Town of Marineland
Sustainable Tourism Comprehensive Plan Element

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Goal I.1
Principle of Sustainable Tourism

The Town of Marineland (Town) shall develop a sustainable basis for tourism development and tourism visitation based on the promotion of the natural, cultural, scientific, and educational resources within the Town.

Objective I.1.1

In promoting and developing its tourism base, the Town shall ensure that tourism and tourism related activities do not compromise the Town's character and its natural and cultural resources.

Policies

I.1.1.1 The Town shall work with tourism related entities within the Town to determine the carrying capacity of its resources for visitation and tourism development.

I.1.1.2 The Town shall develop sustainability indicators to monitor the effect of tourism on the Town's natural, cultural, scientific, and educational resources, and shall reevaluate progress toward its sustainable tourism goal accordingly.

I.1.1.3 The Town shall review appropriate national and international sustainable tourism certification programs and, if appropriate, seek municipal certification and/or encourage certification of tourism-related facilities in the Town.

I.1.1.4 In approving new tourism facilities or modifications to existing tourism facilities the Town shall consider whether these facilities will adversely affect ecological processes and dynamic coastal processes.

I.1.1.5 In approving new tourism facilities or modifications to existing tourism facilities the Town shall consider whether these facilities will adversely affect cultural resources and are compatible with the character of the Town and the region.

Objective I.1.2

The Town shall seek to restore vegetation associations that are native to the northeast coast of Florida.

Policies

I.1.2.1 The Town shall require tourism and tourism related facilities to use landscaping that uses vegetation native to the region.

I.1.2.2 The Town shall work with Marine Park of Flagler to restore and enhance the
landscaping at the attraction to take advantage of natural forms and plant life native to the northeast Florida coast.

Objective I.1.3

The Town shall promote the use of sustainable construction practices for tourism and tourism related facilities.

Policies

I.1.3.1 The Town shall encourage the use of sustainable construction techniques for new tourism related facilities, and where feasible, shall encourage retro-fitting existing tourist facilities.

The Town shall explore the development of a “green building program” for the construction and modification of tourism and tourism related facilities.

I.1.3.2 The Town shall encourage educational programs highlighting innovative building techniques.

Objective I.1.4

The Town shall encourage cooperation among tourism related interests in Marineland and within the region.

Policies

I.1.4.1 The Town should encourage the use of the Marineland Community Revitalization Workgroup as a forum for consensus-based collaborative decision-making.

I.1.4.2 The Town shall encourage alternative dispute resolution mechanisms such as mediation to address tourism related conflicts within the town that can not be resolved by consensus-based processes between the interested parties.

I.1.4.3 The Town shall encourage tourism related entities within the Town to develop an integrated sustainable tourism business plan.

I.1.4.4 The Town shall participate in County and regional fora that relate to tourism development that may affect the Town’s resources, character and sustainability goals.

Goal I.2

Nature Based Tourism
The Town shall take actions that promote sustainable visitation to the River to Sea Preserve.

Objective I.2.1

The Town shall continue working with Flagler County and other agencies in implementing the Management Plan for the River to Sea Preserve.

Policies
I.2.1.1 The Town shall continue to work with Flagler County and other agencies in acquiring funding for implementation of the management plan.

I.2.1.2 The Town shall continue to work with Flagler County and other agencies on completing the implementation of the Management Plan of the River to Sea Preserve, including developing appropriate oceanfront parking, developing beach access (dune walkovers), developing picnic shelters and a pavilion, and developing passive water-based recreational uses through means of a canoe/kayak launch.

I.2.1.3 The Town shall continue to work with Flagler County on the development and construction of educational and interpretive signs and exhibits in the trail area of the River to Sea Preserve.

I.2.1.4 The Town shall consult with Flagler County and explore the possibility of setting up voluntary user fee stations for the River to Sea Preserve to provide supplemental funding for implementation of the Management Plan.

Goal I.3
Cultural Tourism

The Town shall promote cultural tourism focusing on the Town's archeological, architectural, historical, entertainment, literary, and film resources.

Objective I.3.1

The Town shall protect archeological resources while promoting tourism and educational opportunities at these sites.

Policies
I.3.1.1 The Town shall work with Flagler County to protect and interpret cultural resources in the River to Sea Preserve.

I.3.1.2 The Town shall consult with Native Americans and other specialists about the most appropriate way to manage archaeological resources within the Town and to educate the public about Native Americans in northeast Florida.
I.3.1.3 The Town shall cooperate with cultural resource agencies and interest groups in the development of a cultural resources education program.

I.3.1.4 The Town shall preserve its historical resources while promoting the Town's historic role in the development of tourism in Florida.

**Objective I.3.2**

The Town shall seek to protect and promote the Town's unique architectural character.

**Policies**

I.3.2.4 The Town shall explore the establishment of design standards for new tourism and tourism related facilities that is consistent with the Nautical Moderne architecture style.

I.3.2.1 The Town will continue to support the restoration of Nautical Moderne Architecture in the Town's existing tourism and tourism related facilities.

I.3.2.3 The Town shall adopt the Secretary of the Interior's standards for the restoration of historic properties within the Town.

**Objective I.3.4**

The Town shall work with the appropriate institutions to promote its film and literary history.

**Policies**

I.3.4.1 The Town shall support Marine Park of Flagler's efforts to inventory the film library and implement film preservation techniques.

I.3.4.2 The Town shall encourage Marine Park of Flagler to make the contents of the film library accessible to visitors and researchers without compromising the integrity of the media.

I.3.4.3 The Town should emphasize the role literary icons like Marjorie Kinnan Rawlings, Ernest Hemingway, Thornton Wilder, Stephen Vincent Benet, John Dos Passos and others played in the Town's history.

**Goal I.4**

Scientific and Education Based Tourism
The Town shall promote scientific and educational programs at the Whitney Laboratory, the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), and the Florida Sea Grant Marine Extension Program to attract science tourists, students and scientists to the Town.

**Objective I.4.1**

The Town shall cooperate with the University of Florida Whitney Laboratory to continue its research and educational opportunities, in order to promote science and technology based visitation in the Town.

**Policies**

I.4.1.1 The Town shall support all outreach programs that are sponsored by the Whitney Laboratory.

I.4.1.2 The Town shall support the Whitney Laboratory in its attempt to create more educational opportunities.

**Objective I.4.2**

The Town shall seek to bring more educational interest to the Town through the programs offered at the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR).

**Policies**

I.4.2.1 The Town shall cooperate with the GTMNERR reserve staff who conduct integrated research and education programs on estuaries.

I.4.2.2 The Town shall cooperate with the GTMNERR in attempting to work as closely as possible with estuarine programs conducted by the Florida Department of Environmental Protection.

I.4.2.3 The Town shall work with the GTMNERR in setting up the programs for adult and grade level education that GTMNERR has proposed in its management plan.

I.4.2.4 The Town shall cooperate with GTMNERR in its efforts to obtain grant funds.

**Objective I.4.3**

The Town shall cooperate with the Florida Sea Grant Extension Program at the Marine Education Center at Marineland in its effort to provide marine education programs.

**Policies**
I.4.3.1 The Town shall attempt to provide Town resources when possible to the Florida Sea Grant College Program in its goal to provide marine education activities such as faculty retreats, seminars and workshops, estuaries training, 4H marine institutes, marine docents and Citizens-In-Science, Eco/Heritage Tourism Training, Florida Coastal Awareness Program and Elder Hostels and Inner-City Outings.

I.4.3.2 The Town shall work with Florida Sea Grant Extension Program at the Marine Education Center at Marineland in other programs, with the goal of bringing more guests to the Town as a result of such programs.

Goal I.5 Promotional Efforts

The Town shall promote its efforts to establish the Town as a prototype tourism community based on principles of sustainability.

Objective I.5.1

The Town shall seek appropriate outlets to promote its nature, heritage and educational based tourism and visitation opportunities,

Policies

I.5.1.1 The Town shall coordinate promotional efforts with the East Coast Greenway.

I.5.1.2 The Town and Flagler County shall apply to have the River to Sea Preserve at Marineland included on the Great Florida Birding Trail.

I.5.1.3 The Town shall use “Florida's First Remarkable Coastal Place” or other similar slogan whenever appropriate.

I.5.1.4 The Town shall work with Visit Florida’s initiatives for nature, heritage and cultural tourism.

I.5.1.5 The Town shall work with the A1A River and Sea Trail and the A1A Oceanshore Scenic Highways Programs

I.5.1.6 The Town shall promote its contribution to the US17/A1A Heritage Corridor.

Objective I.5.2

The Town shall promote its efforts as an living experiment in sustainable tourism
1.5.2.1 The Town shall work with tourism related entities within the Town to develop a program that utilizes the Town’s efforts as a means of educating visitors on the principles of sustainable tourism embodied in this element.
SECTION I
SUSTAINABLE TOURISM ELEMENT
TOWN OF MARINELAND COMPREHENSIVE PLAN
DATA REQUIREMENTS, ANALYSIS, AND
GOALS, OBJECTIVES, AND POLICIES
MAY 17, 2001

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I-1. Introduction and Principles of Sustainability

The purpose of the Sustainable Tourism Element is to assist the Town of Marineland in its effort to establish itself as a model community of the future based on an economy that is largely dependent on tourism. For the Town to truly embrace sustainable tourism, it must adopt policies and standards that truly reflect principles of sustainability. The goals, objectives and policies set forth in this element will assist the Town in realizing its vision.

State of Tourism Today
Tourism has continued to grow during the last decade of the twentieth century and into the twenty-first century. In 1993 it was estimated that 1.4 million people a day went traveling and they spent $888 million dollars worldwide. The continued growth of tourism resulted partly from technological advances, increased affluence resulting from strong economies and dual income households, a growing population of single adults, relaxed immigration restrictions, increased paid leave, earlier retirement, increased awareness of travel destinations, reduced visa requirements, enlarged transport infrastructure, and improved travel safety. While tourism remains one of the leading industries in the world, tourists' demands are changing. Tourists increasingly prefer destinations that evoke a strong and unique sense of place. Thus, the growth in the tourist industry is more and more coming from tourists seeking learning opportunities and historical, cultural, and natural resources. This trend has been spurred by a desire among tourists for vacations that offer some prospect for self-improvement or self-discovery, instead of the pre-packaged and synthesized culture of resorts and theme parks. It is this type of visitor, the visitor interested in self-improvement, self-discovery, and learning that Marineland wants to attract. Marineland does not want to create a tourist attraction. It wants to create a place of learning and self-discovery for local, state, national, and international visitors. Marineland must target this type of visitor directly by marketing its cultural, educational, scientific, and natural resources as creating a place of learning and self discovery. It must also market its resources in places where this type of visitor is likely to see it (for example, cultural or alternative tourist magazines and websites).

Sustainable Tourism
Sustainable tourism meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems. Sustainable tourism products are those which are operated in harmony with the local environment, community, and cultures, so that these become the permanent beneficiaries and not the victims of tourism development. Thus, the effects of tourism on the local environment, culture, and community must be considered. To minimize the adverse effects of tourism on the local environment, culture, and community, tourism must be developed and maintained in such a manner and at such a scale so that the resources attracting the tourists are not degraded, so that the parking facilities are not overwhelmed, and so that overcrowding is avoided. Thus, sustainable tourism requires knowledge of the area’s tourist carrying capacity and efforts to limit the flow of tourists below this level.

Scientific analysis should be used to determine the Town's carrying capacity. In addition to
determining the carrying capacity, sustainable tourism requires adaptive management. Since the carrying capacity is determined through scientific analysis, it will not be perfectly accurate. Thus, the Town needs to monitor visitors' effects on the Town's resources and reevaluate its carrying capacity analysis accordingly.

**Brief Overview of Marineland's History**
The precursor to modern day Marineland was the construction of Highway A1A, which, begun in 1926, increased access to the area. Cutting edge entrepreneurs and naturalists W. Douglas Burden (the great-great-grandson of Cornelius Vanderbilt), Cornelius Vanderbilt Whitney (cousin of W. Douglas Burden), Sherman Pratt (a descendant of a partner of Standard Oil), and Ilia Tolstoy (grandson of Russian novelist Leo Tolstoy) built the world's first Oceanarium and the first underwater movie studio at Marineland in 1937. Originally called Marine Studios, it was “where the sea comes ashore.” The facility was the forerunner of marine life facilities now found throughout the world. A desire to increase public access to natural and scientific resources inspired the founders in 1937. This idea of increased public access has become the philosophy of Marineland again today. Marineland wants to increase public access to its natural, historical, and scientific resources.

The attraction originally consisted of two tanks, a research lab, and other auxiliary buildings. The founders owned the entire 150 acre tract of land that is the Town of Marineland today. The attraction later expanded to include a gift shop and a stadium for live animal performances. In 1940, the 150 acre tract of land was incorporated into a Florida city. Over the years, Marineland served as a center for entertainment and scientific research and discovery.

In 1970, the attraction and surrounding lands were sold to Marineland, Inc. This included all of the town with the exception of the Whitney Laboratory. The Oceanarium was a leading tourist attraction until the early 1980's, when attendance dwindled, largely because of competition. In 1996 the struggling attraction was sold again. The 140 acres adjacent to the attraction, which included undeveloped land, a hotel, a campground, a restaurant, and a marina, and the 10-acre attraction were sold separately. The 140 acres were owned by Marine Ocean Resort, Inc. (MOR), while the attraction was owned by Marineland Foundation (MF), a nonprofit foundation. Originally MOR planned to build high-rise condominiums, as was typical of elsewhere in Florida. MOR, however, was denied the necessary permits to build the condominiums. Additionally, MOR was to manage the attraction for MF and provide funds for renovations. These funds were to be raised by the Marineland town commission. A $9.7 million bond sale occurred in 1996, but these funds were not allocated to the renovations. MOR later declared bankruptcy and the MOR properties were sold to the Trust for Public Lands and Marine Park of Flagler. In 1999, Flagler County and the Town of Marineland purchased the 90-acre River to Sea Preserve from the Trust for Public Lands using Preservation 2000 funding. In 2000, the Marineland Foundation, owner of the Oceanarium, declared bankruptcy and the property has since been sold to Marine Park of Flagler. Last year 40,000 to 50,000 people visited the Oceanarium.

The Town of Marineland has embarked on a revitalization project by developing a public finance and resource plan. The primary component of the revitalization plan is a focus on sustainable tourism to sustain a desired population of 100 to 200 residents. The sustainable tourism would
consist of nature tourism, scientific tourism, and heritage/cultural tourism, and requires amending
the comprehensive plan with a sustainable tourism optional element to guide the Town's future
decisions. The Town encourages further efforts in all these areas. Marineland will be the first
town to adopt a sustainable tourism comprehensive plan element. While no model exists to
direct Marineland's efforts, this element will likely be a model for other cities following
Marineland's lead.

I-2. Nature Based Tourism

Recent History of the River to Sea Preserve
Flagler County and the Town of Marineland own the Marineland River to Sea Preserve. The 90-
acre preserve was purchased with funds from a Florida Communities Trust Preservation 2000
grant. The Preserve contains an environmentally significant corridor connecting the Atlantic
Ocean and the Matanzas River.

Flagler County is the management entity for the preserve and is responsible for implementation
of the management plan that was adopted by the state, county and town. The management plan
includes development of oceanfront parking, beach access (dune walkovers), picnic shelters, a
pavilion, canoe/kayak launch, and a pedestrian trail system. It also includes
educational/interpretive signs and exhibits and the development of educational programs. The
implementation of the management plan has the potential to be a crucial advance in the
revitalization of Marineland.

Advantages and Potential of Tourism to Natural Areas
While a management plan in the River to Sea Preserve will likely bring more visitors, steps must
be taken to ensure that the increased number of visitors will have a low impact on the natural
area. One way to do this is to follow established procedures of nature-based tourism. The
concept of nature-based tourism has expanded over the years. Nature-based tourism strives to be
low impact and small scale. In addition, it also helps to educate the traveler and directly benefits
the economic development of local communities.

Regardless of whether a plan balancing tourism and the environment is labeled as ecotourism or
nature-based tourism the underlying goal must be to minimize any impacts the tourists have on
the environment. Guidelines have been established for improving the tourism-environment
relationship. Environmental considerations should be fully incorporated in tourism development
plans. Tourism goals should be based on the carrying capacity of sites. Wildlife and natural
habitats must not be disturbed needlessly. Waste must be disposed of properly, preferably
recycled. Energy consumption should be minimized. Tourism should be a positive influence on
local communities and be managed and sustainable.

Local heritage and culture should be incorporated in carrying out these guidelines. Tourism to
natural areas can foster a greater appreciation of local historical structures, landscapes, and
cultural heritage. This could be particularly beneficial to the Town.

I-3. Cultural Tourism
The cultural component of the Sustainable Tourism Element can be broken down into four categories of resources that will be used to attract visitors. These categories are archeological resources, architecture resources, historical resources, and entertainment resources.

**Archeological Resources**

3. **Shell Midden and Shell Mound** Marineland falls within the St. Johns archaeological region of Florida. The archeological resources within Marineland include the Marineland Midden/Dupont's Mound site. Dupont's Mound was originally identified in 1885 by Andrew Douglass. The shell Midden extends along the Matanzas River, with a low shell mound west of the former campground. The mound and midden date to the St. Johns IIc period (c. 1513 to 1565 C.E.).

4. **Orange Ceramics** In addition to the shell midden and mound, Orange ceramics have been discovered in the midden and mound area. These ceramics are from the Late Archaic or Orange period (c. 2,000-1,000 B.C.E.), and they are distinguished by fiber tempering, incised or punctuated surface decoration, and slab construction. The Orange period is the earliest documented period of human occupation in this area, although it is believed human occupation may date to the Paleoindian period 10,000 years ago. The Orange period marks the beginning of ceramic productions in the New World. The Indians of this period were hunter-gatherers who migrated seasonally to exploit a variety of resources. During this period there was a shift to extensive exploitation of the coastal lagoons, particularly for shellfish.

5. **Native American Reburial Site** There is an area within the shell midden where Independent Florida Seminole Bobby Billie conducted a Native American reburial. This reburial is another archeological resource, though it must be carefully protected.

**Architectural Resources**

6. **The Oceanarium** One architectural resource is the Oceanarium itself. The architects of the attraction created structures consistent with the Nautical Moderne style that was popular at the time. The Nautical Moderne style is evidenced at Marineland in the rounded corners and steps, ribbons or bands of portholes, steel railings, wall finishes painted white, decks, and curved ventilation stacks. The landscaping at the attraction is another noteworthy architectural resource. The landscaping takes advantage of the natural forms and plant life found along the northeast Florida coast. The native plants were combined with exotics. The fauna included cactus, yucca, agave, cabbage and sabal palms, scrub palmettoes, brown eyed susan, beach verbana, beach morning glory, and St. Augustine and Bermuda grass. The landscaping designs also incorporate oyster shell middens into the landscaping.

7. **Green Building** A potential future architectural resource is green building. Green building attempts to apply the design principles of natural systems to the building industry. Natural systems are cyclic instead of linear, and promote the efficient use of...
materials. By applying the design principles of natural systems to the building industry, green building attempts to make the building industry sustainable. If Marineland were to adopt green building standards such as the LEED system adopted by the U.S. Green Building Council, the resulting development would be an architectural resource which could attract and educate visitors.

8. Sustainable Community of the Future  Another potential architectural resource is Marineland’s development as a sustainable community of the future. By incorporating cutting edge wireless and other technologies into its growth and development, Marineland would be able to attract additional visitors interested in learning about sustainability.

Historical Resources

9. The Oceanarium  One historical resource is the Oceanarium. It is listed in the National Register of Historic Places. The primary historic structures within this site are the two original tanks, connecting flume, research laboratory, filter plant, original gift shop, porpoise stadium, and the landscaping. In addition to being in the National Register of Historic Places, Marineland was the world's first Oceanarium.

10. Scientific Discoveries  Another historical resource is the scientific discoveries that were made at Marineland. The use of echolocation by marine mammals was discovered at Marineland and used to train marine mammals. In addition, a shark repellant and methods for maintaining the health of marine specimens were developed at Marineland.

11. Local History of the Town  The local history of Marineland is also a resource. The first documented period of human occupation of Marineland is the Late Archaic or Orange period (c. 2,000-1,000 B.C.E.). The occupants were hunter-gatherers who migrated seasonally to exploit a variety of resources. By the end of this period there was a shift to extensive exploitation of the coastal lagoons, particularly for shellfish. The subsistence and settlement patterns remained essentially the same until 500 B.C.E. During the period from 500 B.C.E. until contact with the Europeans occurred, the Native Americans began practicing horticulture and living in large villages with elaborate chiefdoms and priesthoods, though they still migrated seasonally. Contact with the Europeans virtually destroyed the Native Americans through disease, slavery, and increased warfare. The European influenced history of the area began with Spanish missions established near Marineland. During the British era (1763-1783) Marineland was within a 20,000 acre grant to Levett Blackburn. During the second Spanish period, Marineland was the location of a number of plantation settlements. Several of these plantations were abandoned in the early 1800's because of Native American raids. In one such raid the Bonely family was captured and held captive for seven months until the ransom was paid.

12. Film History  The film history of Marineland is another resource. In addition to a being a research facility and a tourist attraction, the Oceanarium was designed as an underwater film studio. The studio was used for such classics as The Revenge of the Creature from the Black Lagoon and the Lloyd Bridges Sea Hunt series.
Entertainment Resources

1. **The Oceanarium's Animal Attractions** One entertainment resource is the Oceanarium's animal attractions. The Oceanarium has a dolphin show, a separate dolphin tank, a penguin show and tank, a sea lion show, a pink flamingo exhibit, and several fish tanks. The Town hopes to attract between 100,000 and 150,000 visitors to the Oceanarium per year. Greater numbers of visitors would exceed the Oceanarium’s carrying capacity. In addition, the parking lot only holds approximately 300 cars, further limiting the number of visitors per year.

2. **Film Library** Another entertainment resource is a film library with a myriad of early underwater film taken at Marineland. For this resource to be useful, however, the library will have to be inventoried and film preservation techniques implemented.

3. **Literary Icons** The role literary icons played in the Town is also a resource. The famous Pulitzer Prize author, Marjorie Kinan Rawlings of “Cross Creek” fame, was so taken with the locale, that she and her husband acquired and operated the local restaurant and bar where literary luminaries hung out, including the likes of Ernest Hemingway, Thorton Wilder, Stephen Vincent Benet, John Dos Passos and others.

Management of Cultural Resources

While cultural tourism will provide Marineland many benefits, it must be managed to limit the negative affects of cultural tourism. Such negative affects include development of infrastructure that ends up not being used, and the degradation of resources from overuse by tourists. These downsides can be minimized, however, by appropriate management.

Marineland should develop its tourism carefully and methodically by researching the impact of proposed action. In addition, there are several management objectives Marineland should pursue to establish sustainable tourism. Marineland must focus on creating an equitable plan for sustainable tourism where everyone cooperates and receives their fare share. As the town grows, this focus will become more important and the objective harder to achieve. Marineland must also focus on sustaining its resources. This objective will require continual observation and review of the effects of tourism on the resources, and the political will to make changes to ensure long term benefits (as opposed to short opportunistic gains) are maximized. Marineland will also need to focus on efficiency. For the tourism to sustain the town it will need to be profitable. Thus, the resources must be managed efficiently. Finally, Marineland must manage the resources with an eye to the future and with a sense of resiliency. Inevitably times and conditions will change. Marineland, like all business, will have to be willing and able to change along with the times.

I-4. Scientific and Education Based Tourism

History of Research and Education in Marineland
When Marineland's Oceanarium was listed in the National Register of Historic Places in 1986, one reason was because Marineland was found to be significant for its association with individuals who have played prominent roles in scientific research, marine education, tourism and film-making, for its primacy in the development of Florida's modern tourism industry, and for its exceptional contributions to science and education. The combination of scientific research and successful tourism has been a key part of Marineland's history. The Town seeks to revive this successful tradition.

Research has been a focus of Marineland since its beginning, initially in order to maintain the health of the specimens, and eventually as a separate focus of the facility. At the time of the Oceanarium's opening, scientists had had little success in keeping large marine specimens alive for any length of time in a controlled aquatic environment because of problems in maintaining proper water salinity, transporting specimens, and providing the specimens acceptable food. Marineland's location helped solve these initial problems by allowing natural saltwater to be used directly from the Atlantic Ocean, by negating the need for transporting specimens, and by having an ample supply of acceptable food located nearby in the ocean. By clearing these initial hurdles of research on marine mammals, Marineland cleared the path for advances in marine mammal research. As the world's first oceanarium, Marineland scientists were the first to train marine mammals as performers. Marineland scientists have continuously worked on identifying methods for maintaining the health of captive specimens.

All sorts of scientific discoveries have occurred at Marineland. A shark repellant was developed here during World War II for use in sea survival kits. Research at Marineland led to the discovery of the use of echolocation by marine mammals and the discovery that dolphins have signature whistles. Scientists at Marineland discovered an elaborate social organization among fish and that there are rules of social conduct in all specimens of fish. In the 1950s, Dr. John Lilly of the National Institute of Health undertook a study of dolphins' social relationships at Marineland. More recently, the Fifth Annual Conference of Marine Mamologists was held at Marineland in 1983, attracting more than 1,000 scientists. All of the major marine life exhibits and attractions throughout the world draw upon scientific discoveries and techniques of showmanship that originated at Marineland.

More research in the Town came when the Whitney Laboratory opened. When the University of Florida College of Medicine opened in Gainesville in 1956, researchers from that institution came to Marineland to study physiological adaptations of marine animals. The University of Florida Whitney Laboratory officially opened in 1974. Since its inception, the Whitney Laboratory has focused on marine biology and medicine. Some of the research carried on there has had applications to the study of birth defects and cancer.

Research in Marineland Today
Research remains a focus in the Town today. A variety of ongoing programs at the Whitney Laboratory continue the long tradition of a focus on research in Marineland. The Whitney Laboratory has both a main laboratory building as well as several common-use facilities including histology, microscope and aquarium facilities. The Whitney Laboratory also has a new molecular lab that is very technologically advanced. There are research opportunities for postdoctoral fellows, graduate students, undergraduates and visiting investigators. Laboratory
space and facilities are also available for independent investigators, with competitive fees.

In addition to the scientific facilities at the Whitney Laboratory, there are also several outreach educational programs. The Whitney Laboratory sponsors The Traveling Zoo, in which marine animals are transported to schools where programs are put on for students in kindergarten through third grade. For students in fourth through eighth grade, A Day at the Whitney Laboratory is offered. This program brings students to the Whitney Laboratory to learn about some of the animals, equipment and approaches used at the Whitney Laboratory in the study of marine animals. The laboratory also an outreach program called Evenings at Whitney. It is a monthly public lecture series with presentations on current marine science topics from distinguished scientists and on subjects from on-going research programs at the Lab.

Research and the opportunity for education continues on at the Whitney Laboratory. The laboratory’s new Center for Marine Studies is designed to have a state of the art auditorium, which should attract more conferences to the facility.

Also within the Town limits are the new administrative offices for the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), located in the River to Sea Preserve. The GTMNERR is the 25th NERR in the nation and the third in Florida. It was designated in 1999 and covers approximately 55,000 acres of publicly owned uplands, tidal wetlands, estuarine lagoons and offshore seas. Research and education are important aspects of the GTMNERR. The Reserve staff conducts integrated research and education programs that develop a fundamental understanding of estuaries and how these areas are impacted by human activities. Still in its infancy, the GTMNERR is continuously evolving and offers great possibility for the continuation of the prominence of education and research within the Town of Marineland.

While most tourists to the Town currently only visit the Oceanarium, opportunities abound for exposing these general tourists to the merits of scientific tourism. All of the shows put on with the animals at the Oceanarium are mainly focused on educating the guests. While exciting stunts are performed, each stunt is done to demonstrate a scientific fact that has been discovered about the particular animal conducting the stunt. Smaller aquatic species are displayed in tanks with an informative sign posted next to each tank. A video is run which explains the role of the Whitney Laboratory. However, the video has become outdated, with the former President of University of Florida still being acknowledged as the current President.

Another source of research and education in the Town is the Florida Sea Grant Extension Program at Marineland. Florida Sea Grant is a partnership program among the State University System of Florida, the National Oceanic and Atmospheric Administration, and Florida’s citizens, industries and governments. Florida Sea Grant’s goal is to use academic research, education and extension to create a sustainable coastal economy and environment. Florida Sea Grant attempts to accomplish this goal through a variety of programs, including it’s college program and a variety of workshops. The Sea Grant program works with schools and students, often using the students to educate the parents. Sea Grant programs include day programs, day camps, with future overnight camping planned to allow for discoveries within the estuary after dark.
1.5 Promotional Efforts

Advertising is a collective term for public announcements designed to promote the sale of specific commodities or services. Advertising is a form of mass selling, employed when the use of direct, person-to-person selling is impractical, impossible, or simply inefficient. It is to be distinguished from other activities intended to persuade the public, such as propaganda, publicity, and public relations. Advertising techniques range in complexity from the publishing of simple, straightforward notices in the classified-advertising columns of newspapers to the concerted use of newspapers, magazines, television, radio, direct mail, and other communications media in the course of a single advertising campaign. From its unsophisticated beginnings in ancient times, advertising has burgeoned into a worldwide industry. In the U.S. alone in the late 1980s, approximately $120 billion was spent in a single year on advertising to influence the purchase of commodities and services.

While advertising has many advantages, one main disadvantage is that it can be quite costly in an economic sense. There are ways around this, however. The Town is a partner in certain nature and heritage based programs. Simply by being a member, the Town is mentioned each time such a group advertises. These opportunities generally come with no associated economic cost. Also, the Town attracts attention due to many of its unique resources. Such resources often attract journalists and other interested parties. This is another form of advertising without cost that the Town should attempt to exploit.

The Town does not wish to become a tourist hot spot. Rather, the Town hopes to attract enough visitors to economically sustain the Town's projected small population increase. At the same time, a limited increase in visitation helps prevent the deterioration of the Town's natural, cultural and educational resources. The Town must selectively advertise to help achieve these goals.
Works Consulted


