.

Area #3 is open pasture land that is to be left as is. This area is approximately 68 acres.

It is hoped that the young stands that we are about to establish will reach maturity in approximately 35-50 years. During this time, you can expect little income from the stands. If we get a good stand of trees that survive on the site, it is likely that we will need to do a thinning in approximately 10-15 years. This will be a pulpwood thin, with very little income. At approximately 10-15 years, the stand should also be able to sustain a prescribed burn if needed. If the stand progress as expected it is possible to do another thin at approximately 18-20 years. This thin will be a saw timber thin and will yield a monetary value.

During any management work, it is recommend that you follow the Best management Practices. These standards are established to preserve the quality of soil and water in our forest. It described the process for building roads, streamside management zones, and other applications. The complete BMP guidelines can be viewed at www.forestry.state.ar.us.

To my knowledge, there is no historic or cultural significance to this piece of property. Also, at the present time, no threatened or endangered plant or animal species, as listed by the U. S. Fish and Wildlife Service, are known to exist on the property.

With this plan, I an also enclosing the recommendation of the Arkansas Game and Fish Commission on wildlife habitat, an aerial photo map showing the areas, and other information on wildlife.

It has been a pleasure to assist you in your timber management. If you need any further assistance, please feel free to contact us or call at (501) 928-4688, or e-mail us at: afcsebco@valuelinx.net

Sincerely yours;

Lou Koch, RF

Lou Koch, Registered Forester
Forester II
Scott County
Arkansas Forestry Commission

MAP OF PROPERTY

[redacted]

Southeast 1/4 and the South 1/2 of the Northeast 1/4
Section 24, T 2 N, R 29 W
Scott County Arkansas
Long 94 01 50.08, Lat 34 48 53.55

Legend

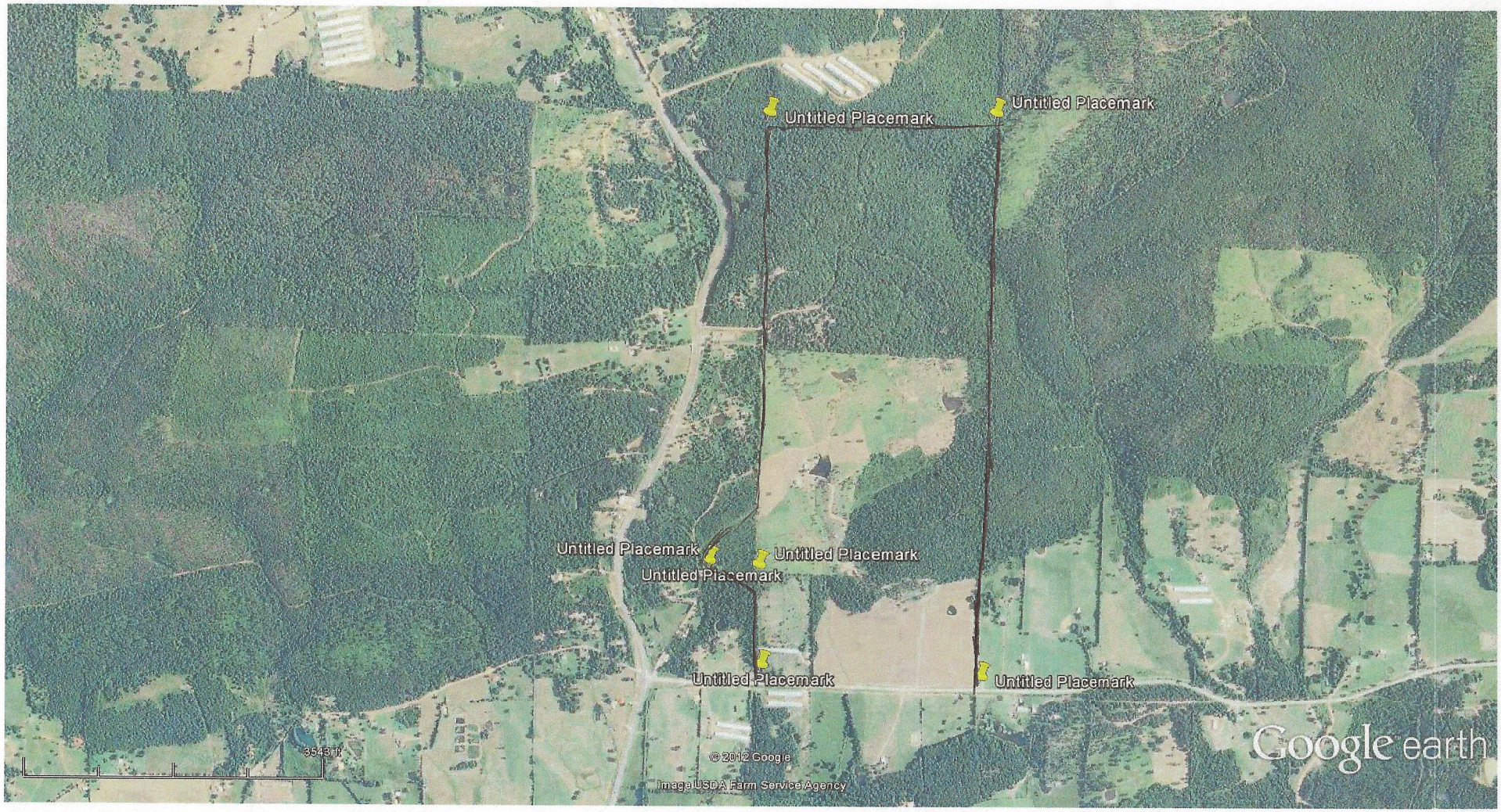
- Area #1
- Area # 2
- Area # 3
- Property Boundary

N

ARKANSAS FORESTRY COMMISSION

Nathan Bennett May 18, 2005

Scale: 1:8417



Google earth

miles 2
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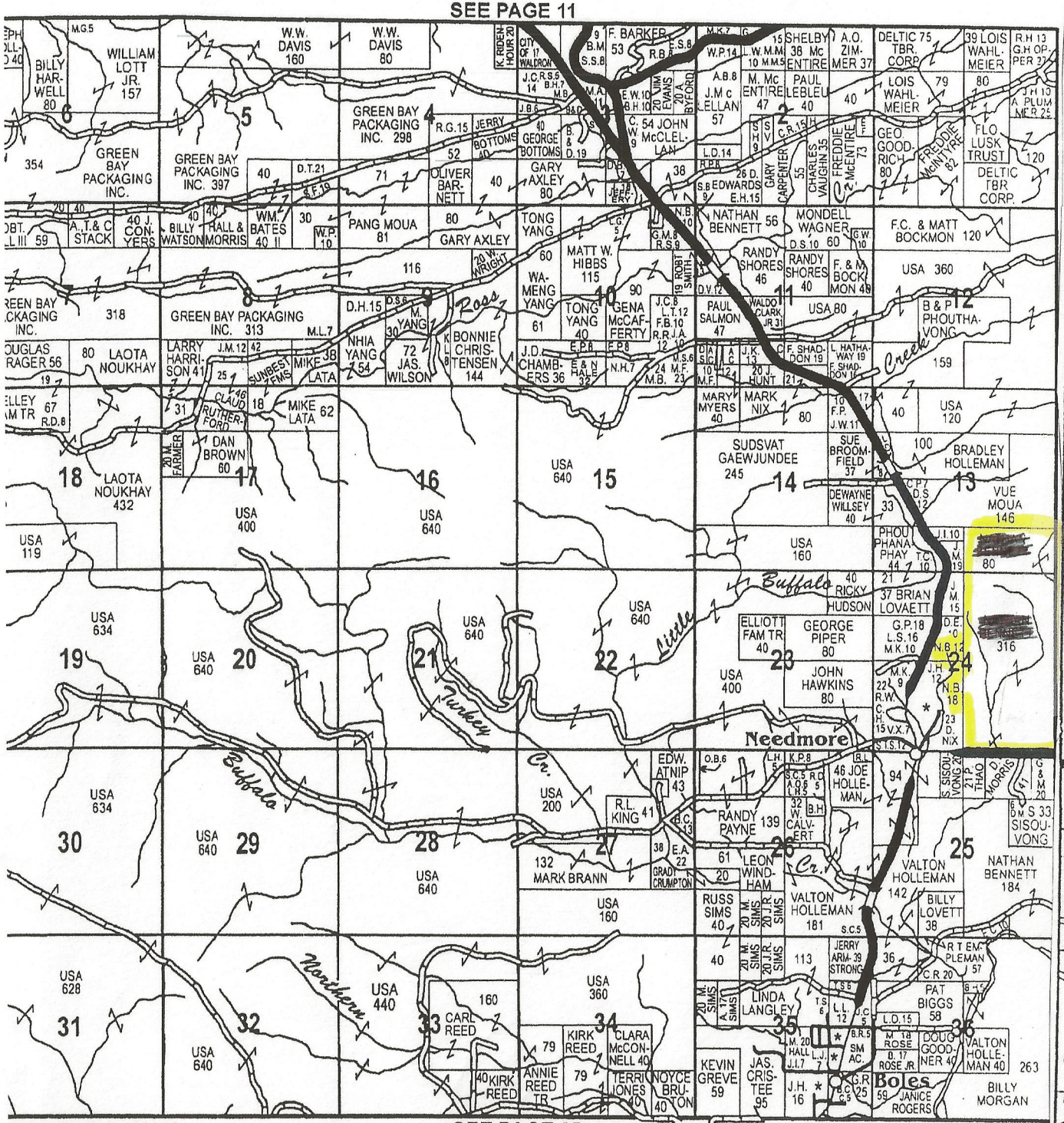
432 Acre Estate

TOWNSHIP 2 NORTH RANGE 29 WEST

SEE PAGE 11



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Forest Stewardship
Wildlife Habitat Recommendations

Scott County, Arkansas
Section 24, T. 2N, R. 29W
244 Acres

Prepared by
Jeff Henderson
Ranger II/Wildlife Biologist
Arkansas Forestry Commission

Legend

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Dr Bennett Farm
- Suggested Areas For Food Plots

0 0.03750.075 0.15 Miles

N

[redacted]

Wildlife Farm Plan
December 2004

After visiting with Dr. Bennett, it is my understanding that he wants to manage his 244 acres in Section 24 of Township 2 North, and Range 29 West for timber and wildlife habitat. Dr. Bennett informed me that he wants to manage for all species of wildlife with some emphasis on deer and turkey.

Current Conditions: This is a 244-acre tract of land with about 94 acres in open pasture (Area's 2, and 5), and about 150 acres (Area's 1, 3, and 4) that have been cut in the last few years. Within the cutover areas, there are some small, repressed Short Leaf Pine, and some Post Oak, Blackjack Oak, and Hickory (but they are few and mostly scattered) that were left after the timber harvest. I understand that there are plans to prescribe burn and replant this area in pine. There are several small paths/bush hog trails throughout the property, with some small clearings as well.

Listed first will be some specific recommendations for your property, and the next section will include some general information concerning wildlife management. I have divided your land into different areas on the map, so that it will be easier to follow the recommendations.

Recommendations:
The control burn, which you have planned for the areas that are to be planted (areas 1, 3, 4), will be very beneficial to the local wildlife. Fire cleans the ground of dead vegetation and reduces the shade provided by small trees and shrubs, which opens up new places for seeds to germinate. This promotes new vegetative growth, and provides new browse for deer, improves the quality of the browse, and increases the available foods for turkey and other wildlife as well.

Trails and firebreaks should be planted for wildlife. I believe that lespedeza (use either Striate, Korean or Common Lespedeza) and Crimson Clover will work well for you. (There is a more information about planting food plots in the general recommendations section of this plan.)

The area near ponds is the best location for salting activity for deer. It would be good to use both sulfur blocks and trace mineral blocks. The

sulfur assists in parasite control, and the mineral block provides much needed nutrients during fawn development and antler growth.

Area's #1, 3, 4: Timber was cut off these areas a few years ago. I did see some Post Oak, Blackjack Oak, and Hickory, but most trees were small with only a few larger mature trees. If there is another cut in these areas before you plant your pine, as many of the oaks as possible should be left for wildlife purposes.

There is sufficient water supply from the various ponds spread across the farm. The pond in area 1, and the small pond in the Southwest corner of area 4, should receive a lot of activity from area wildlife since they are isolated and have plenty of cover around them. If you plan on stocking fish in the large pond Southeast of the Cabin, or if it is already stocked, adding a few small brush piles (or old Christmas trees) will provide structure and habitat for fish to hide, and will provide a good location for fishing by concentrating fish in that area.

Area #4 seemed to have a little better quality of vegetation and trees, which is probably the result of having a little deeper topsoil. The best oak trees that I saw were in this area. I also noticed some patches of French Mulberry (or Beauty berry) in this area with signs of heavy deer use.

The main recommendations I have for area's 1, 3, and 4 are: leaving as many of the oaks as possible in future cuttings, seeding of the bush hog lanes and fire breaks, and the prescribed burn. These actions will make your land more attractive to deer, turkey, and other species of wildlife.

Area's # 2, and 5: Both of these areas are typical hay fields/pasture areas, where I noticed a lot of fescue growing. Fields can be excellent places for food plots.

In area 2 I recommend putting a food plot in the area of the Northeast corner. This is an excellent location because of the pond in area 1, and the trails that go from the field to the pond. It would also be a good idea to place salt and mineral blocks in this area. If you establish additional plots in area 2, remember that food plots work best when they are placed toward the edge of the field, but situated where they will receive adequate sunlight. To increase the opportunity of viewing wildlife, your plots can be planted within view of your cabin. I have marked some suggested sites for food

plots on the map. (There is detailed information about food plots in the general recommendations section of this plan).

In area 5 food plots are optional. I have concern about placing any food plots in this area, since it is visible from the highway. I have marked two places that might be good for food plots, but I would ***only recommend*** planting these areas after establishing a barrier of trees to conceal the plots.

General Recommendations:

Management practices to attract wildlife to the land should include maintaining at least 3% of the land in wildlife openings. These openings are areas with no tree canopy over them and preferably from ¼ to 3 acres in size. Examples of such areas include firebreaks, woods roads and roadsides, loading decks (from logging practices), unplanted pockets inside forests, and food plots, etc.

In forestlands, habitat can be improved through Timber Stand Improvement. This is the removal of select trees to improve habitat, while maintaining species diversity. Remove unwanted trees and favor oaks and other fruit and nut bearing trees (such as: persimmon, dogwood, plum, cherry, black gum, and beech) for wildlife food. Ideally there will be about 10 feet of space between the limbs of one tree to the next tree. This spacing will reduce competition and allow the remaining trees to grow, and bear better nut and fruit crops. Active or potential den trees, or snags should be retained where possible for squirrels, raccoons, wood ducks, etc.

The open areas need to be managed by bush hogging, disking, or burning on a rotational basis. Example: If you have three open areas that you are going to bush hog, bush hog only one a year (or if it is a large area only bush hog a 1/3 of it a year). This will allow each one to be in a different stage of growth. Always remember that the more different types of conditions that you have, the more productive the area will be for wildlife.

Food Plots: The following are some tips to remember when planting open areas in wildlife food plots. Each food plot should have a buffer strip (thicket) around the edge to increase cover and provide travel corridors. When food plots are located next to the forest edge, they should be planted about 50 feet from the base of trees to reduce competition with the trees for moisture and sunlight. This 50-foot strip can be allowed to grow up in

native vegetation and will provide a buffer strip next to the food plot. Wildlife food plots should be established on areas with little or no slope to minimize erosion.

Care should be taken when choosing a food plot location. Remember, plots that are located close to roads, or other easily accessible areas, are vulnerable to poachers and night hunting. If fields are visible from roads, it is good to plant a barrier of 2 or 3 staggered rows of wild plum, Autumn Olive, Russian Olive, or Loblolly Pine (consult local soil survey book for site specific species recommendations).

Before planting a food plot, a free soil test should be obtained through the local county Extension Service Office. A sample of soil from the food plot site should be taken to the county Extension Service Office. After testing the soil they will inform you of how much lime and fertilizer to add to your site. Planting food plots without proper fertilization and liming wastes time and money, and is often of little value to wildlife.

Wildlife food plots should be established by preparing a good, smooth seedbed by disking. Seed and fertilizer can then be broadcast, if no mechanical spreader or planter is available. If the seeds are broadcast, the seed should be lightly covered or drug. The following suggested food plots would benefit deer, turkey, quail, and other wildlife as well:

> Spring Planted Plots (April 15th-June 1st): Use a combination of Browntop Millet, Cowpeas, Sunflower, Soybeans, Striate, Korean or common Lespedeza.
>
> Fall Planted Plots (September 15th-November 1st): Use a combination of Winter Wheat, Annual Rye, Turnip Greens, Crimson or Ladino Clover.
>
> (Recommended Perennials to plant if desired: Orchard Grass, Kenland Red Clover, and Regal Clover.)

When establishing new food plots, it is best to mix annual and perennial plants. Mixtures of several plants can maximize production of your food plots and ensure a good stand. It is recommended that areas be planted in both spring and fall food plots (if you have a large plot, plant half in spring plants and half in fall plants). A mixture of wheat and clover can provide

forage from fall through early spring. Always remember that clover must be inoculated before planting. This is best done by coating the seed with a commercial sticking agent or soda pop, at about 12 ounces per 50 lbs. of seed before the inoculum is mixed in with the seed. (Red clover tolerates shade better than other clovers, so it should be used when planting narrow openings such as woods roads and firebreaks.)

Legumes are plants that have the ability to fix nitrogen in the soil, which makes them excellent soil builders. Also, they are highly preferred by deer and other species of wildlife. Honeysuckle is a naturally occurring evergreen vine that is excellent forage for deer. It is one of the best natural foods in winter when other fresh, green vegetation is not available. It is also easy to establish since it is an aggressive invader. Honeysuckle thickets can be promoted by cutting down trees of little value (smaller cedar, sweet gum, etc.) and allow them to be consumed by the honeysuckle. French mulberry (Beauty berry) also makes excellent deer browse and should be promoted by removing the competing species around them where possible.

The Arkansas Game and Fish Commission and the Cooperative Extension Service have a program called "Arkansas Acres for Wildlife." In this program landowners receive free packets of lespedeza and of a food plot seed mix (Browntop Millet, Laredo Soybeans, Redripper Cowpeas, Combine Grain Sorghum, etc.) For more information on this program or additional assistance on setting up your food plots, contact your local Agricultural Extension Office. (Their number in Scott County is 479-637-2173.) Wildlife seed mixes can also be bought at many local feed stores.

It is a good idea to leave brush piles scattered around the edge of openings to provide cover for quail, rabbits, songbirds and other small animals. Some areas of bare ground should be left to provide exposed soil for dusting areas for birds and small animals to help remove external parasites. These areas also provide locations for quail, turkey, and other birds to get grit for food grinding.

Salting is a good practice for deer. It would be good to use both sulfur blocks and trace mineral blocks. The areas around ponds are a great location for salting.

Prescribe burning is a valid tool to maintain open areas and to improve forest resources. Control burns in the forested areas will promote new browse and

improve the quality of browse, and provide a more open timber stand near the ground, which will allow for an increase in available foods for most wildlife. Burning should be done in late winter or early spring to prevent damage to larger trees.

If I can be of further assistance, feel free to contact me at 479-675-3415.

There are two stress periods in Arkansas for deer and other wildlife, mid-winter and mid-summer. Many outdoorsman plant winter food plot systems because it is both beneficial for wildlife and aids in their harvest. Not enough people recognize the importance of summer plantings. Summer food plots provide high quality forage during the months of antler development in bucks and does are nursing fawns. Also, if we have our typical late frost, summer food plots could also be used as an early season harvest tool. I would recommend dedicating 50% of area to be planted to summer plantings.

Location and size: Locate all food plots in areas where deer will feel comfortable when using them. This is generally close to some sort of escape cover such as a wooded area or thicket. If at all possible stay away using sites visible from public roads. This will minimize any poaching that could result from deer being very visible. Size of individual plots is relatively unimportant ranging from ¼ to 3 acres and usually dictated by location. Long oddly shaped food plots are generally preferred over square or round plots because more edge is created. To benefit overall health of your deer herd the combined acreage of all plots should account for roughly 10% or more of available land.

Soil preparation: Most soils in the Southeastern United States are very acidic and pH must be adjusted prior to planting. Your Local County Extension Office has soil test kits for soil sampling. The soil sample will be analyzed and recommendations made on lime and fertilization need for each site to be planted. This is a very important step and should not be overlooked. Without proper pH many plants will not be able to take up available nutrients from the soil and will suffer diminished growth and lose some of their palatability.

Seedbed Preparation: Area to be planted should be free of brush and stumps to allow preparation of good smooth seedbed. Thorough disking twice should be adequate.

Seed selection: Here I will list some common plants used for food plots. I would recommend that you plant these in combinations. That way under different growth conditions you will generally have a stand of something for deer.

Summer Planting

Alyceclover: A warm season annual highly preferred by deer and best suited for well drained sandy sites.

American Jointvetch: A warm season annual best suited for sandy loam to silt loam soils. This plant is highly preferred by deer but not very drought tolerant.

Cowpeas: A highly preferred warm season annual that grows on a wide variety of soil conditions with good drought tolerance. These should be planted in larger food plots because of their low tolerance to heavy grazing pressure.

Hairy Indigo: This is a good warm season plant to include in your mix because of its excellent drought and late summer growth. This plant may not be grazed much initially but is still available when other plants have passed in summer.

Soybeans: Soybeans are highly preferred by deer and are fairly site tolerant. As in cowpeas, soybeans should be planted in larger plots to protect from over grazing.

Winter Planting

Winter Wheat: A widely adapted cereal grain that is highly preferred.

Winter Oats: Highly preferred but not as cold tolerant as wheat or rye

Elbon Rye: The most cold tolerant of the cereal grains and highly preferred.