



Florida Black Bear National Scenic Byway Newsletter

"How strange that nature does not knock, and yet does not intrude!"

Jurassic Park and the Byway

Imagine 130,000 years ago and even earlier, a massive 13 foot, three-to-five-ton mammal strolling through what was to become the City of Daytona Beach.

Because of the depth that the animals were found (12 feet down) and soil types present in the area, experts also identify other animals that lived around the time of the sloth, including a mammoth, mastodon, and the rare Cuvieronius Elephant, that roamed the area along with a tapir,



Giant Ground Sloth

Even though this mammal was a vegetarian, it wouldn't change the fact that seeing this massive mammal would be quite terrifying. "*Jurassic Park comes to life at Daytona Beach*" featuring Giant Ground Sloths and Mastodons. Yes, the skeletons of both have been discovered at Daytona Beach.

The Giant Sloth was discovered in October 1975 at the bottom of a retention pond in Reed Canal Park, now referred to as "The Daytona Beach Bone Bed." Dr Gordon Edmund, Curator of Paleontology at Canada's Royal Ontario Museum and his team of workers and volunteers spent two and half years recovering the bones of the sloth. Once excavated, Dr. Edmund brought the remains to Canada where he identified and reconstructed the sloth for the Museum of Arts and Sciences in Daytona Beach.

capybara, palaeolama, and glyptodon (a nine foot armadillo). Along with these now extinct animals experts also recovered the remains of about 50 other species of animals, including some that are alive today, such as the deer, bobcat and raccoon.

It is thought that the giant ground sloth must be among the strangest mammals that ever-walked planet earth. Their living relatives include tree sloths, and more distantly the anteater, and armadillos. Unlike living tree sloths, the extinct sloths were large, ponderous animals that presumably spent all their time on the ground.

There was one other impressive find on this excavation: plant material. Based on their knowledge of the newly discovered plant life, scientists were able to piece together the



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Jurassic Park and the Byway Cont

ecosystem that supported the enormous sloth and other animals. The seeds of several trees revealed that this was a swamp forest near a marsh. Pollen trapped in the black organic soil was extracted and could still be identified after 130,000 years.

So, some may ask what is a mastodon? It is an extinct, prehistoric elephant that vanished from fossil records some 11,000 years ago. This mammal was short, stocky, heavily muscled and stood about seven and a half feet tall when measured at the shoulders.

The soldiers transported the bones down the Mississippi River and then to Paris, France, where they were studied at the Museum of Natural History.

Through the study of the mastodon, it was discovered that mastodons separated from the elephant about 27 million years ago. The mastodons eventually moved out of Africa and into Asia, and ultimately crossed the Bering Land Bridge into North America and finally migrated into Florida.



Mastodon

The mastodon and woolly mammoths are distant cousins, and while both species had thick, shaggy coats, the similarities stopped there. Mastodons lived in herds and were predominantly forest-dwelling animals while the diet of the Mammoth was mainly grasses and sedges. Mastodons had large rows of conical cusps on each molar while mammoths had very flat teeth.

It was 1739 in Big Bone Lick State Park in Kentucky when French soldiers discovered the first scientifically researched mastodon bones.

Closer to the byway, a submerged mammoth kill site was found in the Silver River, where mammoth bones and man-made projectile points were found near each other. Unearthing the bones of these large, now extinct residents might be as glamorous as prehistoric archaeology gets – and it looks good on the newsstand and just another day on Florida Black Bear Scenic Byway.

"Never lose hope. Storms make people stronger and never last forever."



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Technology in our Forests

It is time to take Florida Black Bear National Scenic byway and the Ocala National forest to a new level of technology. Sit back relax, and hopefully you will find this an interesting article about wood and technology.



Logging or Commercial logging involves cutting of trees for sale as timber or as pulp. The logs are used to build our homes, and during the pandemic the disappearing toilet paper, furniture and many other items that we utilize on a daily basis. But what if the timber was used in a different way, a medical way or in green energy a way to power our everyday lives?

Everyone knows high winds due to a hurricane can paralyze our power grids, residents left in the dark, no power for days or even weeks. In Wendell California, the honey lake power plant is busy converting wood waste into energy to bring the



lights back on in Lassen County California. Honey Lake normally provides its electric output to San Diego Gas & Electric under a long-term power purchase agreement. In the event that Lassen County is

is disconnected from the larger California electric grid, Honey Lake supports local grid reliability by providing power to the Lassen Municipal Utility District.

This 30-megawatt bio energy electrical generation facility is one of seven bio energy plants in California with special contracts authorized by the state legislation to obtain 80% of their feed stock from forest biomass from high hazard zones, such as those with trees killed by fires, wind events, insects and disease.

Biomass typically includes urban tree trimmings, sawmill by-products, and forest-derived fuels like the tops of saw logs, wood chips and slash.

When it comes to biomass forests generally have plenty to offer. Honey Lake Power burns between 150,000 and 200,000 tons of woody biomass per year, including about 140,000 bone dry tons acquired from forest thinning and fuels reduction on 10,000 acres of public and private lands. Of this, it's estimated that the Lassen supplies up to 20% – wood waste that would otherwise be burned on site, either in planned pile burns or as fuel for the next wildfire. Much of this fuel is classified as ladder fuels that allow flames to reach the tops of larger trees.

"Bio energy offers other significant environmental and consumer benefits, including improving forest health, protecting air quality and providing the most dependable renewable energy source," said Deb Bumpus, forest supervisor for the Lassen National Forest.

Wood energy facilities like Honey Lake Power convert unwanted forest fuels into energy in an environmentally friendly way. When bioenergy is



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Technology in our Forests, cont

burned under controlled conditions, filters remove 95% of the polluting emissions that would otherwise be released into the atmosphere. Honey Lake Power also uses geothermal groundwater from local wells to preheat its boiler feed water, which further reduces the plant's consumption of biomass.

The Forest Service investment is critical to enabling Honey Lake Power to meet its forest biomass contractual goals.

"The Lassen National Forest has been extremely supportive in providing fuel to Honey Lake Power Company," said Plant Manager Benjamin Gates. "It is our goal to provide reliable back-up electricity to Susanville during emergencies."

When the next disasters hits and there is no power, you never know the Ocala National Forest might very well be your only power source.



TidBits

The vernal equinox - occurs on March 20 or March 21 each year and signals the start of spring in the Northern Hemisphere (and fall in the Southern Hemisphere).

The Earth tilts at an angle of 23.5 degrees on its axis relative to its plane of orbit around the sun. As the Earth orbits the sun over the course of a year, different places get sunlight for different amounts of time.

An equinox occurs at the moment when the Earth's axis doesn't tilt toward or away from the sun. Someone standing on the equator on an equinox can observe the sun passing directly overhead.

MoJo (Coffee) - More than five centuries ago, when coffee was a localized crop in the East African territories of Ethiopia and Yemen, Arab Sufi monks used the beverage for a similar purpose that people drink it today—to get a boost to stay awake. Their goal back then? To reach divine consciousness in midnight prayers.

There is actually a "coffee" that grows wild in the southern parts of Florida. It's fancy scientific name is *Psychotria nervosa*. It's in the same family as the coffee we drink everyday. The plants themselves also look a lot like twins. They both have large, dark green, glossy leaves and little jasmine like flowers that turn into red berries with two little seeds in them.

Minnesota usually steals the thunder when it comes to being a city filled with gorgeous water bodies, but it does have a strong contender: Orlando. Not only is the city home to over 100 lakes that make its scenic beauty irresistible, but one of its more famous lakes also has a deep secret. In reality, Lake Eola is just a giant sinkhole with its depth reaching 80 feet at the deepest point.

This takes care of another byway adventure.

[Minutes can be found on our website.](#)

