

THE LAKE WALES RIDGE

Florida's Ancient Islands

by Gaye Griffin Sharpe

"The most important remaining patches lie along the Lake Wales Ridge, a chain of paleoislands running for a hundred miles down the center of Florida, in most places less than ten miles wide. It is a relict seashore, tossed up more than a million years ago when ocean levels were higher and the rest of the peninsula was submerged. That ancient emergence is precisely what makes the Lake Wales Ridge so precious; it has remained unsubmerged, its ecosystems essentially undisturbed since the Miocene."

- John Jerome, "Scrub, Beautiful Scrub" in Heart of the Land

Imagine yourself walking on the sands of an ancient island. To the east you hear waves rolling in from the Atlantic Ocean. Look west and you see the calm waters of the Gulf of Mexico. Of course, the waters have long since receded from this place that was sculpted by the sea more than one million years ago. You are standing on the Lake Wales Ridge in the heart of Central Florida, a unique geological feature that runs for about 150 miles through Lake, Orange, Osceola, Polk and Highlands counties.

What makes the Lake Wales Ridge so special? More than one million years ago, the world's oceans were much larger and sea levels were much higher. Florida as we know it today was almost entirely covered by water. The only land areas left exposed were islands of sand, now known as "Florida's ancient islands." Imagine that, beachfront property in interior Central Florida! Although several of these elevated ridges exist to form the backbone of the Florida peninsula, the Lake Wales Ridge, standing 295 feet above sea level, is the oldest.



At first glance, a person looking at the Lake Wales Ridge may see nothing more than a desert-like landscape with densely growing shrubs and a few scattered pines. The natural community that characterizes the Ridge is the scrub habitat. The term "scrub" typically means low-growing, shrubby plants in dry, sandy soil. On the Lake Wales Ridge, scrub areas are situated among other habitats - including sandhills, numerous lakes and pine flatwoods — in a rolling topography that creates significant biodiversity.

Old timers said that the only thing scrub was good for is "holding the world together," since it did not appear to be good for much of anything else. Its dry, sandy soils were not good for growing row crops, and the sparse, tough vegetation was not an ideal diet for cattle. However, portions of the Ridge were converted to citrus groves in the early 1900s. Along with the thriving citrus industry came development, and today, many homes have been built along the Ridge to accommodate the influx of people.

If you've ever driven U.S. Highway 27 through the center of Florida, you have seen the Lake Wales Ridge. But from a distance, you miss all of the fascinating details. It has been said that in order to appreciate the scrub, one must approach it on hands and knees. The scrub is like a miniature forest. Most scrub creatures are small and many of the wildflowers are only a few inches high. The delicate sand lace from above looks little more than a weed. But by lying belly down, face-to-face with this plant, one may come to understand the formidable and unrelenting struggle of life in the scrub.



© Orlando/Orange County CVB

Historic Bok Sanctuary, located in Lake Wales, is a beautiful landmark and arboretum for the preservation of rare Florida plants.

burrow underground that may be up to ten feet deep and up to 30 feet long. More than 360 species may share the gopher's burrow. Other small animals such as the sand skink leave only "S"-shaped tracks as it "swims" just beneath the surface of the sand. It is the only known sand-swimming skink in North America and occurs in only seven counties in Florida.

By far the most famous scrub animal is the Florida scrub-jay. Found in both interior and coastal Florida scrub, scrub-jay adults, juveniles and

Due primarily to a long period of isolation, plants and animals that live on the Ridge have developed ways to deal with their harsh environment. The leaves of the sand live oak are thick and leathery, rolled in at the edges to help retain as much water as possible during the blazing hot days of summer. When walking through scrub areas, small scrub lizards often race off in the distance so quickly they are just a blur — perhaps an adaptation for crossing the hot sand quickly.

Many animals of the scrub spend much of their lives underground. It is an ideal place to escape the hot Florida sun as well as to avoid predators. The gopher tortoise digs a

young live together in family groups and share the responsibilities of life. Florida scrub-jays need scrub with its patches of bare sand to bury acorns, a dominant part of the scrub-jay diet throughout the year. The open patches also help the scrub-jay stay on the lookout for predators.

In addition to plant and animal life, the Lake Wales Ridge also has water resources. The sinkhole lakes scattered along the Ridge were formed when naturally acidic rain created cavities in the limerock that underlies most of Florida. Because of the beach-like sand these lakes appear clear. Other lakes along the Ridge originated as shallow depression marsh areas that slowly filled with water. These marsh lakes tend to be more nutrient-rich than sinkhole lakes, but typically harbor a wide array of fish species. Rapid seepage of rainfall on the Ridge provides important recharge for the Florida's Aquifer.

Why is there a desert-like landscape in Central Florida, which has abundant water resources and averages 50 inches of rain each year?



© Jeffrey Spence

Florida Scrub Jay

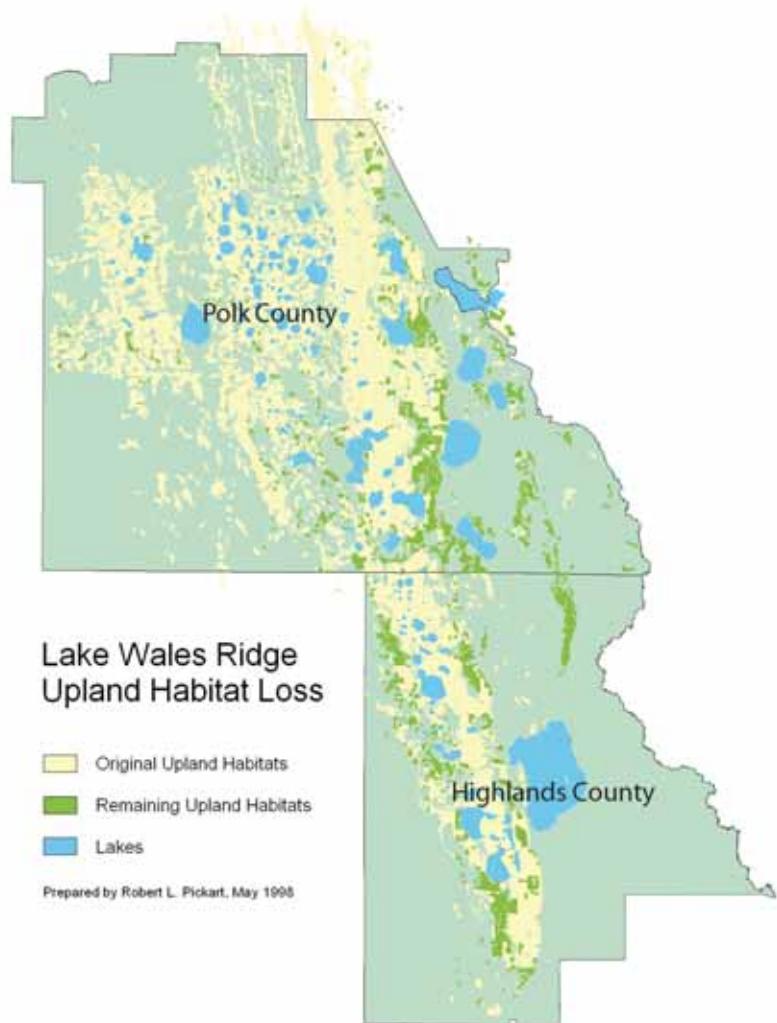
Central Florida was once connected to the desert Southwest via a land bridge during the last Ice Age. At that time, much of the world's water was frozen at the Earth's poles, leaving much more land exposed. The "land bridge" that formed where the current Gulf of Mexico now rests enabled plants and animals to move across the area freely. Even today, Florida shares similar species with the southwestern U.S., including prickly pear cactus and the gopher tortoise.

Approximately 40 species of endangered and threatened plants and animals survive on the Ridge, a hotspot of biodiversity. These species and fragmented natural areas are all that remain of an ancient flora and fauna that is truly unique.

In order to protect the Lake Wales Ridge, voters in Florida must continue to voice their concern for the land. Appropriate planning and continued support of local and state land acquisition and management efforts for strategic land is imperative for the protection of the Lake Wales Ridge. Public and private organizations have successfully acquired numerous conservation lands along the Ridge since the 1990s. But while there have

been many successes in land acquisition on the Lake Wales Ridge, the real work has only begun.

Think of the Lake Wales Ridge as a jigsaw puzzle you might find at a garage sale. Of the original puzzle pieces, there may be many that are lost forever. Yet, there may be enough key pieces remaining to be able to keep "holding the world together." What a treasure these ancient islands are, home to unique species found nowhere else in the world!



EXPERIENCE THE LAKE WALES RIDGE

- Visitors to the **Ridge** may encounter one of its most charismatic residents, the Florida Scrub Jay, at a number of managed natural areas. In Polk County, the best places include **Lake Kissimmee State Park**, **Crooked Lake Prairie** and the **Lake Wales Ridge State Forest/Walk-in-Water Tract**. In Highlands County, **Archbold Biological Station**, **Lake June-in-Winter Scrub State Park** and **Avon Park Air Force Range** are good locations to observe this unique bird.
- Setting foot in **Hickory Lake Scrub** is like walking into a rare plant museum. Although small in size, this 57 acre preserve in Polk County harbors several threatened and endangered plants. A few miles away, **Crooked Lake** offers a glimpse of one of the best remaining examples of sandhill along the Ridge.
- **Lake June-in-Winter Scrub State Park** in Highlands County is well suited to those seeking a wilderness experience. Visitors can enjoy walking a half-mile nature trail winding through white sand scrub, fishing, or canoeing.
- The 5000 acre **Tiger Creek Preserve** is located on the edge of the **Lake Wales Ridge** in Polk County. More than nine miles of trails traverse various habitats, including hardwood swamps, flatwoods and sandhills. For more information, contact **The Nature Conservancy** at **863-635-7506** or visit www.nature.org/florida.
- Learn about rare plants of the **Lake Wales Ridge at Historic Bok Sanctuary**. The Bok collection includes an endangered plant garden, and Pine Ridge Nature Preserve offers a self-guided hiking trail through **Longleaf Pine** and **Turkey Oak** habitat.
- For a copy of the **Lake Wales Ridge** visitor's guide, contact the Polk County Environmental Lands Program at **863-534-7377**.



A native of Polk County, Gaye Sharpe holds a double major in Biology and Physical Education from Mercer University. Following eight years in the citrus industry, she became a biologist with the Natural Resources Division of Polk County. Today Ms. Sharpe is the Polk County Environmental Lands Coordinator. Her work includes the purchase of environmentally-sensitive properties, protecting the natural resources of acquired lands, and developing appropriate nature-based recreation. Ms. Sharpe has received the Audubon Kaucher Conservation Award, Woodsman of the World Conservation Award, and Osprey Award from the Sierra Club Florida Chapter.

