

Orientation

-Introduce yourself, and then welcome the group to the Winter Estates of Thomas Edison and Henry Ford.

- Refer to the brochure that everyone should receive. This gives more information about the estates and a map of the property.

-(Refer to the map) On the riverside of historic McGregor Boulevard are the Edison and Ford family gardens, homes and other historic structures. On the east side, where we begin, Edison located his research functions like the rubber laboratory and planting areas. He also had barns, vegetable gardens and other functions of a country estate.

So, your visit today will include historic homes, botanical gardens, a laboratory, as well as a contemporary museum full of inventions, special exhibits and the Museum Store, Garden Shoppe & Cottage Shoppe. There are about 20 acres in all for the public to enjoy. The Estates are a National Historic Register Site and a Florida Historic Landmark. Today the site is owned by the City of Ford Myers and operated by a private non-profit corporation.

The first estate we will visit today is that of Thomas Edison's so I will tell you some personal information about Edison, as well as how he and Ford met, before we go to the site.

-Edison is one of the most productive inventors and successful businessmen in history.

-Although he is known for inventing the light bulb, he actually held 1093 patents on a variety of items. He is the only person to have been issued a patent every year for 65 consecutive years. A patent gives the inventor the exclusive right to make, use and sell an invention.

-Edison was born on 2/11/1847 in Milan, Ohio, and died 10/18/1931 at age 84 in West Orange, NJ.

-Father Samuel and mother Nancy had 7 children of which Thomas was the youngest.

-After attending several schools, his mother (being a teacher) provided his education at home. Reading was one his favorite hobbies. He continued to teach himself various subjects throughout his lifetime.

-When he was 24, he married 16-year old Mary Stilwell, an employee of the Edison Company, on December 25, 1871.

-Thomas and Mary had 3 children: Marion, Thomas, Jr., and William. Mary died suddenly of an illness in 1884 at the age of 29.

-By this time Edison was already a successful inventor and businessman. He then married Mina Miller on February 24, 1886, whom he met through his good friend & business partner, Ezra Gilliland. Mina was the daughter of Lewis Miller, a successful Ohio businessman.

-Thomas and Mina had 3 children: Madeleine, Charles and Theodore.

-Though all 6 of Edison's children married, only his daughter, Madeleine and her husband John Sloane, had children— 4 boys, each given the middle name of Edison.

-So today, there are no direct descendents of TAE carrying the last name of Edison.

-Descendents of the family frequently visit the Estates.

When Ford and Edison Met

-Ford apprenticed as a mechanic, and in 1891 worked for the Detroit Edison Illuminating Company (A corporation licensed to use the Edison electrical power system).

-During an 1896 convention in New York he was introduced to Edison as the man who built the quadracycle. Edison was so impressed that he encouraged Ford to continue his work and Henry attributes this motivation as responsible for his success.

Prepare Group to Depart for the Family Estates

-Cameras are allowed on the site. On the historic site, please stay as a group, do not touch or pick up any planting items, smoking is not allowed & please turn off cell phones.

-Restrooms and drink dispensers are available at the Gazebo and the Ford property.

-We will be crossing historic McGregor Boulevard (point to on Map) and entering the family gate with the dock ahead of us. In Edison's day this was a road traveled by cattle, horses and later horseless carriages, but today this is a very busy thoroughfare. So I will be asking the group to stop at the gate before the security guard stops traffic and waves us across.

Stop #1 Inside the Edison Main Allée Gate on the River side

-In the early 1880s, the Edison family was vacationing in northern Florida to escape the cold winters of New Jersey for health reasons.

-On a similar trip in March of 1885, Edison found it still a bit chilly in St. Augustine. He & his friend Ezra Gilliland sought a warmer climate and decided to venture down to the Fort Myers area.

-Within 24 hours, Edison had taken a boat trip up the Caloosahatchee River (from the Tarpon Hotel at Punta Rassa) where he encountered land for sale. Edison agreed to buy 13+ acres along the shores of the river for \$3000 (eventually only \$2750) from local cattleman Samuel Summerlin.

-June 19, 1885 log entry: "Damon (Gilliland) and I study plans for our Floridian bower in the lowlands of the peninsular Eden, with that charmed zone of beauty, where wafted from the table lands of Oronoco and the dark Carib sea, perfumed zephyrs forever kiss the gorgeous flora. Damon took the plans to Boston to place them into the hands of an architecturalist [sic] to be reduced to paper reality."

-Soon thereafter Edison sketched the layout for the grounds of his winter retreat, much of this design was actually incorporated in the buildings and lineal layout of the gardens. Began in the fall of 1885, most of the plan was completed by 1887--the pier was the first structure built.

-By 1886, Thomas & and his second wife Mina came to Ft Myers for their honeymoon. They stayed several days downtown at the Keystone Hotel, and were then able to move into their Winter Estate that they named *Seminole Lodge* for the local Native Americans who were in the area.

-The gardens include exotic plants from around the world. Edison enjoyed them for beauty, as well for research in his inventions.

-Letter to Eli Thompson (local agent) in April of 1886: *"I think about 1800 varieties (of botanicals)...I want to carry everything to excess down here."*

-I will discuss some of the more interesting plantings on site. Many of them were originally planted as research material for Edison's ongoing inventions.

Stop #2 Original 1887 Lab Location (Little Office area) and Bamboo stand

-The Bamboo here is one of the reasons that Edison purchased the property. He experimented with carbonized bamboo fiber as a filament for the light bulb. He also tested such items as hair, cotton thread and Bristol (cardboard). The plant grows to 60 feet tall and may grow 8 to 12 inches per day during the rainy season. It is a type of grass, not a tree.

-Edison built his primary laboratory in West Orange, NJ in 1887. In the same year, he completed a laboratory on this site. Edison and several staff worked on a variety of experiments in this lab during visits to Fort Myers—as the light bulb, batteries and the phonograph.

-Edison had a generator on the south side of the lab. He wired his home and even the gardens (under the ground) for electricity and used a 40-horse powered motor to run a dynamo (steam fueled) located on the south side of the lab to power the system. In March of 1887, the local newspaper reported that the entire community of Fort Myers, some 350 people, came out to see Edison turn on the lights. (lights were a combination of new Municipal Lamps made by Bergmann & Co, as well as 580 10C lamps made by The Edison Lamp Co. for the lab)

-Feb 1904: Work to conduct in Florida—*"working upon sound, trying to extend the distance at which telegraphing by sound through water can be successfully accomplished. I have a regular workshop and a laboratory...and will go down with a half dozen assistants. I am using steam explosions in such rapid secession as to form a musical note-long and short pauses (like dots and dashes of Morse alphabet)-can signal 3 or 4 miles. ...I find the Florida waters best fitted for my experiments of account of their freedom from other sounds."*

-By 1928, the original laboratory from this site was moved to Henry Ford's Greenfield Village in Dearborn, Mich. in 1928. It is said that Ford took some of the soil so the lab would sit on Fort Myers ground.

Edison Little Office and the Moonlight Garden

-To replace the original lab Mina had this Little Office built in 1929 as a birthday gift for TAE. She also added her own Moonlight Garden. Together they outline the footprint of the original lab.

-A well-known female landscape architect, Ellen Biddle Shipman, designed the Moonlight Garden. She also designed Clara Ford's gardens at Fairlane and the Miller family vacation home in Chautauqua, New York.

-Blue and white lilies would be fragrant and seen at night, and the pool would reflect the moonlight.

-Recently completed a restoration of the Garden to further reflect the 1929 period.

Stop #3 Edison Winter Home

(Made up of the first building the main or family home and the adjacent Guest House)

-Edison essentially designed both homes, with the help of Boston architect Alden Frink. The structure itself was pre-cut through a collaboration of two firms in Fairfield, Maine—Kennebec Framing Company and Stephen Nye Lumber Company.

-Other items as hardware, windows, furnishings, and linens, were purchased in Boston and New York.

-All was brought to Florida on two boats, and houses were completed in February 1886.

-Named *Seminole Lodge* in honor of local Indian tribe.

-House faces the river for the great views and the breezes and also to the street so Edison could see visitors coming to his Estate.

-Edison did not visit from 1888-1900. He had a young family and new business ventures. He rented out the home and even thought about selling it.

-He returned in 1901 and thought about enlarging it. However did not—I will discuss what happened as we move to the adjacent house.

-The light fixtures were designed by Edison and called Electroliers—some pre-date this house—for they were in his Menlo Park, NJ home; made exclusively by Bergmann & Co.—associated with Edison for many years.

-1907-1910 made many renovations: extended porch from 7' to 13', added the French doors to allow air to flow through the home—central air conditioning did not exist—and the wall between the living room and dining room was removed to open the living room on to a library.

-The kitchen and servant quarters in the separate wing changed to a main bedroom suite for Thomas and Mina downstairs and a bedroom suite for Charles and Theodore upstairs--later to become Edison's bedroom known as the "doghouse" –he could enter from the exterior staircase, not disturbing Mina if late in the evening.

-2nd floor--Also 2 bedrooms, bath & sitting room.

-The furniture is original to this house that the Edisons brought to the home—most of it during the 1910 period.

-There is a lot of family history here showing their love of the outdoors, fishing and there is even a marker called the Marriage Stone—Charles and Carolyn (Hawkins) Edison in March 27, 1918. Small family wedding—TAE did not attend—he was in Key West working on projects for the Naval Board.

-Fish Story: Charles caught large Tarpon when he was 14 years old—story is that Charles related that it was the only thing he ever beat his father.

--Also about Tarpon: Edison received a letter from a H.M. Hollerman [sic] dated June 22, 1906. Mr. Hollerman relates how great the Tarpon fishing is in Houston, TX. TAE notes on the letter “*say the finest Tarpon fishing in the world is right in front of my House in florida....*”

Move through to the Guest House via Pergola

-After completing the homes, Edison’s friend & business partner Ezra Gilliland, as originally planned, bought the 2nd house and four acres from TAE.

-After a disagreement over the phonograph business soon thereafter, Gilliland did not return to Fort Myers and rented the home to other people for several years.

-In 1892, Gilliland sold it to Ambrose McGregor, President & CEO of Standard Oil who died in 1900. His widow Tootie paid for the paving of Riverside Drive, which was completed and renamed McGregor Boulevard in July of 1914.

-1902 Tootie sold to Harvie Heitman; who traded it with RIO and Julia Travers for a home in downtown Fort Myers.

-Travers sold to Edison in 1906—perfect time to expand the living space, and not have to add onto the existing house.

-Edison used the kitchen and dining room functions in the Guest House. Added the Pergola to connect the two homes.

-It also includes 2 bedrooms, bath & sitting room, plus servants’ quarters on 2nd floor.

-Such well-known friends as President Herbert Hoover, Henry Ford, Harvey Firestone, and their families, stayed at this home.

-Mrs. Edison gave the property and the homes to the City of Fort Myers in 1947, “to show her appreciation for the love and affection in which she and Mr. Edison always have been held by the community....”

Now we will move through the Friendship Gate to the home of Edison's dear friend and colleague, Henry Ford.

Stop #5 Ford Home

Ford history and family

- Born July 30, 1863 on a farm outside Detroit, known as Dearborn today; died April 7, 1947 in Dearborn.
- Married Clara Bryant in 1888: one child, Edsel.
- Four grandchildren: Henry II, Benson, Josephine, and William Clay (still living)
- Ford is best known as the founder of the Ford Motor (Car) Company, which he started in 1903—Model A first car
- Model T began in 1908. This car was made by assembly line, which made it less to produce—so less to purchase. The average person could buy a car.
- Many innovations and models over the years; business remains in the family

Ford Home Area

- Henry Ford first visited Fort Myers in 1914 on invitation of Edison; with naturalist John Burroughs—all took camping trip to the Everglades.
- Robert Smith of New York was original owner of the Ford Home, *The Mangoes* (as a winter resident) who sent a letter to Ford's assistant secretary G.S. Anderson asking if Henry would be interested in purchasing the home next to his good friend, Thomas Edison—he did for \$20,000 in 1916.
- Ford added the two flanking wing additions and the tin roof in the 1920s.
- 2nd floor has an office, 2 bedrooms, 1 bath, and 1 dressing room.
- Ford only spent a couple of weeks each year here with Edison.
- The Fords enjoyed music and entertaining and they would move the furniture out of the Living Room and hold square dances.
- Wedgewood China in the dining room is one of Clara's favorite patterns—made by the Wedgewood Company in 1990 for the home.
- Ford returned a few times after Edison's death in 1931, but sold the home to the Thomas Biggar family in 1945. (1934 was the last year he stayed at The Mangoes; 1940 was the last year he came to Fort Myers—rented the home at the time—stayed at a hotel downtown).
- Understood is the Ford furnishings were auctioned off; seen today are representative antiques and collectibles—except the Grandmother Clock now located in the Ford Gallery of the Museum, which is understood to have been in the home during the Ford ownership.
- The City of Fort Myers purchased the Ford home in 1989 from Gladys Biggar, and opened in January of 1990 as part of the historic site.

Biggar's Garage Car Display

- This is a building that was added after Ford left.
- We use it today to show representative historic vehicles that show Ford inventions and manufacturing by his major invention, the assembly line.

- 1917 Model T Truck
- 1929 Model A Sedan

Ford's Caretakers Cottage and Garage

- This was originally the Caretaker Cottage and one car garage for Ford family.
- Biggar family added on to in the 1940s to make a guest cottage. Now a Cottage Shoppe.

Other Historic Areas of Interest

Western Section (Riverside)

Edison Caretaker's House

-Part of this house was on the grounds when Edison purchased the property—and is one of the oldest structures in Fort Myers. It is an example of an early Florida cracker style house. The word 'cracker' comes from the crack of the whip that the cattlemen used.

-The building was originally used for cattle drivers to rest on their way to the loading dock about 7 miles down the cattle trail to Punta Rassa.

-Edison added to it over the years, and by 1929 the L-shaped extension was added. At that time the caretaker lived in the main section and the chauffeur lived over the garage (Edison did not like to drive).

*The 1919 Model T touring car is on display

Swimming Pool Complex

-As part of the agreement for Ford to take the original lab to Michigan, he and Mina negotiated that Ford paid for a new Little Office for Edison, for the Moonlight Garden, as well as the renovation and additions to the next feature—the swimming pool.

-Edison built the pool in 1910 out of Portland cement, a product he improved in quality and determined that the 94lb bag provided a good mix (this size is still used today). He also wanted to build houses and factories of cement.

-Per May 13, 1910 letter to Edison agent Harvie Heitman from W.R. Wallace contractor:
floor and walls to be of concrete reinforced throughout with woven wire or expanded metal, the side and bottom being made continuous by interweaving of metal. Mixture of concrete is 3 parts shell, cinders or broken rock, 2 parts sand, and 1 part Portland cement mixed with power batched mixture and thoroughly tapped into place. The whole inner surface to be plastered with cement mortar of 1 part cement to 2 parts sand.

-It is filled with water from a 1000' deep artesian well. (water source that naturally flows up—no pump needed)

-It is 20' wide x 50' long, and is 4' to 7' deep.

-Many family and friends enjoyed the pool.

Lily Pond

-The lily pond was added in 1929.

-It is a landscape feature and also provides overflow from the swimming pool. So the water is mostly fresh although we do have a few resident blue crabs and snakes.

-Mrs. Edison included favorite plantings like the iris, water lilies and papyrus that you see today. Papyrus was used to make paper in ancient times.

Edison Pier/Caloosahatchee River/Seawall

-Edison arrived on the property by water. The railroad did not come as far south as Fort Myers in 1885. The Caloosa River was 'the' best way to get around. It is about 7 miles south to the Gulf of Mexico.

-The Edison Pier you see is in the original location, but not the original pier as that has been destroyed and replaced many times due to hurricanes, high water, and age.

-At one time it extended out 1,500 feet to accommodate various boathouses, fishing areas and a summerhouse at the far end.

-Fishing was one of Edison's favorite hobbies; everyone enjoyed fishing, boating, swimming, visiting.

-A model of Edison's battery operated electric launch, the *Reliance*, is located on display in the *Wizard Invents* gallery.

-The rock seawall ahead was constructed between 1903 and 1907 by Edison to create a family area with a beach, as well as to protect the pool and the property.

-Rubber tree just before the dock—As early as 1925 Edison began planting latex (white milky sap) producing plants on the grounds. Will discuss when we visit the lab.

Cycads and Palms

- Edison had a great love for palm trees and cycads.
- The cycads you see here are descendents of the first seed bearing plants. Cycads are over 280 million years old, when dinosaurs roamed this country.
- The Sabal Palm here is the State tree of Florida—raw known as the heart of palm, cooked known as swamp cabbage.
- Along the western edge of the Edison homes you will see an alleé of Royal Palms. There are 80 varieties of palms in the gardens.

The Main Fountain and Alleé Area

- This was installed in 1907, and was a popular gathering place for Edison and his guests.
- This area also is the focus of the Main Alleé (or alley). It was an open walkway that connected the Edison houses to the Caretaker's House and the visitor street gate to the pier.
- In Edison's day the Alleés were 18 feet wide.

Eastern Section (McGregor Blvd Side)

Friendship Walk

- Dr. Holt of Rollins College in Winter Park, FL visited Edison in 1928 and described his "Walk of Fame" at the college.
- The Edisons decided to make a similar walk in 1930 and they called it their "Friendship Walk."
- The first stone was from Dr. Holt, President of Rollins College. Stones were given through 1947.
- There is a story told that the unmarked stone, third one in was given by Henry Ford and it was not marked because Ford said he was just a poor boy and could not afford it, although, he was very wealthy at the time; also John Burroughs, Harvey Firestone, Botanist John Small, Pharmaceutical F. Merck, local Jimmie Newton (associated with Edison Park—1920s development across the street).

Mysore Fig & Lofty Fig

- These are rubber/latex-producing specimen that Edison would have planted in the garden around 1924. The roots only go into the ground about 9 to 12 inches. They are natives of Southern India.

Line of Mangoes/Orchid Lane

-Mina had planted down this way a double line of Mango Trees, which she filled with numerous orchids—called Orchid Lane. Today the staff and volunteers still fill the ancient trees with numbers of orchids that bloom throughout the year.

McGregor Royal Palms

-Edison's original sketch of the grounds shows Royal Poinciana trees lining at the time Riverside Ave.

--It was not until 1907 Edison decided to put a plan in motion. Originally brought Royal Palms from Cuba on barges and planted the trees 1½ miles down the road. That was the start of what is now about 14 miles of palms north and south on McGregor Blvd, and this is why FTM is known as the "City of Palms."

Research Garden Area (East Side)

Banyan Tree (*Ficus Benghalensis*)

-I will describe to you more about Edison and Ford's collaboration with rubber research in a moment.

-Here before us is a Banyan Tree that brings tire magnate Harvey Firestone into the friendship circle.

-Firestone was visiting India when he saw what is now the largest Banyan tree in the world.

-He sent one to TAE to add to the collection of tropical trees and plants in FTM as a birthday gift in 1925.

-4 feet tall and 2 ½ inches in diameter when it was planted and now covers approximately one acre, and is believed to be the largest in the United States.

- Aerial roots produce small absorption roots underneath the surface of the limb, which cling tightly and eventually penetrate cracks and crevices of the limb—creating a new aerial root; thickens into a stout root (pillar root); become auxiliary trunks.

-Often called the tree that walks.

Edison Botanic Research Corporation Laboratory

Photos on south wall to refer to various activities

General Information

- TAE, Harvey Firestone, and Henry Ford each invested \$25,000.00 to establish the Edison Botanic Research Corporation in 1927; the lab was completed in 1928.
- The focus of this project was to find a domestic source of rubber.
- Each used rubber to make products in their business ventures.
- Most of the rubber for America came from Southeast Asia or South America.
- Prices rose during World War I, and again in the early 1920s.
- Edison began to research latex-producing plants, and began gathering and planting hundreds of such plants on his Fort Myers estate.
- By 1928 Edison and his team in Fort Myers created research plots that were located on the south side (*parking lot is now*).
- After several years of experimenting with hundreds of plants, Edison decided to use a variety of goldenrod that grew 12' to 14'.
- It was fast growing, occupied a relatively small area and produced a large volume of leaves per plant.

Research Staff Office

- Working office for all staff. Edison would sit at the front desk, and his clerk Azell Prince, Jr. sat at the side desk. Edison would write all his notes in small notebooks, and Mr. Prince would type them up and place in ring binders.
- Edison very hard of hearing, staff would typically write down questions for him to answer.
- Only about 5 people worked in the lab itself: Edison, C. Azell Prince, Jr.(clerk), C. Azell, Prince, Sr. (chemist), Fred Ott (worked for Edison for years—tool maker by trade), and Charles Dally (glass blower by trade)—however each worked on each phase of experimentation.
- Cot for catnaps—Edison habitually from an early age slept at irregular hours and often took naps.

Laboratory

-Lab contains various apparatus and chemicals that were used to: extract leaves from stalks, then rolled, pressed and distilled to extract the latex; then vulcanized (added benzol or acetone) to produce a hard rubber substance—also various machines for tool making and table for glass blowing.

-Last month in lab was June of 1931; returned to his home in New Jersey; and died in Oct. 1931 at age 84.

-Research and experimentation continued under the leadership of his brother-in-law, John Miller; decision by Ford, Firestone & Mina Edison to dissolve the corporation in July 1936.

Summation

-Rubber was not a commercial success: death of Edison, the process was tedious & thus high cost to produce, & eventual production of a synthetic rubber (no more need for natural rubber product).

-Significant that this was Edison's main focus the last decade of his life.

Museum is next adventure, open until 5:30

7 galleries of exhibits