



WET GAZETTE



Department of Homeland Security
USCG Auxiliary
Flotilla 11-10
Dunedin, Florida

Rob Bonnem, Commander
Gordon Thomas, Vice Commander
Kristi Mackey, Immediate Past Commander
Ron Shebanek, Publications Officer

Commander's Corner



First, I would like to thank flotilla 11-10 in having the confidence in Gordon and me to remain your bridge for a second term. We are both very excited. I promise that 2022 will be a much more active year than 2021. We are in a good position to pivot back to in-person activities. This will begin with our first hybrid flotilla meeting (in person at The Annex at Air Station Clearwater while simultaneously running a Zoom meeting). We are already planning some activities for early in the year, for example, participation in the Dunedin Mardi Gras parade, and an island clean up. We are kicking around the idea of a get-together with a White Elephant sale in February/March to tie in with Mardi Gras. This would be great as we have had to lose two holiday parties with their White Elephant sales this year and last.

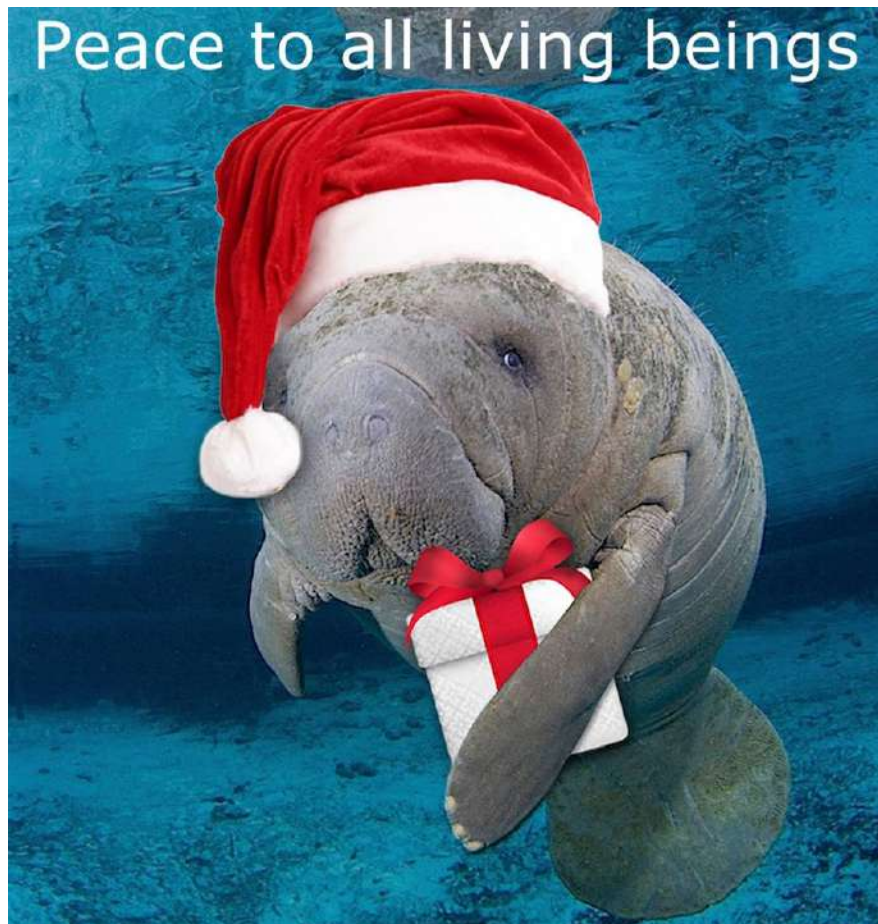
We will be getting our facility B4IV out of Charlie status shortly, with crew safety training planned. Members who wish to start crew training or are in the middle of training will be able to resume activities. C-130 training missions alongside active duty "Coasties" will be resuming

I am already in contact with the Threshers for our annual June flotilla baseball night. A ballgame, a buffet and fireworks all are back and we will be able to participate in our most popular fellowship event. Buddy's ROMEO lunch is back and going strong. Look for the next invite in late November.

As you see, we are trying hard to hit the ground running for 2022 as a flotilla. If any member has ideas for something they would like to see us do, please contact Gordon or me. We would love to hear your thoughts.

Lastly I would like to wish all of you and your families a wonderful holiday season. A flotilla get together will stand in for our December flotilla business meeting. This will be done via ZOOM and is holiday casual. Please look for the invite from Gordon and log on, even if it's just for 15 minutes - enjoy a beverage of your choice and wish your shipmates holiday cheer.

Photo source: pinterist.com



Lead Us Onward



Harvey Prior, harvb4@aol.com, is the Flotilla Staff Officer (FSO) for Member Training.

Prepare

Is the time to prepare? Prepare for what?

Each of us prepares for many different events every day. Start with a cup of coffee. Pick a favor. Pick a cup to pour it. Pick whether to use an artificial sweetener, sugar or perhaps honey. Pick where to sit while drinking it. Preparing to have a cup of coffee can be a lot of work.

While most of these choices happen so quickly that we don't really think about them, there are other times that we should more formally prepare for what we are going to do. One area that Auxiliarists should be familiar with is preparing to go for a boat ride. A quick review might help us prepare of our next outing.

Start with what activities do we plan to do on this trip? Fishing, skiing, sightseeing, diving, staying overnight, just getting away from work or some combination of the many reasons to go boating. Next might be what boat. Are we taking your boat, a friend's boat or maybe chartering a boat?

For this article we will take our own boat. Is our boat prepared? Does it have all of the state and federal required equipment onboard? A Coast Guard Auxiliary vessel safety check is a great way to check this. Does the boat have other equipment such as a VHF radio, a first aid kit, water and perhaps an anchor and line? Does the boat have adequate fuel remembering the one third rule?

Now what is the weather forecast? Weather forecasts should be checked ahead when planning the trip, shortly before the trip and during the trip. Conditions can change quickly and going to the dock early can prevent a potential disaster

Does anybody know to alert the authorities, such as the Coast Guard, if we don't come back? Float plans are like life jackets, they only work if you use them. A friend or relative calling for someone to help find you has a better chance of getting the right help headed your way if they have your float plan describing your boat and where you were going.

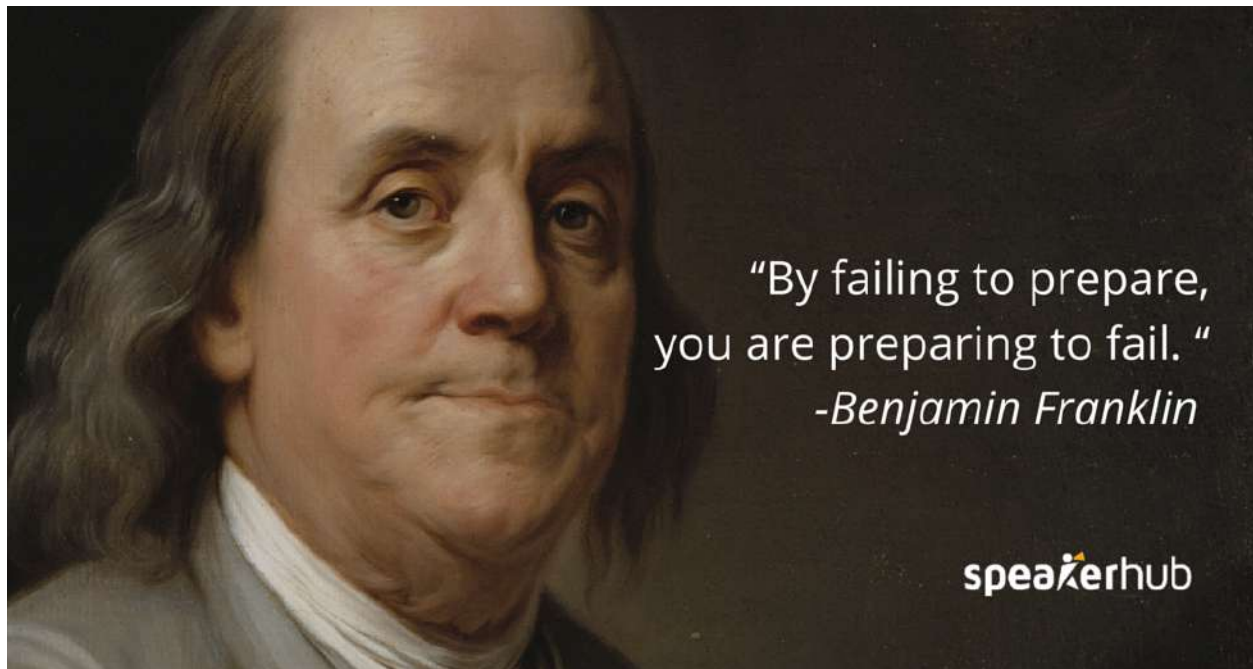
Another prepare item is the vessel operator. Has the person driving the boat taken a boating safety course? Has that person had proper rest, stayed hydrated, not become distracted and not gotten under the influence of alcohol or other substances? Has this person operated a vessel of similar size and configuration before?

There are a number of other prepare items that should be considered. Everything from insurance to trash disposal. Checklists are a good way to be sure every item is covered.

Wow! Who knew there was so much to prepare so we could have a safe and enjoyable boat ride? Hopefully, every boat owner knows.

Spread the word. Float Plans. Safe Boating Courses. Vessel Safety Checks. And don't forget to help the Coast Guard Auxiliary prepare for the future by inviting others to join.

Image source: speakerhub.com



AUXAIR Update

Flew three missions this month – one with Tom Maloof, a Delta Pilot and Tarpon Springs Flotilla officer, one with Kevin Wilcox and Ute Kegel and one with just Ute.

We were tasked with a Search and Rescue (SAR) on our last mission in the vicinity of Anclote Key where a red canoe had capsized with two persons in the water and they were able to call one of their wives before the phone died.

The wife called sector but was only able to give a general position ---"probably somewhere between Fred Howard Park and Anclote Island".

We were just north of Egmont Key when Sector St. Petersburg (SSP) directed us to the general Anclote Key area to try and find them.

Made multiple passes and were about to abandon search due to fuel state when Ute found the capsized canoe with two people in the water. We forwarded the position to SSP who forwarded it to various surface assets including FWC and Pasco County. Pasco County also dispatched a helicopter to the area.

We departed the area once the other assets were on site.

Article and photos by John Landon

The following is an excerpt from an email from CDR Michael Bell, USCG to CAPT Matthew Thompsom, USCG SSP . Used with permission.

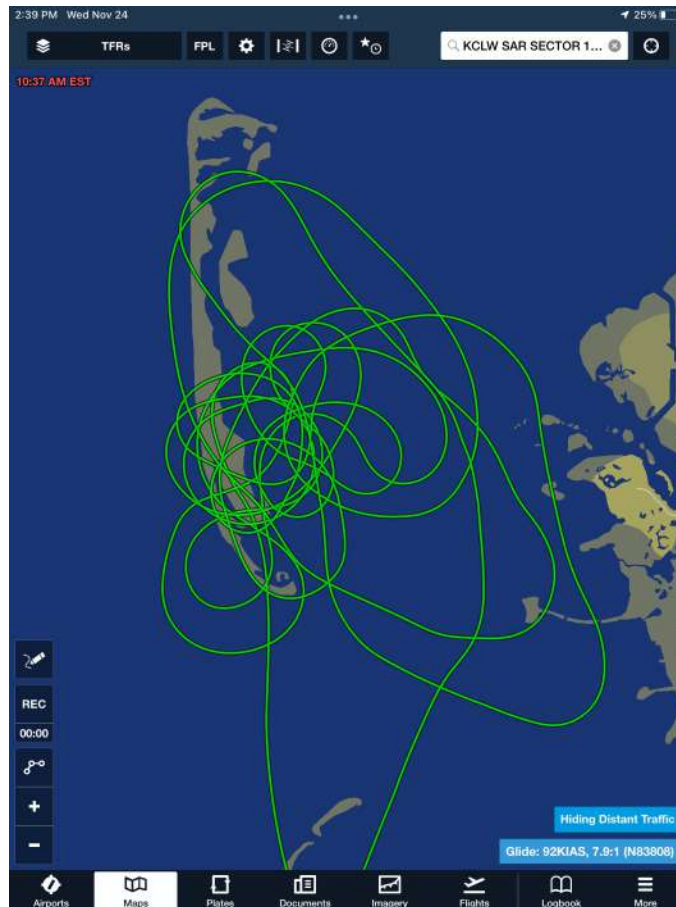
“Good afternoon Captain,

This is great case that highlights our important partnership with the CG Auxiliary! Upon receiving the report of two people in the water in the vicinity of Anclote River and Anclote Key, Auxiliary Aircraft 808 diverted from their maritime observation mission to area. In the meantime Station Sand Key and partners from FWC and Pasco County responded to the area. The area between the river and key is roughly 2NM and we didn't have an accurate position to send responding surface assets. Once on-scene, Auxiliary Aircraft 808 quickly located and vectored in surface assets. The two people were rescued approximately 1500 yards off the Anclote Key Lighthouse. Given the area and weather conditions, this situation could have turn out much differently, however without a doubt Auxiliary Aircraft 808, the Command Center, Station Sand Key, and our other SAR partners were critical to the SAR system and saving the two people in the water.”

Very respectfully,
Mike

CDR Mike Bell

Chief of Response
U.S. Coast Guard
Sector Saint Petersburg





- Photos:
- Big Sarasota Pass
- Little Sarasota Pass
- Longboat Pass
- Crew
- 2021-11-3 Flight Track



2021 Hurricane Season Is Over!!

There were 21 named storms this season. Only two Atlantic seasons on record had more than 21 named storms: 2005 (28 named storms) and 2020 (30 named storms).

Seven of the named storms strengthened into hurricanes. The strongest storm, Hurricane Sam, flirted with Category five strength but remained a Category four storm with 155 mph sustained winds. Impressively enough, Sam avoided all land and remained a fish storm out in the Atlantic Ocean. The storm maintained major hurricane status for a whopping seven days. It was the longest-lived storm of the 2021 season.

Out of the seven hurricanes, Hurricane Elsa was the first hurricane of 2021 and the only storm of the season to impact the Tampa Bay area.

Hurricane Elsa, forming on July 1, became the earliest fifth named storm on record in the Atlantic Basin. Elsa's sustained winds reached 85 mph at its peak, which kept it at Category 1 strength. While tropical-storm-force winds and heavy rain ripped across west-Central Florida, Elsa swept past Tampa Bay and left little damage as the center of the storm with the strongest winds remained offshore.

The storm eventually curved east and officially made landfall along the Big Bend several miles northwest of Cedar Key with 65 mph winds.

A shelter opened in North Port, and roads were forced closed as floodwaters inundated the area. In Indian Rocks Beach, Elsa eroded about half of the shoreline.

This was the first year where if the list of names for the hurricane season were to be exhausted, the newly developed supplemental list of names would have been used. The World Meteorological Organization wanted to avoid confusion and decided to retire the Greek alphabet that was originally used in 2005 and 2021 as a supplemental list.

Although the 2021 list was exhausted, no storms formed following the last storm of the season, Wanda.

The Atlantic hurricane season begins on June 1; but due to tropical activity developing before the official start of the hurricane season for the last six years in a row, the National Hurricane Center started issuing its regular schedule of tropical outlook discussions on May 15 instead of June 1.

This year was no different from the last six years. Tropical Storm Ana was the first storm of the season, and the NHC issued the first advisory on May 22. The storm remained out at sea.

Article source: [wtsp.com](https://www.wtsp.com)

Note: Review all the medications and food in your hurricane kit and use or discard anything that is expiring in the next year.

Winter



Winter the dolphin, the beloved star of the “Dolphin Tale” movies whose story of resilience with a prosthetic tail, and recent illness, captured attention around the world, has died.

Winter died at about 7:45 p.m. as she was being prepped for exploratory surgery to treat an intestinal blockage at Clearwater Marine Aquarium, according to aquarium board chairperson Paul Auslander. She was 16.

Aquarium staff noticed Winter stopped eating and began to behave differently on Nov. 1. She was being treated around the clock for a gastrointestinal infection and initially responded to antibiotics but took a turn on Thursday, according to the board chairperson.

Auslander said a team of about 15 veterinarians and technicians were preparing Winter for the “last-ditch effort surgery” to treat the blockage when her blood pressure spiked and breathing became heavy.

“She was pretty lively and feeling pretty good and when they started to do all the preparations with the IV and taking blood and all of that, in medical terms, you’d say she stroked out,” he said.

“While we are heartbroken by Winter’s death, we are comforted knowing that our team did everything possible to give her the best chance at survival. We worked with specialists and marine mammal experts from around the country to provide her with the best care available. Our staff worked around the clock during this challenging time,” said Dr. Shelly Marquardt, a veterinarian. “I’m honored to work alongside such dedicated and talented professionals who gave their all for Winter.”

Her story began in a bloody tangle of crab-trap rope in the muddy shallows north of Cape Canaveral. It ended in the aquarium that she made famous, in a county that benefited greatly from her unlikely aquatic superstardom.

In the years after Winter the dolphin was rescued and rehomed at Clearwater Marine Aquarium, she became a movie star, an economic engine and a symbol of perseverance. Her recovery, after losing her tail and adapting to a prosthesis, made her a local icon: In St. Petersburg Times and Tampa Bay Times stories over the past decade and a half, she was called the Elvis of Tampa Bay, the Laurence Olivier of the Clearwater aquarium, the Mickey Mouse of Pinellas County.

On a cold Saturday in December 2005, a fisherman found Winter, then two months old, badly injured and struggling to breathe. Only Clearwater Marine Aquarium was willing to take her. Necrosis ate away at her tail; her survival was uncertain. But she gained weight by sucking fish smoothies out of Dasani bottles, relearned to swim and eventually moved in with an older dolphin, Panama, who became an adoptive mother to Winter before dying in 2013, at around age 40.

The first few years of her life were chronicled in a 2008 St. Petersburg Times series, written by John Barry, that was later a finalist for a Pulitzer Prize. It followed her incredible recovery; the media blitz by the aquarium's then-chief executive, David Yates, who made Winter international news; and the prosthetics builders who created Winter's new tail, and in doing so created designs that could also help people — including some of the children with disabilities who felt intense bonds with the dolphin.

Excerpted from a *tampabaytimes* article. Photos by Clearwater Aquarium.



Manatee Deaths Approaching 1000



Florida Fish and Wildlife Conservation Commission (FWCC) biologists examine the corpses of manatees in Indian River Lagoon in March. The number of Florida manatee deaths recorded this year is about to surpass 1,000.

The number of Florida manatee deaths recorded this year is on the cusp of surpassing 1,000, which is already a record number for the Sunshine State's iconic mammal.

"This year is unprecedented," said Martine de Wit, a veterinarian in the state's marine mammal pathology lab in St. Petersburg.

There have been 997 manatee deaths reported through Nov. 5, according to the latest Florida Fish and Wildlife Conservation Commission data. Manatee mortality reports are filed each Friday and released each Wednesday.

Florida may have already surpassed 1,000 deaths, but the official count won't be released until next week.

This year's fatalities over 11 months far surpasses the 2020 death toll of 637 manatees. It marks the most deaths since 830 died in 2013.

The veterinarian, de Wit, has spent more than 15 years investigating manatee health and performing necropsies (similar to an autopsies) for the state. The problems causing this year's die-off, she said, have been building for a while.

"We're dealing with poor health of ecosystems that are very critical to manatees," de Wit said. "It's not something that happened overnight."

The vast majority of deaths occurred at the beginning of this year, during the winter months, when water temperatures dropped. Manatees clustered in traditional wintering grounds in the Indian River Lagoon, gaining warmth from the discharge at a power plant in Brevard County. But once there, they struggled to find food.

Years of seagrass loss have driven the grim trend, scientists say. Algal blooms, fueled by pollution from leaky septic tanks, sewer systems and fertilizer runoff, have devastated the ecosystem.

“Hundreds literally died of starvation,” said Patrick Rose, executive director of the Save the Manatee Club.

Manatees are vegetarians who have evolved over millions of years in ecosystems with seagrass. Without it, they are trying to adapt by consuming other food sources, he said. However, those are not as nutritious.

As the number of 2021 deaths exceeds 1,000, Rose is bracing for what the winter ahead will bring.

“They literally have to make the choice between starving to death or freezing,” he said. “We could lose hundreds more this winter.”

Rose fears the need for manatee rescues will exceed capacity. “I’m literally both sad and mad at the same time that it ever came to this because there were many warnings,” he said.

Even if everything goes right in terms of restoring the health of the water, recovery is years away. “It takes years and years to undo what was done through decades of abuse,” Rose said.

“It’s almost like you have a ticking time bomb,” he said. “I hope people recognize how severe the consequences can be.”

“It’s our Florida, and we have to do our part to fix it.”

Article and photo source: *tampabaytimes*



Red Tide Mitigation

The Florida Red Tide Mitigation & Technology Development Initiative, led by Mote Marine Laboratory & Aquarium in partnership with the Florida Fish and Wildlife Conservation Commission (FWCC), is developing the tools and technologies to mitigate red tide and decrease the impacts on the environment, economy and quality of life in Florida. During the first two years of this six-year Initiative, over 25 projects are already underway.

One of those projects includes a partnership of scientists from Mote Marine Laboratory & Aquarium (Mote), Woods Hole Oceanographic Institute (WHOI) and University of Central Florida (UCF). In response to the current bloom event, these researchers have come together to rapidly deploy and test the ability of clay dispersal to remove cells and toxins, a mitigation strategy used in other settings around the world to control other types of harmful algae blooms (HABs).

Florida red tides are caused by the overabundance of cells of native species of algae, *Karenia brevis*. Clay mitigation involves spraying the surface of the water with a slurry of modified clay particles and seawater, and as the dense clay particles sink they combine with red tide cells. This process can kill the cells and also bury them in the sediment on the seafloor. For a more thorough description of this process, known as clay flocculation, see below.

“The Initiative is focused on a multi-tiered approach to developing mitigation strategies,” said Kevin Claridge, Vice President for Sponsored Research & Coastal Policy Programs at Mote and serving as the Administrator for the Initiative. “Although we have many Initiative projects in different stages of research and development, we’re excited to be able to conduct one of our first field tests to work through logistical hurdles and gauge the effectiveness of a treatment option in a real-world situation, with actual red tide present in a water system.”

“This is just the first of what we hope will be several upcoming trials of clay flocculation on active blooms in the wild,” said Dr. Don Anderson, Senior Scientist at WHOI and Principal Investigator for this Initiative project. “What we learn here will help us better understand how conditions in Florida affect its success and how clay flocculation might be tailored to blooms of *Karenia brevis*, as well as other species of algae, here and elsewhere in the world.”

“In addition to cell abundance and toxin concentration, our team is evaluating phytoplankton community composition as well as multiple water quality measurements before, during and after the clay application to determine the success of cell and toxins removal as well as the impact on other water column parameters,” said Dr. Vince Lovko, Co-Principal Investigator and Senior Scientist at Mote.

Dry clay material was mixed with seawater to create a slurry, which was then dispersed over the water in the study area with hoses. A screen was placed into the water on one end of the canal, and water samples were taken on both sides to compare the treatment area with non-treated areas.

“As we’re looking for mitigation strategies for red tide, we’re not only looking at the water quality impacts of treatment options, we’re also looking for potential impacts on the benthic and fish communities,” said Dr. Kristy Lewis, co-Principal Investigator and Assistant Professor in UCF’s Department of Biology, National Center for Integrated Coastal Research.

“Florida is really leading the way in the United States in utilizing decades of red tide research and monitoring to deliver innovative technologies that can be deployed to decrease the impacts of the HABs in our environment, economy and quality of life,” said Mote President & CEO, Dr. Michael P. Crosby. “We’re still in the early stages of this six-year Initiative, yet we’re already able to have early-stage technology ready to rapidly deploy for field testing. That’s the power of science, and how by bringing together the best and brightest minds, we can create solutions to help our communities.”

Read more about the Florida Red Tide Mitigation & Technology Development Initiative at redtidemtdi.org

Special thanks to the Sarasota Outboard Club and the City of Sarasota for allowing access to the canal where this work took place.

How does clay flocculation work?

When sprayed as a slurry on the surface of the water during an algal bloom, the tiny but dense clay particles will “flocculate” or combine with other particles in the water, including the red tide cells. The process of flocculation is common in drinking water and sewage treatment. As these aggregations, known as “flocs,” grow, they sink through the water until they reach the bottom. As these flocs fall, they capture additional particles, clearing the water as they descend. In some cases, as with the fragile cells of the Florida red tide organism *Karenia brevis*, the flocculation and sinking process can rupture cell membranes, killing the cell. In deeper water, darkness, prolonged contact with the clay, and eventual burial in sediments on the seafloor can also kill the algae cells.

In studies of the Florida red tide organism *Karenia brevis* and related HAB species, clays have been very effective in removing cells from the water with no re-emergence up to 48 hours after clay control experiments in the laboratory, suggesting that the cells are either dead or incapable of escaping from the clay floc.

This study also assesses the amount of clay needed and the ability of the clay to remove the toxins from red tide-impacted water. In researching mitigation strategies, scientists are focused on not only the removal of cells, but also removal of the toxins produced by the red tide organism. Determining the fate of red tide toxins, as well as the cells is an essential aspect for evaluating the ability of the products and/or processes we are testing to mitigate the adverse effects of red tides.

Source: Mote Marine Laboratory.

What is Zero Day?



"Zero-day" is a broad term that describes recently discovered security vulnerabilities that hackers can use to attack systems. The term "zero-day" refers to the fact that the vendor or developer has only just learned of the flaw – which means they have “zero days” to fix it. A zero-day attack takes place when hackers exploit the flaw before developers have a chance to address it.

Zero-day is sometimes written as 0-day. The words vulnerability, exploit, and attack are typically used alongside zero-day, and it's helpful to understand the difference:

A zero-day vulnerability is a software vulnerability discovered by attackers before the vendor has become aware of it. Because the vendors are unaware, no patch exists for zero-day vulnerabilities, making attacks likely to succeed.

A zero-day exploit is the method hackers use to attack systems with a previously unidentified vulnerability.

A zero-day attack is the use of a zero-day exploit to cause damage to or steal data from a system affected by a vulnerability.

Software often has security vulnerabilities that hackers can exploit to cause havoc. Software developers are always looking out for vulnerabilities to "patch" – that is, develop a solution that they release in a new update.

However, sometimes hackers or malicious actors spot the vulnerability before the software developers do. While the vulnerability is still open, attackers can write and implement a code to take advantage of it. This is known as exploit code.

The exploit code may lead to the software users being victimized – for example, through identity theft or other forms of cybercrime. Once attackers identify a zero-day vulnerability, they need a way of reaching the vulnerable system. They often do this through a socially engineered email – i.e., an email or other message that is supposedly from a known or legitimate correspondent but is from an attacker. The message tries to convince a user to perform an action like opening a file or visiting a malicious website. Doing so downloads the attacker’s malware, which infiltrates the user’s files and steals confidential data.

When a vulnerability becomes known, the developers try to patch it to stop the attack. However, security vulnerabilities are often not discovered straight away. It can sometimes take days, weeks, or even months before developers identify the vulnerability that led to the attack. And even once a zero-day patch is released, not all users are quick to implement it. In recent years, hackers have been faster at exploiting vulnerabilities soon after discovery.

Exploits can be sold on the dark web for large sums of money. Once an exploit is discovered and patched, it’s no longer referred to as a zero-day threat.

Article and photo source: [kaspersky.com](https://www.kaspersky.com)



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FC Flotilla Commander	Rob Bonnem
VFC Flotilla Vice Commander	Gordon Thomas
IPFC Immediate Past Flotilla Commander	Kristi Mackey
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U.S. COAST GUARD