



# Goldbug's Wake

East Cooper Outboard Motor Club ~ Founded 1956

August 11, 2020

Volume 2020, Number 8

[www.goldbugisland.com](http://www.goldbugisland.com)  
Webmaster, (Email)

## 2021 Board Members

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**Randy Howe, (Email)**  
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**Walter Kaufmann**  
Past Commodore

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Membership Chairman

**Matt Williams, (Email)**  
Dock & Deck Chairman

**Dave Kauffmann, (Email)**  
Member at Large

**John Curry, (Email)**  
Member at Large

**Jerry Barnett,**  
Commodore Emeritus

Club Rentals, Contact:  
[destinationgoldbug.com](http://destinationgoldbug.com)  
or

## **Until further notice there will not be any organized member meetings or events at Goldbug.**

**Goldbug remains Open to members** subject to House Rules and Bylaws, Please use common sense at all times. The Boat ramp is open. The Bird deck is open. Rentals have resumed (leave gate open if rentals are using clubhouse) **KEEP GATE LOCKED DO NOT LEAVE GATE OPEN**

**New BOARD MEMBERS** for FY 2021 are listed on the left column. Please welcome Dave Kauffmann as the new **Member At Large**.

Many thanks to Mike Murphy who served as a terrific member at large for the last two years; Mike we all appreciate your service and dedication to the club.

Please help appreciate and thank Chris Mullen for his continued diligent and very hard work on Goldbug Island. Chris is always on the Island keeping it looking great!

Standing Committee Positions are always open; please contact any board member to become more involved in YOUR club:



**REMINDER:** No Pets are allowed at Official Club Functions, however when you bring a dog to the island - PLEASE be courteous and responsible and maintain complete control and clean up any mess.

**FIREWOOD:** Remember if you or anyone you know is cutting trees or if you see a pile of available wood that can be used in the fire pit please bring it to the club.

**Need Work Parties?** (no one is going to do them for you, at least until after November 3rd) - **Contact Mark Law, (Email) or Chance Nilsen, (Email) for details.**

**FACEBOOK:** Goldbug Members can join the **"ECOMC MEMBERS ONLY"** private Facebook group to share pictures, news, or anything to benefit the club. Maybe you have something to sell or looking to buy. Perhaps you need a partner to fish with. That's the purpose of the group. Remember - Only members can see who's in the group and what they post, and only members can find this group.

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REMINDER (house rule #5): Mature sons and daughters who are under the age of 21 years, and members' wives, whose place of residence is the same as a member's may use the boat landing without being accompanied by the member. **Sons, Daughters and Wives are not allowed to invite guest boats. No son or daughter who is 21 years of age or older, may use the facilities except as a guest accompanied by the member.** Sons, Daughters and Wives on club property without the ECOMC member present shall identify themselves to any member when requested.

## ECOMC 2020 CALENDAR of Events

All scheduled events are subject to change due to Covid-19

Date	Event
Cancelled due to Covid-19	Banquet
November	?? Turkey Shoot ??
December 06, 2020	Cookies With Santa
December 12, 2020	Christmas Party

**KEEP GATE LOCKED****DO NOT LEAVE GATE OPEN**

Photographs of Fish and other interesting Goldbug related items can be emailed to the [WAKE](#) for publication in future editions; please include captions and names of people in photo and their permission to reproduce in wake.



## Boater Survey Means More Personal Responsibility

### *Boater safety means more personal responsibility*

**T**he freedom of being out on the water, being your own captain and leaving landlubber laws behind are some of boating's biggest draws. But with that freedom comes responsibilities — to everyone onboard, to other boaters and to the vessel itself — and the captain is always outranked by the weather, the tides and the nature of water.

So careless speedboaters plow into oyster beds, cabin cruisers get stuck on sandbars, fishermen in high-powered bass boats collide with pontoon boats, backwater picnickers find their beached boats stranded at low tide and inebriated operators open themselves and others to all kinds of trouble, sometimes deadly.

The Feb. 24, 2019, death of teenager Mallory Beach, who died in an alcohol-related nighttime boat crash into a bridge near Beaufort, grabbed plenty of headlines, but at least 11 other people also died in South Carolina boating accidents last year. And that was fewer than average.

Reported accidents average about 130 per year. No doubt, the actual number is higher.

As reported recently by The Post and Courier's Bo Petersen, law enforcement officers with the Department of Natural Resources are struggling to keep up with the ballooning number of boaters. The number of registered watercraft statewide stands at nearly 400,000, up by about 5,000 over the past few years.

So it's becoming more important than ever for boaters to take their responsibilities more seriously, old salts and new boaters alike.

Though South Carolina only requires motorboat operators younger than 16 to have

boating-safety certificates, all new boaters should take a basic safety course. Plenty are available from DNR, the Coast Guard and through associations like BoatUS. Most are inexpensive and some can be completed online.

Certain safety equipment is legally required for ocean-goers such as a VHF radio, fire extinguishers, life preservers and signal flares, but they won't do much good if you don't use them — or know how to use them.

Knowing which vessel has the right of way in a number of situations is vital when boating among container ships, sailboats and jet skis in a crowded harbor like Charleston's. You need to know how to read nautical charts and tide tables when wending your way through tidal creeks or trying to find your way home. And you need to know how to render aid to fellow boaters or to call for help when all else fails.

Potential hazards are everywhere. Motorboaters should have a body-worn kill switch to prevent falling overboard into a whirling prop. Such a device might have saved a sheriff's deputy killed during a training mission on Lake Hartwell in 2018.

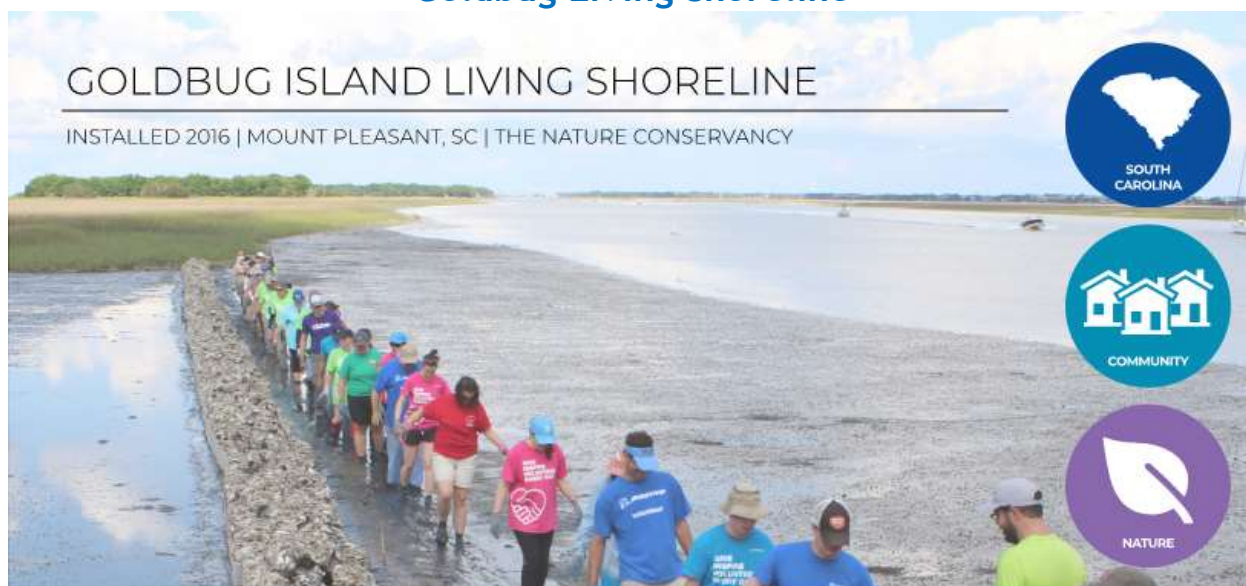
There's no good evidence that stricter regulations, such as requiring a boater's license, would help reduce accidents. Alabama is the only state that requires such a license, and it consistently has among the highest rate of boating deaths.

At its core, boating safety in South Carolina is a matter of personal responsibility. So while the height of boating season is months away, it's a good time to get your boat and yourself ready for a safe summer on the water.

credit: Post and Courier



## Goldbug Living Shoreline



**CHARLESTON, SOUTH CAROLINA** has experienced an increase in flooding due to rising sea levels and extreme precipitation events. Annual days of tidal flooding, which cause storm-water drainage stress and street flooding, increased by 12 days to a total of 50 between 2015 and 2016 and is forecasted to reach 180 days by 2045.<sup>1</sup> Nature-based solutions, such as living shorelines and oyster reefs, provide a cost-effective way to address these threats.

The Goldbug Island Living Shoreline was completed in 2016 near Sullivan's Island as an illustration of one way to address tidal flooding. The Nature Conservancy worked with local groups to develop this installation, using oyster habitat restoration to increase vegetation and assist in shoreline protection. Over a hundred volunteers assisted to create the 240 feet long living shoreline, built from wooden pallets, castle building blocks, and oyster shells.<sup>2</sup>

Oysters have attached to the reef at Goldbug, helping wildlife and fish populations thrive while also protecting the eroding shoreline from increasingly high tides. The visible high tide vegetation line moved out 30 to 70 feet from the shore between 2016 and 2018 (photo on reverse), indicating increased stability and protection against higher tides.<sup>3</sup>

Living shoreline installations utilize structures and reinforcements created from natural materials, such as oyster shells and vegetation, to protect shorelines from erosion and flooding caused by storms and sea level rise. These protected coastal zones are a valuable alternative to grey infrastructure, which can cost up to three times more for materials and installation and often causes accelerated erosion on adjacent properties or damage to habitats when wave energy bounces off rigid seawalls.<sup>4,5</sup> Living shorelines also enhance the natural habitats of marine life, increasing water quality and fish populations, bringing a benefit to those who make a living fishing.

In addition to these shorter-term benefits, living shorelines play an important role in climate change mitigation through carbon uptake and storage. In a year, one square mile of marsh stores the carbon equivalent of 76,000 gallons of gasoline.<sup>6</sup>

References and photo credits available at [climateinteractive.org/resilience](https://climateinteractive.org/resilience)

### PROJECT GOALS

- Display co-benefits of oyster restoration
- Alleviate flooding
- Prevent erosion
- Restore marine life habitats

### OYSTER REEF BENEFITS



One oyster can filter 180 liters of water per day<sup>7</sup>



They boost populations of over 130 fish and invertebrate species, improving sustenance fishing for communities<sup>8</sup>



SC commercial fishing value of oysters was \$2.6 million in 2017<sup>9</sup>



Oyster reefs save \$750/meter on coastline protection<sup>7</sup>



## GOLDBUG LIVING SHORELINE RESULTS<sup>3</sup>

- 2019 New vegetation clusters
- 2019 Vegetation above high water
- 2018 Vegetation above high water
- 2017 Vegetation above high water
- 2016 Living shoreline reef
- 2016 Vegetation above high water



## LEADERSHIP AND COLLABORATION

The Goldbug project was initiated by The Nature Conservancy (TNC) and funded with a 2-year Climate Adaptation Fund grant from the Wildlife Conservation Society. CH2M worked with TNC to develop the design of the structure, and over 200 volunteers have participated in installation and monitoring of the project, including groups from the Citadel and Boeing. TNC and the South Carolina Department of Natural Resources (SCDNR) continue to monitor water quality, oyster and vegetation growth, and sediment accretion from the installation.<sup>2</sup>

### BUSINESS

CH2M (D)  
East Cooper Outboard Motor Club (I)  
H&E Equipment Services (F)

### SOCIAL MISSION

The Nature Conservancy (A, C, D, E, I)  
Wildlife Conservation Society (F)  
Lowcountry Land Trust (E, I)

### GOVERNMENT

SC Department of Natural Resources (E)

A: Advocacy, C: Champion, D: Design, E: Evaluation, F: Funding, I: Implementation

## REPLICATION

The Nature Conservancy has installed living shorelines across the United States, including 8 in South Carolina since 2009. The Living Shorelines Academy provides a collection of databases listing these and other installations across the US, online training modules, and a practitioner directory.

A working group comprised of the South Carolina Department of Health and Environmental Control and SCDNR is in the process of a 5-year study to define living shorelines permitting separately from grey infrastructure, setting standards and evaluation criteria to make these projects accessible to more people in the state.<sup>10</sup>

## CLIMATE AND RESILIENCE BENEFITS



References and photo credits available at [climateinteractive.org/resilience](https://climateinteractive.org/resilience)

## OTHER BENEFITS



**FOOD & WATER**  
**JOBS & ASSETS**  
**HEALTH, WELLBEING, & SAFETY**  
**CONNECTION**  
**RESILIENCE**

## CONTACT INFORMATION

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The Nature Conservancy  
Protecting nature. Preserving life.<sup>®</sup>

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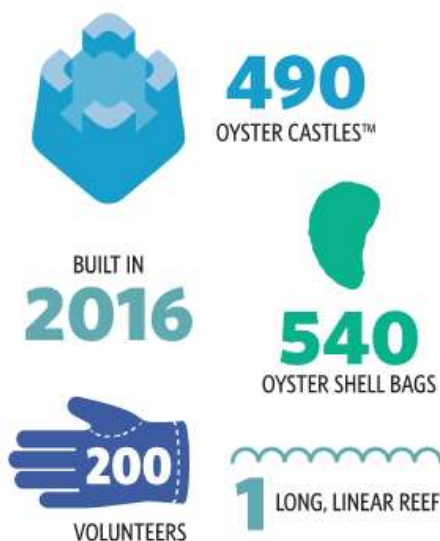


## Living Shoreline Fact Sheet



Over 170 volunteers installed the living shoreline reef at Goldbug Island, forming a human chain to pass 490 Oyster Castles™ and 540 oyster shell bags to build the 225-ft-long reef.

Goldbug Island sits about 20 minutes from downtown Charleston. The island is privately owned by the East Cooper Outboard Motor Club and held under easement by Lowcountry Land Trust. The Nature Conservancy (TNC) was awarded funding by the Wildlife Conservation Society's Climate Adaptation Fund for a living shoreline demonstration project near the developed coast of Charleston. This project used a combination of geotextile wrapped pallets, Oyster Castles™, and bagged oyster shells and is the longest linear reef installed to date by TNC.



## THE NATURE CONSERVANCY IN SOUTH CAROLINA

1417 Stuart Engals Blvd., Suite 100 | Mount Pleasant, SC 29464 | [nature.org/southcarolina](http://nature.org/southcarolina)



The Intracoastal Waterway is a high-energy environment, and areas of marsh are experiencing significant erosion, including a portion of Goldbug Island. TNC sought to install a living shoreline near the urban region of Charleston to demonstrate the value and effectiveness of nature-based solutions in these types of environments.

The reef was co-designed by CH2M, an engineering firm, to ensure that the materials were elevated out of the mud, promote optimal oyster growth, and attenuate wave energy. Due to the soft nature of the sediment, the base of the reef is made of wooden pallets, which support a layer of Oyster Castles™ and a layer of bagged oyster shell.

TNC monitors oyster growth, vegetation growth, and sediment accretion annually. Within the first year, oysters had grown to 3 inches, and within two years, the eroded vegetation line had moved 30 to 70 feet closer to the reef, highlighting the wave attenuation properties of the reef.



### PARTNERS

CH2M  
East Cooper Outboard  
Motor Club  
H&E Equipment  
Services  
Lowcountry Land Trust  
South Carolina  
Department of  
Natural Resources

### FUNDERS

Wildlife Conservation  
Society (53%)  
Duke (private) (47%)

### FUN FACT

The Goldbug Island living shoreline is the longest reef installed by TNC to date at 225 ft long, 4 ft wide, and 1.5 ft high.

### REEF METRICS

#### OYSTERS

▲ High

#### MARSH

▲ High

#### SEDIMENTATION

▲ High

*\*Trends based on long term observations of reefs compared to natural and other built reefs in South Carolina.*



Andrea Margiotta, marine technician for TNC in South Carolina, monitors the growth of oysters on the reef materials. This was the first reef The Nature Conservancy installed in which 3 inches of oyster growth was recorded in the first year!

PHOTOS JOY BROWN/TNC

2016



The reef was installed in April 2016 and made of wooden pallets, Oyster Castles™, and bagged oyster shell. Prior to its installation, heavy wave and boat activity had caused the marsh to erode into a U-shape.

2019



By July 2019, wave attenuation and sediment accretion behind the reef had stabilized the shoreline enough to allow for significant growth of marsh grass. Multiple size classes of oysters are now thriving on the reef.