

GIACOMINI-RITTER  
FOREST STEWARDSHIP MANAGEMENT  
PLAN  
SANTA ROSA COUNTY, FLORIDA

Prepared 11/20/07  
By  
Tree Longevity Corporation  
10151 South Loop Road  
Pensacola, Florida 32507

850-458-6227  
800-458-6227  
251-980-6268

## PROPERTY LOCATION AND HISTORY

The Giacomini-Ritter Stewardship Forest is in northern Santa Rosa County, Florida at the end of Creek Stone Road which turns east off of Lewis Road. The 360-acre contiguous tract is adjacent to the East Fork of Big Coldwater Creek and is in Section 35 of Township 4 north, Range 28 west. The land has historically been used as timberland and this management plan continues that tradition. Most of the pine timber was harvested from the tract in the late 1980s and was partially replanted with slash pines.

## MANAGEMENT OBJECTIVES

The primary objective of the landowner is timber management with a strong secondary goal of providing wildlife habitat for as many species as is practical. Quality outdoor recreation and the enhancement of aesthetics are also important goals. The landowner may try some small plots of silvopasture, Christmas trees, shiitakes, etc. All management goals will be reached by using natural resource management practices that promote good soil and water conservation. The landowner's participation in the Forest Stewardship Program will provide a good example for other landowners in the area.

## SUMMARY OF MANAGEMENT STRATEGIES

### Timber

Management of the timber resource, under this plan, is for the highest practical economic return to the landowner. Areas of the forest that can economically produce a marketable pine timber crop will be used for that purpose. Areas not well suited for pine timber production will be dedicated to other activities.

Southern Pine Beetle (SPB) outbreaks are becoming a major problem in other parts of Florida. So far they are not a big problem in the Panhandle but that could change as more highly susceptible loblolly pine is planted in this area. SPB control for the Giacomini-Ritter Stewardship Forest will be accomplished by eventually replacing the existing slash pines with longleaf pines, which are a less-susceptible species, and by actively managing the pines to promote good stand health and tree vigor. Since crowded stands are more susceptible to SPB, the Giacomini-Ritter Forest pines will be thinned to maintain a basal area at or below 80 square feet per acre (basal area is a measurement of stand density based on the cross sectional area of the trees at 4.5 feet above the ground).

For management planning purposes the tract is broken into four management stands (see the stand map). Each stand is a forest area with similar species composition, age distribution, soil type, site index, productivity potential, and silvicultural needs. Underbrush control will need to be a management priority and will be accomplished primarily through the use of controlled burning in the existing timber stands and later with the use of herbicides when areas are replanted with longleaf pines. Controlled

burning is desirable, especially within longleaf pine forests, for underbrush suppression due to its historic natural occurrence from lightning strikes and its beneficial ecological values.

Controlled burning will be very desirable over the long term by removing the naturally accumulating fuels on a regular schedule and reducing the risk of wildfire. This is historically a timber production area so the neighboring landowners likely view controlled burning in a positive light. Wildfire presents risks not only to the Giacomini-Ritter Forest's timber crop value but also to the surrounding timberland. Timber production is increasingly at risk to fires set by humans in addition to naturally occurring lightning strikes. Although controlled burning adds smoke risk during the burns, it reduces catastrophic wildfire risk. Continued maintenance of the existing forestry roads and the construction of some new permanent fire break roads are strongly recommended such that emergency vehicles can negotiate the road and fire break system for the suppression of wildfires and access for controlled burns. A permanent firebreak should be constructed along the west, south and north boundary lines of the property. Existing roads should be widened and maintained so they can be used for interior firelines. To increase the likelihood that controlled burning can be done safely on this forest, some interior fireline roads should be constructed that connect existing roads and other fire breaks to divide the tract into smaller more manageable sections of about 20-40 acres each. Several proposed new interior firebreak roads are shown on the stand map. The exact number and location of the new roads can be changed to suit the landowner's desires and budget. All new firebreak roads should be initially established with heavy equipment prior to the first controlled burn. Annual grasses, such as winter wheat or Florida oats, should then be seeded into the firelines to control erosion and provide wildlife food. In following years most firelines can be freshened for fire control and planting using a farm tractor and disk. Periodically maintain the lines by disking during the winter months. Winter disking is best in that it promotes the most desirable native vegetation and no ground nesting birds will be disturbed.

Due to the heavy underbrush on much of the property, the first controlled burn will need to be done when conditions are relatively dry. The fuel on the ground is limited in some areas due to the brushy undergrowth catching much of the pine straw and keeping it suspended. Also the hardwood leaves that predominantly cover the ground are not a very flammable fuel. Further, the hardwood leaves are relatively flat thus trapping moisture underneath which reduces the fuel's ability to burn. When most of the Giacomini-Ritter forest is dry enough to be burned, a few open areas on the forest will be very dry. Care should be taken in any area to be burned on a specific day to light the more open areas early in the morning while temperatures are low and the humidity is high, and then light heavy under-brush areas later in the day as temperatures rise and humidity falls. Even doing this, there will be areas that burn either hotter or cooler than ideal from a silvicultural perspective. As the property is successively burned over the years the fuel conditions will become more uniform over the forest and burns too will become more uniform. During the first burn, which will require relatively hot dry conditions, extra care should be given to not letting fire escape to adjoining properties, because those properties also will be dry (especially if they are more open type areas).

The proper timing and implementation of silvicultural practices like burning, thinning and harvesting can maintain or improve wildlife habitat quality, aesthetics and recreational potential.

## Wildlife

Wildlife management on this property should involve the manipulation of habitats that best provide for both game and non-game wildlife species, particularly white-tailed deer, wild turkey, and songbirds. Recommended options include installing and managing a system of wide firelines, daylighting (widening) the shoulders of existing roads, creating and maintaining permanent wildlife openings, retaining desirable upland and bottomland hardwood areas, and prescribed burning in the pine dominated stands. Also, reforestation with longleaf pine can benefit wildlife while also improving timber growth and aesthetics.

No threatened or endangered species were observed during the initial land reconnaissance. Management recommendations contained in this Forest Stewardship Management Plan are conducive to the conservation of threatened and endangered species that may be found on the property.

## Soil and Water

The potential for erosion is high on this tract in the areas where the sandy soil is on moderate to steep slopes. Water bars and water turnouts should be constructed and maintained where roads concentrate runoff water on slopes. The new fireline roads should be constructed with runoff management as a top priority.

A gully has formed running eastward from the west property line due to uncontrolled runoff from an adjoining property. When the new fireline road is constructed along the west property line an attempt should be made to remedy this situation (diversion of the water, placing brush or rip-rap in the gully, installing a deeply angled culvert, hard-bottom ditch, etc.).

Beavers have stopped up the natural creek which used to drain about 50 acres along the west property line. From a timber growing perspective, the beavers should be eliminated and the stream allowed to revert to its natural state. Presently, these 50 acres have limited productive potential.

Several of the existing metal road culverts are rusted or too small. They should be replaced with 24-inch plastic culverts (plastic culverts will burn, so rake the leaves away from the ends before controlled burning near them). Any culverts required in the new firebreak roads should also be 24-inch plastic. Permits for all new and replacement culverts must be obtained from the Northwest Florida Water Management District.

Florida Best Management Practices for Silviculture will be adhered to in the management of this forestland. New roads and firelines should avoid wetland areas and steep areas where practical.

Soil Summary for the Giacomini-Ritter Tract—Santa Rosa County, Florida

SOIL TYPE	VEGETATION	SLOPE	DRAINAGE	SITE INDEX
Bibb-Kinston	Pine, Juniper, Titi Brush	0-2	Poor	80
Dorovan-Pamlico	Bottomland Hardwood	0-2	Very Poor	Hardwood
Johns Fine Sandy Loam	Pine, Oak, Brush	0-2	Somewhat Poor	80
Troup Loamy Sand	Pine, Oak, Brush	3-8	Somewhat Excessive	80
Lucy Loamy Sand	Pine, Oak, Brush	3-8	Well	80

### Recreation

The principal types of recreation on this tract will be camping, hunting, fishing, hiking and wildlife observation. The landowner plans to eventually try some forms of eco-tourism which will probably involve building some small site-friendly cabins. The forest roads and firelines will serve as access for recreation. Controlled burning will enhance all the recreational activities on this forest.

### Aesthetics

Controlled burning and maintaining the variety of habitats will enhance aesthetics on this property. This tract borders the East Fork of Big Coldwater Creek on the east. It is a large attractive creek with large white sand bars. The access to this creek frontage will be enhanced by the new fire break roads.

## STAND SPECIFIC MANAGEMENT STRATEGIES

### Stand #1

13 Acres

### Upland Hardwood

#### Stand Description.

This Stand occurs in one contiguous block in the northwest corner of the tract (see stand map). The overstory is scattered natural slash pines mixed with laurel oaks, magnolias

and other hardwoods. The stocking of pines is light. The understory is primarily small hardwoods and yaupon. The access road enters the Giacomini-Ritter forest in this stand. The landowner plans to build a cabin and equipment shed near the entrance so aesthetics is important in and near this stand.

Management Recommendations.

The hardwood underbrush should be reduced using controlled burns or bush hogging at intervals of about three years. The first burn or bush hogging should be done in the winter of 2007-08. If it is burned, the landowners may want to first rake the leaves away from the trunks of desirable magnolias for a distance of about two feet (fallen magnolia leaves burn well and magnolia bark is thin allowing for trunk damage from fire). It is recommended that the roads and fire lanes in this stand be maintained as access for emergency vehicles in the event of wildfire.

Stand #2  
33 Acres  
Bottomland Hardwood

Stand Description.

This stand exists in one contiguous block along the central part of the western property line. This stand received considerable damage during Hurricanes Ivan and Dennis with most of the taller trees being blown over. There is a sparse overstory of yellow poplar, red maple, sweetbay magnolia, sweetgum, and black gum. The understory is predominantly hardwood brush covered with heavy mats of saw briars and wild grapes. Beavers have stopped up the creek that used to drain this stand.

Management Recommendations.

If the beavers are allowed to stay, this stand should be left alone except for burning. With the high water table created by the beavers, pine trees will not grow well on this site. The hardwoods there will eventually be harvestable as hardwood pulpwood, but that is a low value product. There is not a good market for hardwood logs in this area.

If the beavers are eliminated, the perimeter of this stand will eventually become similar to stand #3. It will support pine trees and thus the perimeter acres should become a part of Stand #3 and be managed likewise.

This stand should be controlled burned in the winter of 2007-08. Much of the stand will probably not burn due to the wetness of the soil. Areas that will burn (primarily the north and south ends of the stand) will become more open and accessible as the understory is controlled by burning.

Stand #3  
222 Acres  
Slash Pine Plantation

Stand Description.

This stand is located in one contiguous block in the central portion of the Giacomini-Ritter Forest (see the stand map). This slightly overstocked eighteen-year-old slash pine plantation has a dense understory of titi and gallberry. Growth of the pines has slowed down considerably in the past 6-8 years. The average pine basal area of the stand is 80 with a range of 50-110. There is very little Fusiform Rust Disease in these slash pines.

Management Recommendations.

From a silvicultural standpoint, the more vigorous areas of this stand needs to be thinned (to a basal area of about 70), however many of the trees that should be taken out (the smaller trees) are not yet of merchantable size. Also the only product that could currently be harvested in a thinning is pine pulpwood and the price for that product is very low right now. There are indicators that the pine pulpwood market may improve in the next few years. Therefore, this stand should not be thinned until the market improves. While waiting for that to happen, the stand should be controlled burned to reduce some of the competition from the dense understory. Burning should be done in the winter of 2007-08. Most of this stand should be burned under relatively warm and dry conditions.

In the future, when this stand matures enough for a final harvest (probably around 2015-2020), this stand should be replanted with longleaf pines.

Stand #4  
88 Acres  
Juniper/Pine

Stand Description.

This stand adjoins the creeks, branches, drains and areas of high water table on the property. It is predominantly a mixture of juniper and slash pines with a few hardwoods and cypress trees. The understory is primarily titi, juniper seedlings, and hardwood seedlings. Many of the large Juniper trees in this stand were blown over during the hurricanes.

Management Recommendations.

The large Junipers that were downed by the hurricanes can be salvaged. Juniper is a decay resistant wood so much of the wood will be solid. The juniper can not be commercially salvaged but the landowners might want to salvage it for their own use.

This stand should be burned in the winter of 2007-08 when the rest of the tract is burned. Burning will open up the understory near the big creek which will be aesthetically pleasing.

The pine in this stand should be harvested when Stand #3 receives a final harvest (around 2015-2020). After that, the higher portions of this stand should be planted with longleaf pines and will become a part of Stand #3, while the lower portions should be planted with slash pines. The portions that have a heavy stocking of juniper should not be harvested nor replanted but should remain a juniper stand.

### Wildlife Openings/Food Plots

Management of the openings should involve one of two methods. First, these openings can be maintained in native ground covers simply by disking during the winter months. About half of the acreage to be managed this way should be disked each winter, alternating back and forth between sites. This will keep the opening free of brush while providing good food and cover resources. For wildlife viewing and hunting purposes, it may be desirable to plant some of these openings to food plots. Areas that are to be planted to warm and/or cool season forages should be at least an acre in size and should be irregularly shaped, where possible. It is imperative that soil tests be conducted well in advance of planting on each food plot to determine lime and fertilizer requirements. Lime should be applied at least 3 months before planting to insure adequate time to be fully effective. Warm season plantings of iron-clay peas, soybeans, or brown-top millet should do well on these soils while winter wheat, crimson clover, and Florida oats should do well in the cool season.

### SUGGESTED STAND TREATMENT SCHEDULE

YEAR	STAND #	PRACTICE
FALL 07-08	ALL	BUILD FIRELINE/ROAD SYSTEM
FALL 07-08	ALL	PLANT FOOD PLOTS
WINTER 07-08	ALL	CONTROLLED BURN
EACH WINTER	ALL	DISK FIRELINES
EACH SPRING & WINTER	ALL	PLANT WARM & COOL SEASON FORAGES
?	3	THIN WHEN PINE PULPWOOD MARKET IMPROVES