



MISSION: BEAUTIFICATION ... CONSERVATION ... EDUCATION

Planting and Growing with Challenges

August 2021

Volume: VI Number: 4

Environmental Issue: Mary Lovings, Editor

Environmental Edition: May, August, November, February - Mary Lovings, Editor
Gardening Edition: June, September, December, March - Linda Doiron, Editor
Landscape Design: July, October, January, April - Suzanne Finger, Editor

GCG Environmental Statement:

The Garden Club of Georgia, Inc. is dedicated to the responsible stewardship of Georgia's natural heritage with a strong commitment to improve, restore, and protect the environment. This commitment includes, but is not limited to promoting cleaner air, cleaner water, environmentally effective management, roadside beautification, litter reduction, and protection of Georgia's wildlife and natural resources. Revised August 2021.

N.B. the above is additionally and essentially a listing of topics for GCG Position Papers available on the GCG Website's opening page under Position Papers - Revised. Concepts within the POSITION PAPERS. - click where directed to "Click here" to find them under LEGISLATION. GCG acts similarly to Dr. Seuss's character in The Lorax where the Lorax states, "I speak for the trees for the trees have no tongues." Similarly, GCG speaks for and advocates for the tongueless/nonspeaking elements of the environment and states the sorts of legislative activity necessary for conservation and protection. And, then, it's valid that **Legislation is what makes Conservation happen** in Georgia. When one absorbs and grasps this paragraph, one knows what GCG advocacy and conservation are about.



FIRST, BEAUTY, and then, RECIPE FOR A COASTAL CATASTROPHIC CASSEROLE

First, BEAUTY: LUNA MOTHS

Among lovely and fleeting elements of wildlife in Georgia is the Luna Moth, *Actias luna*. The spots on its back/lower wings resemble moons; hence the *luna*. Luna moths also are appropriately night fliers attracted to lights, often alighting on windows or on screens with lights behind them.

Light green in color with white veins and bodies, Lunas' wings are almost transparent although there are also albino variations of the moths. They are considered akin to silk moths. Wingspread is approximately four inches with maroon/magenta and white bands along wing edges.

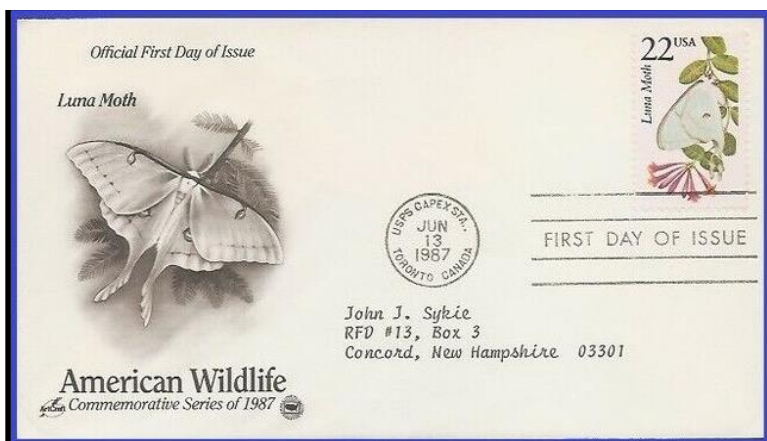
(Recent photo, left, courtesy of close friend and neighbor in suburban Atlanta, taken in a late afternoon by Elaine Sacks, shows a luna moth with its lower or back wings mostly covered by the upper or front ones.)

Luna moths emerge after going through the standard egg to larva/caterpillar and to pupa/cocoon stages of metamorphosis to live briefly, for only a week or so. They lack digestive tracts and survive on stored nutrition from caterpillar days. Predators for Lunas include owls and bats, as well as other fly by night species. Often, Lunas use their long, slender hindwing tails to distract and to interfere with bats' echolocation. Seeing Lunas that have had bites taken from their wings is not unusual. They do continue to live their lives if their heads and food storage bodies are protected, even when wings may be bitten or otherwise damaged.

Luna moths' strongest defense mechanism is the moon or eye like spots on wings that when spread open wide make the whole moth look like the face of a larger and therefore more threatening creature. For their short lives, they survive on nutrition stored in their bodies during their caterpillar days when they live on and eat leaves to store the nutrition for their brief time - roughly a week - as moths. Their primary purpose is to reproduce. Females, a slightly larger and darker green than males also have narrow antennae. Their bodies are larger because they contain hundreds of eggs; males have slightly larger and fuzzy antennae. They find each other through females releasing pheromones (chemicals) into the air that the males can follow.

Luna moths are also often considered symbols of good luck or good fortune. As example, one landing on a wrist in the film trilogy **The Hunger Games** (2012, 2013, 2014) foreshadows good fortune for a character.

The reproduced card below of a First Day Issue - found on Google - is a bit of stamp collecting history. Such items are valued by philatelists and form important parts of many stamp collections. Proportions of a USPS stamp likely precluded a full view of the moth on the stamp itself but the philatelist's treasure allowed space for a honeysuckle branch.



If one searches, many commercial items are available with Luna moth images. Need a silk luna moth necklace or a t-shirt or even a blanket? They are out there. Or, through Carolina Biological Supply, one can purchase luna moths in the pupa stage to watch develop. Clemson University has a card with removable luna moths in their four stages - made likely of plastic - as well as detailed information and outstanding photos. Also, luna stickers are available. Use Google for more photos of these items you can own and detailed information about the luna moth as a wonder itself. They are astoundingly photogenic.

[This editor's introduction to Luna moths was Len Foote Hike Inn, in Amicalola Falls State Park, while serving on its board of directors. The backcountry inn, reached by a five-mile trail hike does all possible for conservation. As a nonprofit organization, it has the highest - Platinum - LEED certification, bunks with bedding, composting toilets, solar panels, hot showers, good meals (dinner and breakfast), worm composting of appropriate table scraps, varied evening programs related to hiking and conservation and go.

It's a place to leave the rest of the world - including television - out of life for a respite. Check its website and go there.]

SECOND; CONSERVATION CAPSIZE CATASTROPHE CASSEROLE: [GCG members are experts with recipes, cooking, and cookbooks, **INCLUDING** the making and selling thereof. The recipe format below is intended to include pertinent information about *a*, if not *the*, major catastrophic ship capsize in Saint Simons Sound, barely off Georgia's Jekyll Island, one of its barrier islands and a treasure of recreation and conservation, presented in a hopefully palatable format that is not intended to detract from the horror and damage of the event itself.]

CONSERVATION CAPSIZE CATASTROPHE CASSEROLE, September 8, 2019

Definitions of ingredients with nautical content:

draft: the depth to which a vessel is immersed when bearing a given load

ballast: any heavy material carried temporarily or permanently in a vessel to provide desired balance and stability, often water that can be pumped in and released

harbor pilot: a mariner who guides a ship through dangerous or congested waters, ones who know locations of shifting sandbars and channel openings

sound: a large body of water between an ocean and an inlet that commonly separates a coastline from an island or a series of barrier islands; a sound generally has both salt sea water and fresh river water and is home to a wide variety of marine life harvested and consumed as seafood

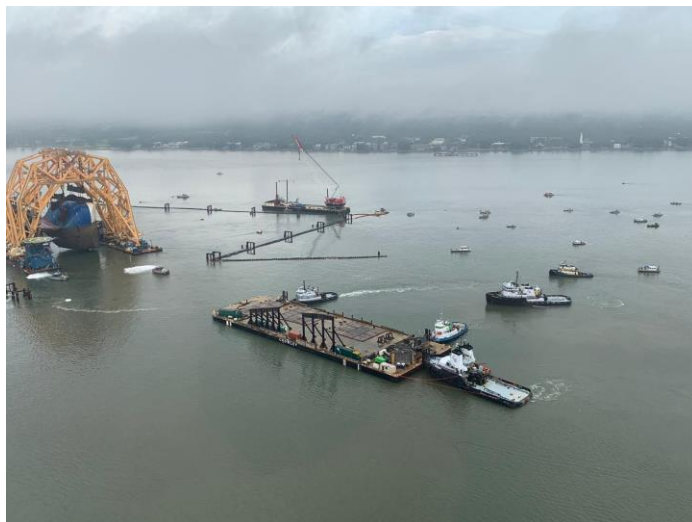
INGREDIENTS:

1 State bordered by Atlantic Ocean coastline of approximately 100 miles, named Georgia;

1 loaded automobile carrier, the *Golden Ray*, registered in South Korea containing over 4,200 assorted new vehicles including ones made by Kia, Chevrolet, GMC, GM, Mercedes-Benz, and Ram, according to Car and Driver;

1 during predawn darkness on September 8, 2019, the *Golden Ray* capsized; note that the third hurricane season is in full swing since event is now in effect;

1 harbor pilot aboard to guide the ship through the sound, past the Savannah River, into an open waters shipping lane and headed to Baltimore.



*Photo on the left, from Captain, of the *Golden Ray*, under a floating yellow operations structure shows the scope of the wreck scene and demolition site, its distance offshore and includes a barge used as an operations platform.*

1 accidentally capsized ship evidently due to imbalance of cargo. Ballast water was dumped before it reached Brunswick - just before a hurricane - at the river mouth of Georgia's second largest port, just above the

coast at St. Simon's Island, Georgia's largest barrier island, located within Glynn County, between the

state's two major ports, Brunswick and Savannah, on September 8, 2019, in St. Simon's Sound. Its cargo, including 24 filled fuel tanks, was not balanced and toppled over onto a sandbar.

SEASONING: Capsize date in early September was within an annual hurricane season; to date, the third hurricane season for this continuing story is in place.

All parts of the Golden Ray, the vehicles, as well gas, oil, transmission fluid and other chemicals harmful and toxic to plants and animals have not yet all been removed or flowed out or burned during a fire on the ship. Demolition and removal for scrap of the ship that was lying on its port (left) side and its vehicle content is anticipated to continue for up to as long as fifteen or more weeks.

Photo, to the right, shows more of the massive scale of the one section of the ship on its side under the yellow structure erected to make further demolition possible. Vehicles dangle precariously. The photo even resembles the layers in a casserole.

Approximately 44,000 gallons of oil as well as gas, oil, and antifreeze within the vehicles aboard the Golden Ray were still within the ship in late 2019 after more than 300,000 oil/water gallons had been removed. Additionally, more than 35,000 pounds of oily sand have been removed from Saint Simons Island.



Insurance losses for the Golden Ray itself are estimated at seventy to eighty million dollars. Vehicles that were inside the ship were similarly valued.

Photo to the right from Car and Driver

shows a cross section of part of the ship on its side with vehicles jumbled and dangling within one of the eight sections of the ship as its layers and levels appeared during demolition. The vessel has been cut into eight sections to enable removal of the vehicles and the ship sections, hauling them away to be recycled if possible and or scrapped. As much as possible of the gas, oil, transmission and other fluids as feasible was also collected.

N.B. the photo above is included strictly for educational purposes.

By early August 2021, 35,000 pounds of oily sand had been collected from St. Simon's Island. Removal of the sections of the vessel to be disposed of and/or recycled or scrapped was necessary to mitigate the oil and chemicals that contaminate marshes, wildlife, and beaches of St. Simons Island, one of Georgia's coastal treasures, became part of the demolition process.

Despite the ship lying on its port (left side from the bow), on a sandbar where it capsized while making a turn just after leaving the port at Brunswick, all twenty-four crew members were removed safely, some after rescue cutting into the ship's hull to reach and to rescue the last of them associated with this major maritime disaster, just off one of the most golden of the Golden Isles of Georgia.

COOKING TIME: two years and counting with Georgia's seasons and varied temperatures, plus pollen.

PERHAPS - just perhaps - the only and truly golden part of this catastrophic Golden Ray casserole episode is that as of August, 2021, there has been no loss of human life,

despite considerable ecological damage to coastal flora, fauna, land, and waters. Protection of such natural resources is assuredly part of the GCG Mission.