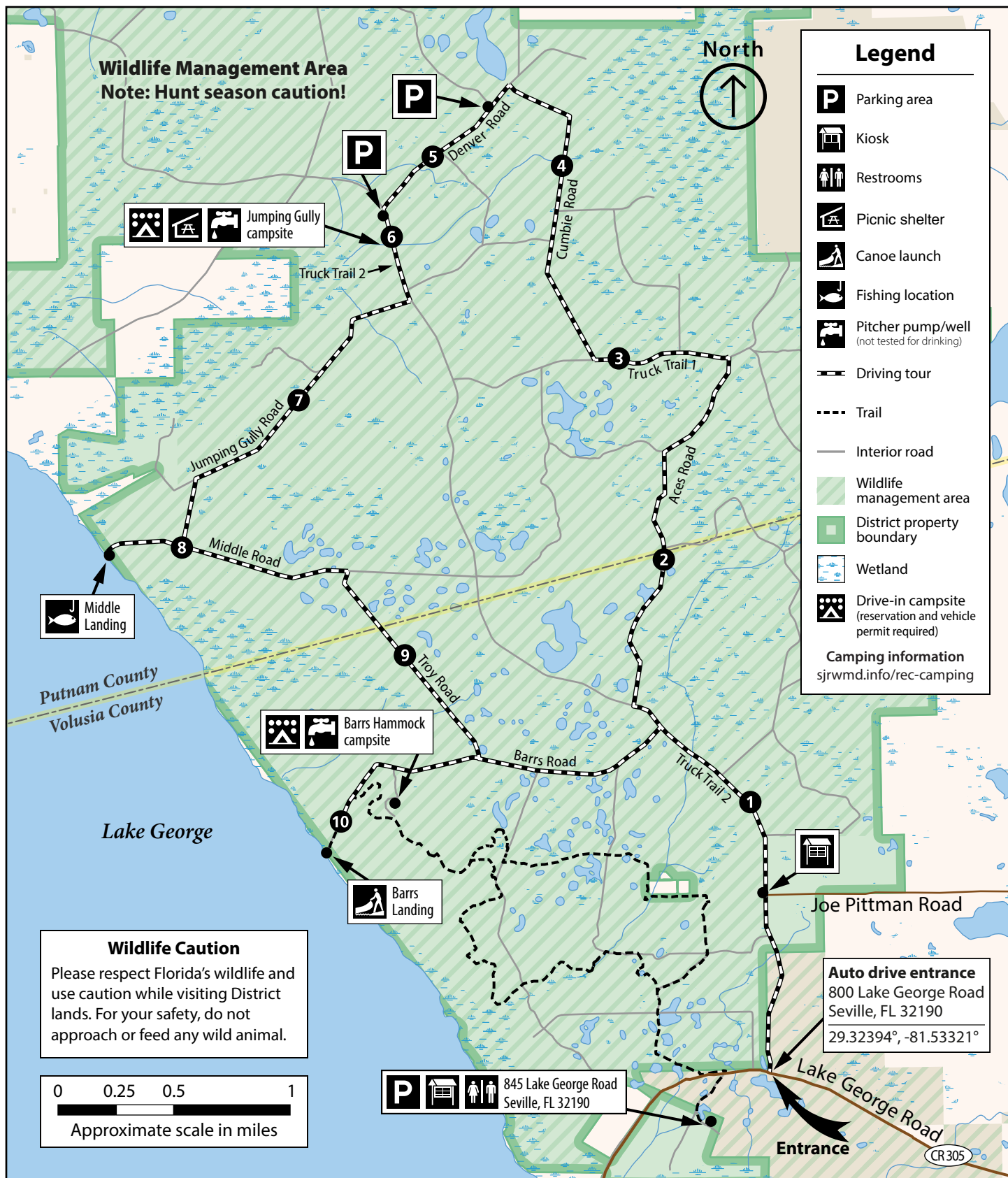




St. Johns River Water Management District

Lake George Conservation Area

Self-Guided Driving Tour





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About this property

Lake George Conservation Area consists of 11,756 acres along the northeastern shore of Lake George, in Volusia and Putnam counties. The St. Johns River Water Management District purchased this property in 1990 to improve water quality, maintain natural hydrologic regimes, increase flood protection, restore, maintain and protect natural community diversity, and provide public recreation. This self-guided driving tour provides a unique opportunity to observe an ecologically diverse conservation area and learn about the tools used in its management.

The property's namesake is Lake George, the second largest lake in Florida, measuring nearly 6 miles wide and 11 miles long, with an average depth of 8 feet. Lake George is part of the St. Johns River, which flows into the lake at the south end and exits to the north. Salt Springs, Silver Glen Springs and Juniper Springs each flow to the lake. Wading birds, raptors, and many species of freshwater fish are among the wildlife found around and in the lake.

In 1773, American naturalist and explorer William Bartram described his boat on the lake: "My vessel at once diminished to a nut shell on the swelling seas, and at the distance of a few miles, must appear to the surprised observer as some aquatic animal, at intervals emerging from its surface..." In 1933, author Marjorie Kinnan Rawlings and her friend Dessie Prescott Smith wrote about their experience boating on the St. Johns River north through Lake George, saying they veered away from the safe haven of the western border of the lake and traveled through the center of the lake, only to find white caps and waves, to their detriment.

Much of the property was once part of an industrial/commercial forestry site before the District acquired it. Commercial forestry operations seek to maximize productivity. In a commercial setting, trees are managed similarly to a long-term crop. Prior to planting, various site preparation methods are employed. Timber companies typically plant fast-growing species in rows, which are harvested — often clear-cut — and replanted on a short cycle, with the cycle repeated again and again.

The property's history as a commercial forestry site remains evident in many places. However, now that the land has been brought into public ownership, the District's overriding goal for the conservation area has been to improve species diversity and the overall natural community's health. For this reason, the District uses a different forest management approach. Densely planted timber stands are thinned to a more natural density, which improves forest health. Thinning reduces competition among trees over time, resulting in larger trees with fuller canopies. More sunlight reaching the forest floor stimulates the growth and reproduction of native grasses and flowering plants. This provides important forage for wildlife, such as seeds for birds and nectar for pollinators.

The District uses prescribed fire in the restoration and management of its public lands, including Lake George Conservation Area. Prescribed fire (also known as controlled burns) is the use of carefully planned fire purposefully set under stringent conditions to control the fire's effects.

Periodic prescribed fires are not just an efficient and effective tool to reduce the threat of property damage from wildfires but also are the only means land managers have to meet the needs of many fire-dependent plants and animals. Prescribed fire mimics nature but burns with less heat and potential damage than wildfire. Substitutes for fire have been tested in recent years, such as chopping and mowing vegetation, yet none provides the many benefits of fire.

While participating in the driving tour, please exercise caution and be aware that:

- Many roads within the conservation area (especially Truck Trail 2) are well-used local roads with moderate amounts of traffic. Additionally, because timber management is an important tool utilized within the conservation area, many of the roads used in the scenic drive are primary logging roads.
 - Roads are maintained regularly but, at times, may require four-wheel drive.
 - The conservation area is part of a diverse system of interconnected upland and wetland areas. Flooding can occur rapidly with small amounts of rain.
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- Lands within Lake George Conservation Area are part of a wildlife management area and are open to seasonal hunting.

1. Truck Trail 2

As you drive along Truck Trail 2, notice the wider gaps in the old rows of timber. These gaps are a result of selective tree removal, or “thinning,” that is done to restore a more natural stand density. In a functioning natural system, trees tend to be widely spaced, reducing competition between trees while allowing sunlight to penetrate the vegetation at ground level that, in turn, promotes plant and animal diversity. Small areas called loading ramps are cleared to provide loggers with an area to sort, trim and load logs after harvesting. You may sometimes see logging debris immediately after harvesting, but remaining tree trimmings will decay rapidly, and the ramps provide valuable openings for wildlife.

Mesic (moist) flatwoods are the dominant natural community visible from Truck Trail 2. Slash pine was the preferred choice of timber companies at the time the property was planted. It remains the dominant canopy tree at Lake George today. The understory is dominated by saw palmetto, gallberry and a variety of grasses.

2. Aces Road

Vegetation at this point on the driving tour is a natural scrub community. Scrub areas have a white sandy soil that consists of low nutrients, causing plants to grow slowly. Sand pine dominates the overstory in some sections. Although sand pine-dominated scrub is a fire-adapted community – meaning its ecosystem benefits from periodic fires – it is a unique pine community in relation to fire. Unlike other pines that promote the survival of the individual tree with insulating bark, sand pine has adapted to protect the species/forest by dropping serotinous cones that blossom later in the season. The term “serotinous” describes plants or seeds that delay release until triggered by an environmental factor, such as fire.

Sand pine burns relatively infrequently, with tremendous intensity in a stand-replacing crown fire. This intense fire kills most of the existing sand pines, top-kills other woody species on the site, and heats the pinecones so they open and release their

seeds. Because fire clears the forest floor, the sand pine seeds fall on nearly bare sand. The seeds will then germinate and become established with little competition. This cycle of germination, growth and mortality often occurs over a 40- to 80-year cycle.

3. Truck Trail 1

Lake George Conservation Area appears to have pine trees as far as the eye can see. However, did you know that approximately 45 percent of this property includes wetlands or other wetter communities? Basin marshes, depression marshes, floodplain swamps, and dome swamps are interspersed through the property due to slight changes in elevation and soil type. More than 62 low-water crossings, culverts or bridges may be found at Lake George Conservation Area to ensure the proper movement of water while still allowing for road use. The elevation at U.S. 17, about 2 miles to the east, is 60 feet above sea level, while the elevation closer to Lake George is 5 feet. Many of these wet areas come together and then flow west to empty into creeks that then drain to Lake George. To the north and south of this specific location are dome swamps, which are typically circular areas of lower elevation that collect water, but also support trees such as cypress. These wetlands provide important breeding habitat for numerous amphibians, including southern toads, green tree frogs, squirrel tree frogs, cricket frogs and oak toads.

4. Combie Road

You are about to cross over Jumping Gully Branch, a small creek that drains to Lake George. Bay and cypress trees are visible from the road, as are large clumps of sand cordgrass and other wetland plants. This area of Combie Road was impacted by the wildfires of summer 1998, when drought conditions and wildfires, mostly from lightning strikes, resulted in nearly a half million acres burned statewide. Here, approximately 1,500 acres of the property burned.

5. Denver Road

This section of the property is an example of mesic flatwoods. Mesic flatwoods have a clay hardpan soil layer that impacts the vertical movement of water through the soil, causing water to drain more

slowly during the rainy season. Mesic flatwoods are maintained by periodic fire which shapes its vegetative structure and preserves species diversity. Vegetation regrowth can be observed within days of a burn and some species flower more prolifically after fire. Plant species that you may see along Denver Road include longleaf pine or planted slash pine in the overstory, with a diverse understory of saw palmetto, gallberry, wiregrass and many other herbaceous species. Keep an eye out for wildlife, including the eastern diamondback rattlesnake, southern fox squirrel and Florida black bear.

6. Truck Trail 2

This segment of road is an illustration of how a slight change in elevation can affect natural communities. The northern portion of this segment is characterized by mesic flatwoods. However, as you drive south toward Jumping Gully Creek, the elevation decreases slightly and the natural community shifts to a bottomland forest.

You will see a canopy of large live oaks and an open understory, marking the entrance to the Jumping Gully primitive campsite. The campsite is equipped with an inclement weather shelter, picnic benches, a fire ring and a small non-potable water source. A reservation and a permit are required to use the campsite. Reservations may be made on the District's website at sjrwmd.com/camping.

Just after crossing the bridge, the landscape becomes even higher in elevation and noticeably drier. The white sand and upland species of the scrubby flatwoods on the east side of the road contrast sharply with the more hydric species of the bottomland forest and the branch itself in a lower elevation.

7. Jumping Gully Road

The area to the north and west of Jumping Gully Road was replanted in longleaf pine after the 1998 wildfires and prescribed fire has since been reintroduced as a management tool. Tall grasses and a diverse mix of shrubs can be found growing among the pines.

8. Middle Landing/Middle Road

Middle Road leads directly to Middle Landing, which overlooks Lake George. A scenic view of the lake can be enjoyed by following Middle Road westward approximately 0.8 miles from the intersection with Jumping Gully Road. Please refer back to the top of this document for more detailed information about Lake George.

9. Troy Road

On Troy Road, you may notice pockets of oak trees scattered among the pines. These distinct clusters of trees are the initial stages of a natural community that is moving from a scrub or scrubby flatwoods to a natural community known as xeric (pronounced "zerik") hammock. This process of changing from one community stage to another is called "succession," and, in this case, it is caused by a lack of fire. Without fire, oaks grow tall and dense, altering the low shrub structure of the scrub. This succession often prevents many plant and animal species commonly associated with scrub from surviving in the area.

10. Barrs Landing

Traveling westward from the intersection of Troy Road and Barrs Road leads directly to Barrs Landing, the second of two points where you can stop to enjoy scenic views and direct access to the shoreline of Lake George. Nearby, the District's Barrs Hammock primitive campsite (reservation required) is secluded under large live oaks just off the swamp edge of Lake George. The conservation area's marked multi-use recreational trail system can be accessed directly from the campsite or from Barrs Road a few yards east of the yellow gate at the entrance to Barrs Landing.

This is the last stop of the driving tour. We hope you have enjoyed your adventure in this part of "Old Florida" and will visit again.

