



# CITIZENS FOR FLORIDA'S WATERWAYS

Volume 24 - Issue 3

May/June 2017

*Citizens For Florida's Waterways promotes the need for responsible use of Florida's waterways. Our primary objective is to encourage coexistence among recreational and commercial boaters, the marine industry, property owners and the environment. Citizens For Florida's Waterways advocates education in the safe and considerate use of watercraft with respect for our marine environment and conservation.*

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## President's Message *by Bob Atkins*

### **“THREATENED”! A Milestone Decision -So Long Overdue That It's WRONG**

Finally! On March 30, 2017, The U.S. Fish and Wildlife Service (USFWS), the Federal authority with responsibility for the listings within the Endangered Species Act (ESA), announced its formal decision to reclassify the manatee from endangered to threatened. A decision that is so long overdue that it is too little and too late. The formal scientific analyses have established that the manatee is RECOVERED and no longer requires protection under the ESA.

I am convinced that even this change would have not happened were it not for the relentless pressure and counter-arguments presented by all of us that have represented CFFW throughout the years. Did we do it alone? No! But there is no doubt that as other like-minded organizations and individuals stepped forward, they gained a lot of momentum from the ongoing efforts of CFFW. We shared a lot of history and knowledge with the folks from Save Crystal River and their legal representatives from Pacific Legal Foundation who then used our results and made the case for reclassification that could not be denied. Our public comment documentation presented enough sound factual data to support the USFWS decision in spite of the 87,000 emotional pleas and form letters that inundated the service.

For over 20 years, CFFW has argued that sound science clearly does not support the manatee being listed as endangered. Ten years ago the USFWS came to the same undeniable conclusion. Unfortunately, a well-financed propaganda campaign, predominantly lead by the Save the Manatee Club, had already convinced the press and ultimately, the public that the manatee was on the brink of extinction. These groups still proclaim that watercraft mortality is a threat to manatee survival. Nothing could be further from the truth, but almost everyone believes it.

Had the USFWS (and FWC for that matter) had the courage 10 years ago to stand up for the truth and dispel the half-truths and lies about the manatee population and reclassify it then, maybe the press wouldn't still be splashing each and every manatee rescue or death in the paper and on TV. In fact, had the service followed through with reclassification to threatened in 2007, they might have made the proper decision in 2017 and REMOVED the manatee from the ESA (delisted).

This is not an argument of semantics. Take a look at the two charts you'll find later in this issue

*... (Continued on Page 2)*

## CFFW Officers

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## Please Mark Your Calendars!



- » **May 18, 2017 Brevard Marine Advisory Council Meeting** - 6 pm  
2725 Judge Fran Jamieson Way Building C, 2nd Floor, Florida Rm., Viera, FL 32940
- » **May 20, 2017 Space Coast Waterfest, Kiwanis Island-Merritt Island 8-1**  
National Safe Boating Week Event Youth Fishing Program & Educational Booths and Displays
- » **May 20, 2017 East Coast Boat Club Lunch Fun Run** Grills on Indian River in Melbourne...This one is also becoming a tradition with great dock space and a great time! Topping it off this year with a "land lubber" meet up later that night at Port Canaveral.
- » **May 21, 2017 8th Annual Thunder on Cocoa Beach Super Boat Grand Prix**  
CFFW will have a tent set up at the south end of Shepard Park Beach early Sunday morning for anyone that would like to attend the races. The race schedule is: Start of 1st Race-12pm, Start of 2nd Race 2pm.
- » **May 24-25 Manatee Forum** St. Petersburg, FL
- » **June 5, 2017 CFFW Board of Directors Meeting** - 6:00 pm Karen Rood Bldg (near the boat ramp) at Kiwanis Island, Merritt Island. Open to the public.
- » **June 7, 2017 District 2 Dredging Committee Meeting** - 6:00 pm Karen Rood Bldg (near the boat ramp) at Kiwanis Island, Merritt Island. Open to the public
- » **June 15, 2017 Brevard Marine Advisory Council Meeting** - 6 pm 2725 Judge Fran Jamieson Way Building C, 2nd Floor, Florida Rm., Viera, FL 32940
- » **July 5, 2017 District 2 Dredging Committee Meeting**- 6:00 pm Karen Rood Bldg (near the boat ramp) at Kiwanis Island, Merritt Island. Open to the public
- » **July 10, 2017 CFFW Board of Directors Meeting** - 6:00 pm Karen Rood Bldg (near the boat ramp) at Kiwanis Island, Merritt Island. Open to the public
- » **July 20, 2017 Brevard Marine Advisory Council Meeting** - 6 pm 2725 Judge Fran Jamieson Way Building C, 2nd Floor, Florida Rm., Viera, FL 32940

## President's Message (Continued from Page 1)

that indicate the exploding manatee population and the decreasing seagrass coverage in the IRL. Ask yourself, how hard do you think it will be to shut off the hot water discharge at Port St John as long as the manatee is listed in the ESA? How many more years do we have before our IRL seagrass can no longer sustain the increased manatee numbers?

What follows is a synopsis of the listing history, both Federal and State, of the Florida black bear. The purpose of including it here is to show just how

... (Continued on Page 3)

political the situation with the manatee has always been. Remember, the manatee was listed as endangered, without review, in the original ESA of 1973. The Florida black bear has never been protected under the ESA. For several years, the Florida black bear was listed as a potential candidate for the ESA, pending review. In 1998 the USFWS completed the status review and determined listing the bear in the ESA was not warranted.

The decision to not list the bear was challenged in court by Defenders of Wildlife (a major player in the litany of manatee litigation) in 1999 and in 2004 the USFWS again established no criteria for listing the bear. The USFWS stood up to another challenge brought in a 2016 lawsuit by a multitude of organizations and individuals. Again, the USFWS determined that listing the Florida black bear was not warranted. The following appears in the April 19, 2017 Federal Register.

“On March 18, 2016, we received a petition dated March 17, 2016, from the Center for Biological Diversity, Animal Legal Defense Fund, Animal Hero Kids, Animal Rights Foundation of Florida, Animal Welfare Institute, Big Cat Rescue, Guillaume Chapron, Compassion Works International, Environmental Action, The Humane Society of the United States, Jungle Friends Primate Sanctuary, Miha Krofel, The League of Women Voters of Florida, Lobby for Animals, Paul C. Paquet, Stuart Pimm, Preserve Our Wildlife, Sierra Club Florida Chapter, South Florida Wildlands Association, Speak Up Wekiva, Stop the Florida Bear Hunt, Adrian Treves, John A. Vucetich, and Robert Wielgus requesting that the Florida black bear be listed as a threatened or

endangered species under the Act. . . . “

“Based on our review of the petition and sources cited in the petition, we find that the petition does not present substantial scientific or commercial information indicating that listing the Florida black bear may be warranted.”

For more information on the Florida black bear and the USFWS / ESA <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=A08E>

Meanwhile, the State of Florida was independently evaluating and assessing the status of the Florida black bear. Florida determined the  
*... (Continued on Page 4)*



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## President's Message (Continued from Page 3)

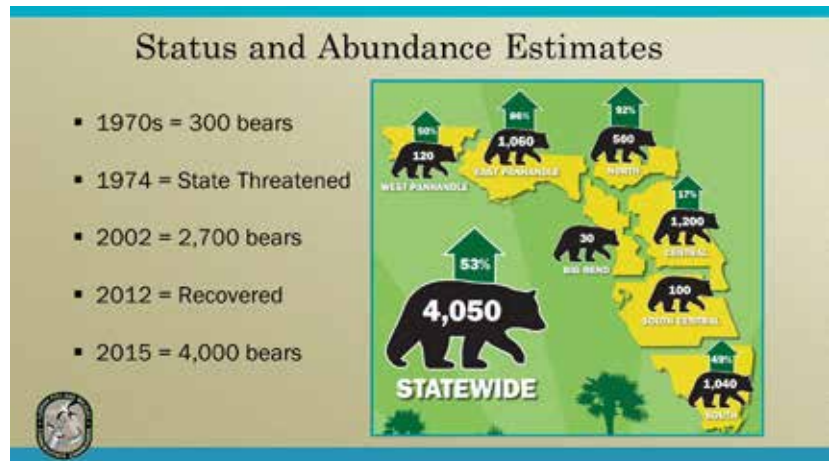
species to be threatened under State rules in 1974 (probably without substantial review). By 2012, the FWC had determined the species had **RECOVERED**.

Why all this talk about bears. Because the population numbers for bears reached a point in 2015 that the state issued permits for hunting. As a result of this management decision, the bear numbers were reduced by around 300. But look at some of the statements, data and population numbers the FWC staff presented to the FWC Commissioners on April 19, 2017. <http://myfwc.com/media/4193952/3b-bearplanupdate.pdf>

"In 2012, the Florida Fish and Wildlife Conservation Commission (FWC) approved a 10-year management plan that guides bear management and conservation in Florida. The goal of the plan is to maintain sustainable bear populations in suitable habitats throughout Florida for the benefit of the species and people."

"Bear populations have made a remarkable recovery in Florida and today are growing and expanding. This slide covers a brief overview of their population status through time. By the 1970's, there was a sharp decline in bear numbers, with as few as 300 bears statewide. In 1974 the Game and Fish Commission listed the Florida Black Bear as threatened under state rule. In 2002, FWC estimated there were around 3,000 bears statewide. In 2012 FWC finished development of the Bear Management Plan, which was approved

by the Commission in August and triggered the removal of the bear from the state threatened species list. In 2015, FWC estimated there were over 4,000 adult bears in Florida. This most recent population abundance research has been accepted for publication in the peer-reviewed scientific Journal of Wildlife Management."



So, in the case of the manatee, once on the endangered/threatened list it seems impossible to get off despite an exploding population that doubles that of the Florida black bear. Even in light of this, the manatee population remains completely **UNMANAGED** and potentially threatens the habitats of several other species by destroying large acreages of seagrass. Yet in the case of the Florida black bear, because it never received listed status, we are actually **MANAGING** that population.

Let's face it, one bear in a Brevard back yard evokes a completely different reaction than 2,000 manatees, but in reality, the potential harm is not even comparable.❖



## Manatee Reclassification - Moving in the Right Direction, BUT . . .

The determination that the manatee is not an endangered species is the correct outcome of the US Fish & Wildlife Service's (FWS) years-long review of the iconic marine creature's status. CFFW has long maintained that the species was incorrectly classified as endangered, a position that has been supported by the best available science for more than a decade.

Reclassification of manatees has been officially pending since 2007, when the USFWS first announced its intention to move manatees from the "endangered" list — meaning they were in imminent danger of extinction — to the "threatened" list, meaning they possibly could become at risk of extinction in the foreseeable future. CFFW is pleased by this proper step forward, even as we are dismayed that it has taken so long to accomplish and does not yet reach the correct classification result — "recovered".

Realistically, manatees no longer meet any of the listing criteria of the Endangered Species Act (ESA) and should be classified as "recovered" which removes the species from the ESA entirely, while keeping in place protections under the Marine Mammal Protection Act. But, despite the science, and with millions of dollars in donations at stake, some organizations, claiming to protect the manatee, have already threatened to take legal action to block the action by the USFWS. Politics and lawsuits are a large part of the history of manatee management and what caused this latest decision to be delayed over 10 years.

It is the vociferous and litigious behaviors of these same organizations that created two

significant negative and completely unintended consequences from misguided efforts to "save" the manatee. The unprecedented population concentrations in Citrus and Brevard Counties locally threaten those areas of the ecosystem from grazing over-pressure. We have over-regulated our coastal and inland waterways, including some man-made solely for navigation, removing reasonable access for thousands of waterfront residents and eliminating areas traditionally available and suitable for watersports.

Without any supporting analysis, the manatee was placed on the "endangered" list within the 1973 passage of the ESA. In 1974 we began collecting, counting and determining the cause of manatee deaths. These mortality counts appeared to give credence to the "endangered" classification.

Manatees can succumb to cold stress when subjected to extended water temperatures below 68°. Here in Brevard, the waters of the IRL regularly remain below 68°F during the winter months. Prior to the power plants, constructed in 1960, most manatees migrated further south to survive. Some did not. Fearing manatee extinction, agencies like FWS took steps to perpetuate the artificial warm water outflows at power plant locations throughout Florida, even though these outflows were in direct conflict with the Clean Water Act of 1974. It seemed like a good idea at the time — an emergency action to forestall a feared extinction — but it's sure not a good idea now, as more manatees than ever imagined live far beyond their natural and historic range.

*... (Continued on Page 6)*

## Manatee Reclassification - Moving in the Right Direction, BUT . . . (Continued from Page 5)

These artificial warm water site policies are almost as bizarre as the watercraft regulations we all endure. Some believed, again without any supporting analysis and in opposition to sound arguments to the contrary, that reducing the speed of recreational boats would reduce manatee mortality. Unfortunately for the boaters who have endured the proliferation of manatee zones throughout the State, these zones have not produced a measurable reduction in manatee watercraft mortality and the regulators themselves admit they don't know if zones are effective! Watercraft mortality has had no measured effect on manatee population growth and clearly boats are not a threat to manatee extinction, even though our boats are continually cited as the greatest threat there is by some to this day.

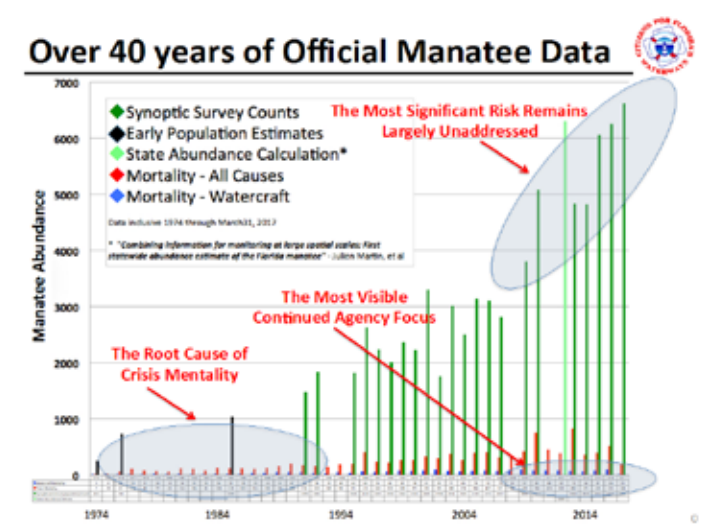
Ironically, even perversely, the two most significant manatee management policies – speed zones and warm water discharges – remain policy keystones, even as evidence mounts that other concerns are far more pressing.

These policies came into existence even before we started the annual manatee counts. In fact, it wasn't until 1991 that we even attempted to count the living. From an original count of 1,267 through the 2017 count of 6,620, the manatee has shown an extremely rapid, even explosive, population growth rate of 6.0% annually. As one would expect, mortality (and watercraft mortality) has also increased, but at slower rates than the population.

CFFW has been leading a growing chorus of voices stating that perpetuation of the mistaken belief that manatees are in danger of extinction has ironically become the greatest threat to the long-term success of the manatee. Because endangered status meant the animal was legally considered “depleted,” regulators felt compelled to take only those actions they believed would increase the manatee population. Whether their regulatory actions were effective remains a matter of debate, but it is abundantly clear that agency focus should have shifted years ago. The reason: the unmanaged manatee population is expanding rapidly. In some areas, such as Brevard County and Citrus County, where thousands of animals now maintain a winter residence and many stay year-round, there are real concerns about the ability of those areas of the estuaries to keep up with the pressures on seagrass.

Focusing locally on Brevard, the man-made warm outflows continue, which divert manatees from their natural (pre 1960) migratory habits. This has attracted large and ever-increasing numbers to Brevard's power plants. This growing winter herd has already reached nearly 2,000 in Brevard

... (Continued on Page 7)



# Manatee Reclassification - Moving in the Right Direction, BUT . . .

(Continued from Page 6)

## Man's Impact on Natural Manatee Migration



The Manmade Warm Water Discharge in Brevard entices thousands of manatees to linger in Brevard all Winter Where only 48,000 Acres of Seagrass remain

Mapping estimates of seagrass acreage along Florida's east coast

Estuary/Region	Previous Year	Most recent Year	Change (Yr/Yr)
Lake Worth Lagoon	2001 1,647	2007 1,688	0.4%
Southern Indian River Lagoon	2011 7,407	2013 8,073	4.5%
Northern Indian River Lagoon	2013 43,084	2015 48,509	6.3%
<b>Total seagrass acreage</b>		<b>56,279</b>	

When 1.6 MILLION Acres of Seagrass and an Abundance of Natural Warm Water are Available to the South

Mapping estimates of seagrass acreage in south Florida

Estuary/Region	Previous Year	Most recent Year	Change (Yr/Yr)
Florida Keys, Marquesas	1992 856,325	2006/11 910,286	0.3%
Dry Tortugas	2006/11	9,301	n/a
Florida Bay	2004 399,036	2010 388,481	1.0%
Florida Bay	1992 153,027	2004/05 178,363	0.3%
Atlantic City Biscayne	1992	140,930	n/a
<b>Total seagrass acreage</b>		<b>1,626,841</b>	

Source: FWC / FWM Seagrass Mapping and Monitoring

restricting navigational channels, closing traditional watersports areas, and implementing over restrictive and expensive regulations for constructing and maintaining waterfront use and access facilities like marinas, boat ramps and even private homeowner docks.

Citizens For Florida's Waterways is a not-for-profit boating advocacy organization based in Merritt Island, FL. Our all-volunteer Board of Directors founded CFFW in 1994. ❖

and many remain year-round. No one knows what the sustainable limits are, but there is a limit to how many of the grazers the IRL seagrass can support. With only 48,000 acres of seagrass remaining in the IRL compared to 74,000 in 2010, a decreasing pasture and increasing grazing population is converging on potential disaster for the IRL. In contrast, those naturally warmer winter waters to the south of the IRL provide 1.6 MILLION acres of seagrass. One has to ask, why do we continue to affect the migratory habits of the manatee and continue to pressure the critically depleted seagrass of the IRL?

CFFW maintains that if the seagrass goes, the Lagoon goes, too. "Saving" the lagoon is a priority. The kind of bureaucratic dawdling we saw on reclassification simply can't be tolerated. CFFW is working to redirect the focus of regulatory agencies to develop new management strategies to maintain a healthy manatee herd that will be a benefit, and not a negative impact, on waterways. To date, the predominant focus has unnecessarily penalized boaters through ever-increasing numbers of slow-speed zones,

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# Letter to Florida Sportsman



## Citizens For Florida's Waterways

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Merritt Island, FL 32954-1712  
[www.cffw.org](http://www.cffw.org) • 850-391-7674

April 17, 2017

Letters to the Editor  
FLORIDA SPORTSMAN  
2700 S Kanner Highway  
Stuart, FL 34994

### *Manatee Reclassification Is Good News*

The long-overdue decision that manatees are not endangered is welcome good news. Long overdue indeed! Florida's Fish & Wildlife Conservation Commission first recommended reclassifying manatees from endangered to threatened in 2003. The Federal Fish & Wildlife Service agreed in 2007, and then took a decade to make it official.

Political gamesmanship is the only reason for the decade-long delay, and the game continues, as some congressmen and women who clearly don't have the facts recently sent a letter to Interior Secretary Zinke asking him to overturn the ruling! They claim there is overwhelming public opposition to reclassification.

I'm asking you to take a moment to show your support for reclassification, and your rejection of the junk science claims that manatees are endangered. Please forward a copy of this letter to Secretary Zinke, and Congressmen Buchanan and Webster.

The science in support of reclassification and, indeed, delisting, is indisputable. Moreover, science is increasingly raising concerns about the pressure on seagrass, and the impacts on other species, that unprecedented numbers of manatees in Florida may be causing.

None of this is the manatees' fault, of course. They are doing what big herbivores do. What is at fault is the well-intentioned but dangerous notion that more manatees – at whatever the cost – is good for our waterways. Ironically, even perversely, "endangered" status has constrained regulators' management options, forcing their attention on more and more speed zones, and not on habitat restoration and the management of a large and rapidly growing manatee population.

Reclassification gives us the opportunity to develop science-based management strategies that will effectively and measurably protect manatees, while allowing people the responsible (and enjoyable!) use of Florida's waterways. (I miss waterskiing!)

FLORIDA SPORTSMAN just ran a very good article about this very subject in its April issue. I urge you ALL to read it.

Sincerely,

Steven Webster  
Past President  
321-693-2370

cc: Secretary Ryan Zinke  
Department of the Interior  
1849 C Street, N.W.  
Washington DC 20240

Rep Vern Buchanan  
2104 Rayburn HOB  
Washington, DC 20515

Rep Daniel Webster  
1210 Longworth HOB  
Washington, DC 20515





Manatee is captured by researchers as part of an ongoing baseline health assessment.

## Manatee in Crisis

*Populations have quadrupled. Habitat has not.*

By David and Mary Gayle Sartwell

**T**he manatee population in Florida is in serious trouble. It is a victim of a recovery program that has succeeded beyond all expectations. The recent explosion in numbers is poised to overwhelm the resources available to support these magnificent animals.

There is general agreement that there are between 7,000 to 8,000 manatees in Florida. Those in charge of the management of these animals understand that the current environment cannot support many more. Everyone also acknowledges it is only because of the warm-water discharges from power plants protecting them in the winter that there has not been a biological day of reckoning. What is more discouraging, at a recent forum on the status of the manatee in Florida it became obvious that nobody seems to know what to do next.

"The number of manatees that the natural environment can support will be greatly influenced by what we are willing to do to protect their habitat," said Dr. Katie Tripp, Save the Manatees Club's Director of Science and Conservation. "However, even if we open up new springs and place further protections on existing ar-

reas, we are heading for a day of reckoning where the resources available are outstripped by the need. We all need to suck it up and play nice and come to some short-term and long-term solutions. If we screw this up and lose two thousand manatees, the public relations impact will be devastating."

When asked what is the optimal number of manatees that the habitat in Florida can support, Dr. Tripp responded, "That is a very good question. For us to develop an effective recovery plan, we need to estimate that figure and to my knowledge no one has. It is important that we have enough to keep the species viable but not so many that they start to negatively impact other species."

The recovery model worked well in the beginning as there was plenty of space for the increasing numbers in existing fresh water spring areas. Unfortunately, as these spots filled to capacity the increasing number of manatees have not dispersed to new locations. They are just stacking up in existing spots and are reaching their maximum sustainable populations. As a result, they are starting to overgraze key seagrass beds that sustain all manner of life forms, not just the manatee.

While the seagrass recovery program

has been a success in a number of places, of the thirty Florida estuaries in which seagrass habitats are monitored, eight show stable abundance, eleven show increases, but seven exhibit ongoing decline. Unfortunately this decline may occur quickly if the number of manatees continues to expand. The new animals are not migrating to the healthy seagrass beds thereby putting great stress on the beds in the traditional areas.

The immediate problem right now is distribution, especially in the winter. Power plants have become the manatee cold weather habitat. They know they can migrate to these spots to avoid the natural water temperatures in which they cannot survive, below 68 degrees. This is a man-made problem that every naturalist sees as incompatible with the healthy management of the species.

"We tried to just shut off the warm water discharge at one small site," explained Ron Mezich, Biological Administrator for the FWC Florida Manatee Management Program. "We had an unacceptable number of them die. To just shut off the discharge to a large colony would result in hundreds of manatee deaths. However, keeping the discharges going only exacerbates a growing problem that will crash in the end."

Despite the increased sophistication of



management techniques, we still cannot circumvent the long established principle that wild animals cannot be stockpiled in excess of carrying capacity. All wildlife species need food, cover, space and water. "We have increased the population by the introduction of the warm water discharge from power plants and have decreased the dispersal process as a result," says Dr. Robert Bonde, of the USGS Wetland and Recovery Center.

The power companies, whose plants are emitting the warm-water discharges, are all talking about the same approach in dealing with this pending disaster. "Manatees are an important part of the chain of life in the ecosystem," said Richard Gibbs, Senior Communications Specialist for Florida Power and Light. "We are looking for leadership from the agencies involved to guide us to a solution. We are all in this together and will abide by whatever they order."

The manatee is a 1,200-pound animal that is a voracious eater, consuming anywhere from 4 to 9 percent of its body weight (depending on the season) per day. Under normal circumstances, their foraging would not negatively impact the seagrass beds as the regrowth would keep up with the rate of consumption. Unfortunately, in an area where the population exceeds the carrying capacity, not only do the manatees eat the grass, they uproot the plant, not allowing it to regrow. Also, their feces create a high nutrient load that affects water quality. To quote Bob Atkins, President of the Citizens for Florida Waterways, with the increase in numbers "we have engineered a distribution that jeopardizes nature's ability to maintain equilibrium."

Different government agencies and volunteers have done a wonderful job working to increase the seagrass areas in an attempt to solve the food shortage problem. The pollution controls that have been implemented in recent years along with additional plantings have made big inroads in bed recovery. Unfortunately, the manatees have been eating themselves out of house and home in some areas. If you have 1,000 manatees eating 50 pounds of seagrass a day, the beds have to produce 50,000 pounds a day to keep up. The beds in the overpopulated areas are in distress, which is affecting all of the other life forms that depend that grass to survive.

There has also been a considerable effort expended in trying to open up more natural warm springs to support manatees in the cold weather months. Over the

years these springs have been modified, covered up, or access to them has been made difficult by the behavior of man. To open more of them would be expensive but it could make it possible to expand the manatee range. Unfortunately, it would not be on a scale large enough to handle this ever-growing population.

In addition, our human population's need for fresh water is lowering the aquifer levels in Florida. As a result, the spring water flows that the manatee require are slowly diminishing. Furthermore, ocean level rise will result in more sea water incursions that also impact available springs. This process has been documented in Crystal River, for instance, which has become saltier.

Robert Bonde has been leading a nine-year effort to study the manatee at the Crystal River National Wildlife Refuge. There have been more than 800 wild manatee health assessments in Florida, aided by 232 manatees that have been captured, examined and released at Crystal River. This examination includes body condition, weight, DNA for genetic study, pregnancy test, pulse rate, eye exam, the implantation of monitoring tags, and the analysis of blood, feces, urine, milk and skin. This information will be very helpful in determining changes over the years in manatee health. Although we now know much more about the health and life cycle of these magnificent creatures, we still have no idea of what to do about their rapidly increasing numbers.



Cages placed to protect seagrass from overgrazing.

## Snapshot of Synoptic Surveys

The following figures represent seasonal counts of manatees in West Florida (Wakulla through Everglades) and East Florida (Jacksonville through the Keys). The interagency surveys are undertaken during optimal periods for observing manatees congregating in warmwater refuge areas around these parts of the state. Counts are made by aerial and ground teams. The Florida Fish and Wildlife Conservation Commission (FWC) is currently studying ways to include estimates of manatees not seen by the surveyors—for instance, animals residing in the Florida Panhandle or deep waters of Tampa Bay.

Year	Date	East	West	Total
1991	February 17-18	828	650	1,478
1996	February 18-19	1,452	1,178	2,630
2001	January 05-06	1,559	1,741	3,300
2006	February 13-17	1,639	1,474	3,113
2011	January 20 and 24	2,432	2,402	4,834
2016	February 11, 12, 13	3,292	2,958	6,250

Where do we go from here? The state does not have a target number for population density, but everyone involved knows we are close to reaching it. No one associated with the problem would disagree that we are headed for a disaster, but no one seems to know how to avoid it.

"We are in a box," said a discouraged Bob Atkins. "If you turn off the discharges now some will die. If you don't turn it off the population will continue to grow and then many will die. People have to be prepared for the fact that there are hard times ahead for the burgeoning population of manatees." **FS**

# CFFW Member Recognition

## New Members

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Robert Rusk  
Daniel Rogers  
Bob Taplin

Russell & Deborah Allison  
Stephanie Somerset

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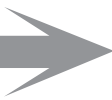
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