

Ecology Guide

~ Second Edition ~



# **Acknowledgements**

Several people contributed their time and talents to make this second edition of the Dataw Island Ecology Guide. Mark Pritchard initially reviewed and commented on the original Ecology Guide published in 2020. He and Guy Apicella rewrote several sections that needed updating and reediting.

Gerry Mueller revised the text with technical guidance from Laura Quail. A number of Dataw resident photographers, including Mark Pritchard, Tuffy Hartz, Denise Sullivan, and Sandy Morse, contributed the photographs that appear in this guide.

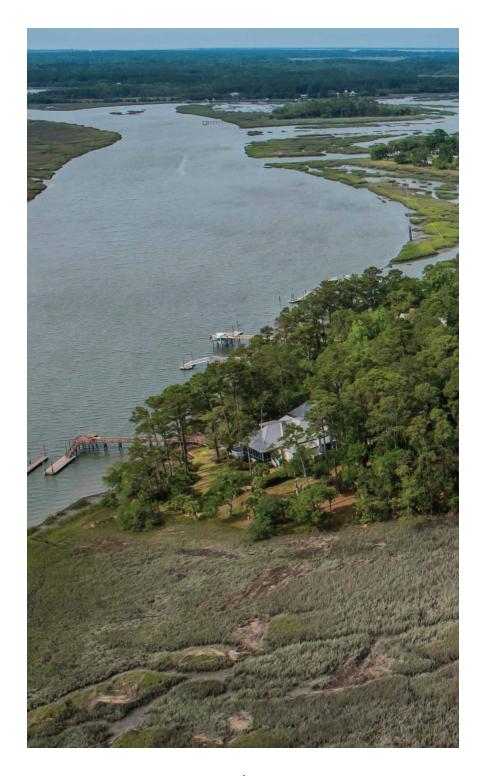
Laura Quail formatted and Anne Miglarese proofread the new guide. Guy Apicella coordinated the team.

# Datau Island Ecology Guide

# A publication for our Dataw Island Community



~ Second Edition ~



# TABLE OF CONTENTS

Preface		page 2
Table of Contents		page 3
1.	General Guidelines and Principles	page 6
2.	Wildlife on the Island	page 13
3.	Vegetation on the Island	page 31
4.	The Importance of the Salt Marsh	page 43
5.	Problems/Solutions	page 46
6.	Special Ecological projects on Dataw Island	page 55
7.	Resources	page 62

Many of our residents have come here from major cities and have had little exposure to the many exotic birds, plants and animals of the Lowcountry. Certainly, most have never lived in such close proximity to them. The goal of this guide is to educate our residents to the role they play in order to fully appreciate this natural paradise.



# GENERAL GUIDELINES AND PRINCIPLES

The Dataw Island community is located on one of 68 inhabited islands in Beaufort County. It is comprised of two islands, the original Datha Island and Oak Island, about 840 acres surrounded by tidal marshland, Jenkins Creek and the Morgan River. Within the community are many freshwater lakes and ponds as well as nesting and brooding

areas for a variety of transient and resident species of birds. Among others, Ospreys, Red-tailed Hawks and Bald Eagles are common on and around Dataw. Southern River otters and mink periodically enter the ponds to feed. Raccoons and opossum are commonly seen, as well as Whitetail deer. Alligators breed in the freshwater ponds and while they are mostly found in fresh water, they also occasionally move into the surrounding marsh. There are also a number of community cats, the remnants of a feral population which have been rounded up, spayed/neutered, and given rabies shots by the Dataw Island Feline Foundation. Thus, we share the islands with a variety



of birds, mammals, reptiles and other kinds of wildlife. In order to coexist in harmony with these wondrous creatures each of us must respect their place, protect their natural nesting and breeding places and enjoy their presence without either endangering their survival or taking any unnecessary risks ourselves.

#### **SAFETY**

#### BEWARE! WILDLIFE IS WILD LIFE!

Dataw Island is abundant with wildlife! The many species of wildlife are what makes our community so unique. We have provided the following information in order to help you enjoy Dataw and its wildlife in a way that is safe for you, your family and guests, and also for the animals.

The wildlife on Dataw are truly WILD and the goal is to keep it that way. In particular, we ask that you do not feed, interact with or handle any of the wildlife species that are native to Dataw Island. No matter how cute or interesting a raccoon or alligator may seem, there are dangers in being too close to these creatures. We should photograph them from a safe distance. DO NOT FEED any of the animals. This includes throwing any type of food into the ponds.

#### **ALLIGATORS**

Most of the freshwater lagoons or ponds on the Island have alligators. They pose potential danger to children, pets and even adults if one feeds them or behaves in a careless manner around them. Signs are posted at every pond that read "DO NOT FEED THE ALLIGATORS AS THEY CAN BE DANGEROUS". South Carolina State law states: "It is unlawful to feed or entice with food any American Alligator".

Anglers who hook any fish in these ponds may rapidly attract the interest of both small and large alligators alike. Be very cautious around our ponds.

AVOID FISHING NEAR ALLIGATORS as they can swim rapidly to intercept a hooked fish and are remarkably fast on land once the fish is brought out of the water. Alligators can run over 35 mph for short distances.

DO NOT ENTER THE WATER to try to manually retrieve lost objects such as golf balls from pond waters. Particularly avoid the ponds during hours of low light (dawn and dusk) and nighttime. Caution should be exercised around any of our ponds. Be especially cautious and avoid being in areas where plants and grasses grow and partially obscure the water's edge.

SMALL CHILDREN AND DOGS SHOULD NOT BE BROUGHT TO OR LEFT UNATTENDED NEAR ANY POND. Alligators are generally timid and may fear adults. However, they may consider small children and animals suitable for a meal. While we should not be fearful of these alligators, we should respect them, give them ample space, and not provoke them. It is particularly important to use extreme caution if there are any "baby" alligators in or near the ponds as the mother alligators are very protective. If the young alligators are disturbed and start croaking, leave the area immediately!

Throughout the state of South Carolina and especially on Dataw Island, dogs are required to be on a leash at all times when off the owner's property. There have been two dog fatalities caused by alligators on Dataw in recent years and there have been several reports of dogs and people being seriously injured or even killed here in Beaufort County. That being said, anyone who experiences or witnesses aggressive behavior on the



part of alligators, should report this to Dataw Security describing location, approximate size and behavior.
Dataw Security, can be reached at (843) 838-8275 or by way of email at security.gate@dataw.com.

AVIAN
ROOKERIES AND
OTHER NESTING
SITES NEED
PROTECTION

Many species of birds are transient to the Island while some nest here - Great Egrets, Snowy Egrets, Great Blue Herons, Wood Storks, Tricolored Herons, Anhingas, Cormorants and Little Blue Herons to name a few. There are two bird counts conducted each year during the

winter months. There are typically between 85-100 separate species of birds identified on Dataw and Oak Islands -- and that's just during the winter.

#### CRABBING AND CRAB TRAPS

Crabbing season is open all year with the best results obtained July through November.





ALL CRAB TRAPS MUST BE LABELED with the owner's name. Crab traps may be used at both the Dataw Drive dock and the Sparrow Nest dock.

Crab traps must be hung from the lower rail of the dock so that they will hang under the walkway and leave the upper rail free for fishermen and shrimpers. During crabbing season they may be left in place. We ask that you move any traps not currently being used to a position 50 feet back from the end of the dock to

allow those actively crabbing to use the end portion. During the off season, all traps should be taken home and stored.

Traps should be checked every day when baited and in the water since crabs will eat each other if their food





source is gone. South Carolina state regulations allow an individual without a license to put out no more than two traps. In addition, they MUST be placed so that they are UNDERWATER even at low tide. Blue crabs reproduce in the late spring and summer months so it is very important to immediately release the female blue crabs with an egg mass The egg mass, called sponge, is located on the underside of the crab and is usually orange. The female carapace (top part of the shell) is wider and has more distinct striped markings. You may harvest blue crabs only if they measure at least 5 inches from point to point.

Although many people use the traps mentioned above for crabbing, catching blue crab with a string, weight and chicken neck is still the





fun way to crab, Have a net ready to snag the crab while you slowly pull it to the surface. Tongs are a safe and convenient way to handle these feisty creatures.

#### HAPPY CRABBING!

#### **FISHING**

Dataw has a "catch and release "policy for fish caught in the ponds and lagoons. The chemical run off from the golf course may make these fish unhealthy to eat. Edible saltwater species can be caught from the Oak Island, kayak launches, and the community docks, including Sparrows Nest. Although a South Carolina fishing license is not required to fish from these places, size and number regulations do apply and are listed in the booklet "South Carolina Rules and Regulations" which is free at marinas and sports stores. Fishing licenses are required when fishing from a boat.

# GOLF BALLS IN PONDS

Golf balls are NOT to be retrieved from ponds lagoons or marsh on the golf course using any sort of device EXCEPT the individual ball retriever that many golfers have in their bag. Raking or netting not only disturbs the

fish, grasses, etc. on the bottom of the pond or along the marsh but one may also disturb other wildlife or even retrieve a curious and dangerous alligator! In addition, walking into the cord grass areas that surround the lagoons and marsh for golf ball retrieval is discouraged. Not only does this damage the grass but many times the grass is known to shelter the Island's wildlife. Mass ball retrieval is handled by the Pro Shop only.

# 2. WILDLIFE OF THE ISLAND

### **DEER**

There are resident deer on Dataw and since they do not have any natural predators (unless they get too close to an alligator!) they too enjoy the peace and serenity of the Island. Feeding the deer is highly discouraged as it endangers both the deer and the person. Please refrain from feeding and leave our animal friends to forage for themselves. Unfortunately, sometimes their foraging will include samplings from your garden. Therefore, when planning or adding to your landscaping, you may want to obtain a list of deer-resistant plants and shrubs from your local nursery and include them in your plans. It is not unusual to see a family of deer crossing the road, especially at night. Please be careful when driving in the evening.



In order for the deer to have sufficient natural foliage to eat Dataw Island strives to keep the herd at a manageable number. This is accomplished through an annual culling program and is managed by the DIOA after a deer count is completed for the current year. This process is accomplished in a humane manner. All precautions are taken to protect our residents during this time.

#### **SNAKES**

We have a variety of snakes on the island. Snakes help to control insects and rodents and are very important to the ecosystem. However, we also have snakes that are very dangerous to humans. These include copperheads, water moccasins, rattlesnakes, and coral snakes. It is a good idea to walk carefully and attentively in the woods and along the marshes and lagoons. While gardening check carefully where you put your hands.

WE DISCOURAGE THE KILLING OF ALL SNAKE SPECIES.

More information about snakes follows, courtesy of the Clemson University Extension Cooperative Service.

Poisonous snakes found in the State are either pit vipers or the Eastern Coral snake. The pit vipers include rattlesnakes, cottonmouths (water moccasins) and copperheads. Pit vipers have vertical, elliptical pupils and a jaw wider than the neck (triangular head). Other than the coral snake, snakes without triangular heads are non-poisonous.

The pit vipers have a heat-sensitive pit between the eye and the nostril. These snakes inject poison through hollow fangs connected to poison glands located

on either side of the head. Venoms of pit vipers are species specific and the reactions of victims to the venom is unpredictable. Symptoms following a bite from a pit viper include pain, swelling, nausea, weakness, sweating or chills and shock. Death may occur if adequate medical attention is not given.

Eastern Coral snakes have small, fixed fangs attached via a duct to poison glands. These snakes bite quickly but only administer a small amount of venom unless they hold on to their victim for some time. Eastern coral snake adults are two feet long with red, yellow and black rings encircling the body. They have round pupils and the head is not triangular. Use the rhyme, "red touches yellow, kills a fellow" to distinguish coral snakes from other ringed snakes. The venom of a coral snake is a neurotoxin that may cause paralysis of the respiratory system and death. Minimum pain and swelling may result in bite victims not being treated as quickly as possible. Precursors to serious respiratory problems are dizziness, vomiting, blurred vision and spastic reflexes.

Snake bites may be prevented by being observant and moving cautiously in areas where snakes might occur, such as under houses and steps, wood piles, heavy brush or ground-cover areas, etc. If these areas are unavoidable, wear high-topped (snake) boots and thick leather gloves. Avoid stepping over fallen trees, but rather stand on them and look down before proceeding.

Treatments for poisonous snake bites include: keeping the victim calm, limiting activity and keeping the bite below heart level. Remove

bracelets, watches and rings as swelling may occur. Get the victim to a hospital emergency room as quickly as possible. (Note: Most doctor's offices and clinics do NOT stock anti-venom). Do not consume alcohol, stimulants or medicine. Do not apply ice or a tourniquet. Do NOT "cut and suck" unless properly trained. Emergency phone numbers and the South Carolina Poison Control Center is 1-800-222-1222.

To learn more about snakes there are several excellent websites, including www.backyardnature.net/snakes.

htm

## **SKINKS**

The Southeastern Five-Lined Skink is a moderately large lizard with short legs and streamlined body. Young have a bright blue tail while adults often lose their stripes and develop reddish or orange coloration on the head. Skinks prey on a wide





variety of insects, spiders and other invertebrates. The blue-tailed young are widely referred to as "scorpions" and are believed by some to have a venomous sting. While this belief is completely false, some scientists speculate that these skinks are bad-tasting to many predators.

## **ANOLES**



The Green Anole is a lizard with a narrow head and long, slender tail. It can vary its color from grey brown to bright green to blend in with its surroundings; however, it is not a true chameleon. It is one of the few reptiles which ventures out during the day in the summer heat. The male is often seen showing off a bright red flap of skin under its neck called a dewlap used to frighten away rivals and attract females. Anoles eat a variety of insects, including spiders and cockroaches. These small amphibians often find their way into our homes. Suggested methods of removal include gentle sweeping towards an open door or capturing in a dishtowel and set free.

#### MINK

The riprap of the causeway is home to many families

of mink. Members of the weasel family, they are mainly nocturnal and feed on fish and small animals. In order to observe these aloof animals, you must be up in the early morning mist before they go home for their day of sleep.



### **OTTERS**

Another member of the weasel family is the River Otter. They swim as smoothly as a dolphin and quieter than an alligator. Adults weigh about 25 pounds and can swim underwater for over half a mile at speeds up to 12 mph, They are



great fun to watch as they cavort in the marsh and rivers around Dataw. They have their pups in March and, if you are lucky, you might see Mom with babies on her back teaching them to swim and dive.

#### **DOLPHINS**

We have many Bottle-Nosed Dolphins in our surrounding waters, They basically stay here year-round going out to deeper, warmer water to feed only during the winter. During the summer months a trip to the Marina will most likely yield several dolphin sightings. The dolphins in this area practice strand feeding, which occurs only in a few places in the world. If you are lucky, you may observe this unique phenomenon. Several dolphins (usually no more than 5 working as a team) find a school of fish swimming near the shore and, together they push the water and fish up on the bank. They then slide themselves up on the bank, capturing their prey either in the air or stranded on the mud or sand. As with all wild animals, do not feed these lovable mammals.

### **ALLIGATORS**



The ponds on Dataw are home to many alligators ranging from tiny babies to 12-footers. While the smaller alligators (up to 3 or 4 feet) do not pose a threat to us, they might have parents who do!



The best advice is to observe from a distance.

#### Movements

Alligators move among ponds on Dataw Island. They also move off the island into the surrounding marsh and creeks. They may move in search of food or mating opportunities, or they may be forced to leave by competing alligators. Most of their travel is done at night. The home range size of adult males is around 2000 acres. Alligators have behavior patterns just like people. If you see an alligator in the same spot for several days, chances are that you are looking at the same individual.

Alligators in the winter seek refuge in dens, often constructed under the banks of ponds. On warm winter days, alligators may come out to bask in the sun, but they usually only extend their snout above water to take a breath of air before retreating back into their dens.

#### Feeding habits

Alligators eat a variety of prey. The diet of an individual depends on his or her size. All individuals are carnivorous. Hatchlings and young alligators eat small fish, amphibians, insects, snails and crustaceans. Large alligators feed more on large fish, turtles, snakes, birds and mammals. The favorite food of many coastal alligators is the blue crab. Because alligators are

ectothermic (i.e. cold-blooded), their feeding activity is dependent on body temperature. Alligators must stop feeding periodically and bask to help them digest their food. During the winter, alligators typically are inactive and do not eat.

#### Reproduction

Both males and females reach sexual maturity when they reach around 6 feet in length. The courtship and mating season on Dataw Island occurs in April and May. During this time, males often bellow loud tones to attract females and warn competing males. The males construct nests consisting of leaf litter, vegetation and mud. The same nest may be used in different years. Breeding occurs in open water. In late June to early July, females lay 20-60 eggs and covers them with a layer of vegetation to keep them warm. The incubation period is approximately 65 days. The ambient temperature in the nest determines the sex of the hatchlinas. Constant incubation temperatures below 86 degrees Fahrenheit produces females. Temperatures above 93 degrees Fahrenheit produces males. Temperatures in between results in mixed genders. Female alligators are good parents, protecting babies at all stages from predators such as wading birds. turtles, large fish and people (be cautious!) Hatchling gators stay together in a pod from 1-3 years.

## Alligators and People

Because of the recovery in the numbers of alligators and the increase in the number of people living in coastal areas, encounters with alligators have increased. In addition, people like to create good alligator habitat (e.g. golf courses). There are fewer than 10 alligator attacks per year despite the millions of alligators throughout the Southeast. Most of these attacks are in Florida. Most attacks occur because

alligators lose their natural fear of humans as a result of learning to associate people with food or because they are defending a territory. Alligators are an important part of Dataw and are here to stay. We can coexist if certain rules are followed:

- Do not approach alligators
- Do not harass (e.g. throw things at, chase) alligators
- Do not allow small children and pets near the edges of ponds
- Do not throw bait in ponds after crabbing or fishing
- DO NOT FEED ALLIGATORS

Remember the adage that a fed alligator is a dead alligator. They cannot be relocated, only euthanized. So let them fend for themselves. They're quite good at it!



#### COTTON OR MARSH RATS

Often, that rustling in the brush is the scurrying of a marsh rat. They remind you of your pet gerbil and provide a very important food source for our many hawks, owls, snakes and even herons.

There is no need to eliminate them because they are ecologically important in the food chain.

#### MARSH RABBITS



That cute Dataw bunny can be seen early in the morning munching on grass near the edge of ponds. They have dark brown coats and white bellies Their ears are fairly short and they have shorter hind legs than those of most other species of rabbits. They can walk on their hind legs which is an unusual ability for a rabbit species.

Marsh rabbits flee to water when they are threatened. They run in a zigzag pattern to elude their predator, and when in water, they float with only their eyes and noses exposed (somewhat like an alligator). They eat many types of green vegetation, feeding on clover and poison ivy in the winter months. These rabbits are important prey for our raptors and other animals, and as such, they are welcome on Dataw Island.

## **RACCOONS**

That scruffy-looking raccoon you see wandering around in daylight hours has probably just come out of the marsh after feeding on inter-tidal oysters. This diurnal (out in the daylight hours) is not necessarily



rabid, just hungry. As with all wildlife, keep your distance but do not be overly concerned.

#### GREEN TREE FROGS

The Green Tree Frog is the most common tree frog found in South Carolina. It can

often be seen clinging to windows and porch lights with its suction cup toe pads. These frogs are carnivores and will eat any insects they can fit into their mouths. Green Tree Frogs have white bellies and smooth skin. They



sleep during the day and forage at night. Their loud "bark" is very deceptive for such a small amphibian. Other South Carolina tree frogs found in our area include the Spring Peeper, Bird-voiced Tree Frog and Barking Tree Frog.

#### **BATS**

Dataw Island is home to a flying mammal called the bat. The Brown Bat is common to our area and, like



all insect-eating bats, the Brown Bat can consume a wade variety of night-flying insects and small beetles. These flying mammals contribute to a healthy environment and are vital players in the checks and balances of insect pests. The reproductive females can consume their body weight in insects each night. Bats form maternity colonies in tree cavities, under bridges, in barns and buildings. Brown bats rank among America's most beneficial animals. Besides the Brown Bat, the Brazilian Free-tailed and Evening Bat inhabit our area.

Being forced out of traditional forest habitats due to encroaching human populations, they move into close human contact often taking up residence in buildings and other man-made structures. To keep bats out of our homes and garages, place bat houses away from dwellings. If you find a colony of bats has taken up residence in your house or garage, Dataw Island Conservancy suggests calling Critter Management, Inc. Hilton Head.

## **BIRDS**

We are extremely fortunate to have the varieties of birds



on Dataw Island that we do. At least two of the local birds are listed by the U.S. Fish and Wildlife Service; the wood stork is classified as "threatened" and the painted bunting is classified as a "bird of conservation concern throughout the southeast." Other species present on our island include the Bald Eagle, Great Horned Owl, Osprey, Blue Heron. Egret, and the Ibis, to name just a few. Anyone looking for more information can consult "Birds of the Carolinas" by Stan Tekeila. Dataw Island is also within the Atlantic Flyway migration path which allows us to view many species of birds as they complete their seasonal migrations to the North or the South, While these birds may not be permanent residents on Dataw, they do make for very interesting bird watching during the migrating seasons.

# COMMON WINTER SONGBIRDS FOUND ON DATAW ISLAND

Thanks to the Lowcountry Institute on Spring Island for providing the list below.

Red-bellied Woodpecker Downy Woodpecker Pileated Woodpecker Yellow-bellied Sapsucker

Common Flicker

Blue Jay

White-breasted Nuthatch Brown-headed Nuthatch

Eastern Phoebe Tree Swallow American Crow

Fish Crow

Tufted Titmouse Carolina Chickadee Carolina Wren

House Wren

Ruby-crowned Kinglet Golden-crowned Kinglet

Eastern Bluebird Hermit Thrush American Robin Brown Thrasher

Northern Mockingbird

Loggerhead Shrike Cedar Waxwing European Starling

Blue-headed or Solitary Vireo

Pine Warbler
Yellow-rumped Warbler
Black and White Warbler
Common Yellowthroat
Northern Cardinal
Rufous-sided Towhee

Dark-eyed Juneo Chipping Sparrow White-throated Sparrow

Swamp Sparrow

Song Sparrow Eastern Meadowlark Red-Winged Blackbird

Common Grackle
Boat-tailed Grackle
Brown-Headed Cowbird
American Goldfinch

House Sparrow

Dataw Island takes part in the National Audubon Society's Annual Christmas Bird Count and Cornell Ornithology Lab's Great Backyard Bird Count in February. These are sponsored by the Dataw Island Conservancy and your participation helps make them successful. We invite you to sign up to help us count our birds and to meet new neighbors!

How lucky we are to have the variety of wildlife, particularly the varied species of birds that call Dataw "home" Each has its own story, but here are four species examined a bit closer as they relate to Dataw Island.

#### **BLUEBIRDS**

Although year-round residents, spring is the time for all bluebird lovers to do their part in making Dataw a safe haven for as many of the nesting pairs as possible. Once nearly eliminated in the Carolinas



due to lack of nesting cavities, they have made a remarkable comeback. How wonderful it is to see all the new bird houses on the island. This shows that there are many bird lovers on Dataw. What you may not realize however, is that we also have many predators on the island that are just as fond of bluebirds as we are.

Experts recommend that bluebird houses be erected on a piece of three-quarter inch diameter galvanized pipe eight feet long. PVC pipe may also be used. Two feet of the pipe is stuck in the ground bringing the bird house to an easy access for monitoring and cleaning. A baffle of galvanized stove pipe is a great



help in keeping out raccoons and snakes. Grease helps to keep fire ants out if they are a problem, Pipe may be purchased from lumber yards or hardware stores. The bird houses should be away from any close shrubbery and trees, The opening should be facing away from prevailing winds and sun.

Spacing between boxes should be at least 100 feet providing the male with 15 feet of open space for the

courtship ritual. If you have an existing bluebird box and no one is using it, do not despair. Bluebirds are like us because they like new houses too. Hopefully, after the initial spring nesting, there will be another pair needing a home.

The bird houses need to be cleaned after each nesting as there may be as many as three nestings for each pair per year. All old nesting material should be removed and the box should be rinsed out with a weak solution of bleach or vinegar water to kill mites. Be sure the box air dries well before closing it back up.

The Dataw Island Conservancy coordinates volunteers to monitor approximately 20 bluebird boxes throughout the island for eggs and hatchlings each year. Another voluntary group monitors bluebird boxes on the golf courses. Annual reports are released and posted on the Conservancy's webpage.

Many bluebirds remain here for the winter. They benefit greatly from our feeders and particularly like peanuts, dried berries and mealy worms.

#### **HUMMINGBIRDS**

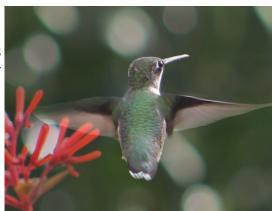
Bird books tell us that there is only one variety of "Hummer" in South Carolina, the Ruby-Throated, but bird experts around the area will readily dispute this. Also, hummingbirds are supposedly only summer residents, but here on the coast they are often sighted well into the winter. Recent sightings and studies by the SC Department of Natural Resources have concluded that there could be as many as five varieties of hummingbirds here during the summer, and some are starting to stay for the winter. So the recommendation now is to leave feeders out year round. Should you wish to attract these fascinating birds to your yard, simply put out a

# Hummingbird food recipe

- 1 part sugar to 4 parts water
- Bring to a boil until sugar is dissolved. Let mixture cool and fill feeder
- Refrigerate any unused sugar water
- Be sure to clean the

- feeder and change the sugar water often
- The summer heat will spoil the food and make the birds sick
- Obviously, in the cooler weather, the interval can be lengthened

hummingbird feeder filled with sugar water. Hummingbirds are also attracted by the following plants: Canna, Cardinal Flower, Honeysuckle, Society Garlic, Hibiscus and many others.



# **PURPLE MARTINS**

Despite their name, Purple Martins are not truly purple. Adult males have an iridescent sheen with a dark blue-purple color overall. Their wings and tail are brown-black. Females have variable amounts of gray on the head and chest. Purple Martins are the largest species of swallow.

The Dataw Island Conservancy conducts a Purple Martin Monitoring Program. There are three house sites on Dataw with a combined total of 42 nests/cavities. They are monitored weekly during the spring and early summer. Data on eggs, hatchlings and fledglings are summarized and presented in an annual report. In

2007, Dataw had 53 birds that fully fledged. From 2019 to 2021 that number had grown to between 165 and 190. The annual Purple Martin Reports are available on the Conservancy's webpage.



#### **OSPREY**

One of the most impressive shore birds found on Dataw is the Osprey. The Cornell University bird identification website states: "Ospreys are brown above and white below, and overall they are whiter than most raptors." The U.S. Fish and Wildlife Service has the following description: "Adults are dark brown above with brownish-black marks on the wings and brown speckling on the breast. The head is white with a dark brown crown and brown streak down the cheek. The female is typically larger than the male." Although the "brown speckling" (sometimes referred to as a "necklace" or a "bib") is not limited to females, it is generally more common on them than males, and therefore can be used to differentiate the sex in a mating pair of Osprey. The photo below shows the male and female side-by-side where the necklace and lack thereof are vividly clear.

Ospreys are specialized for living near water and fish constitutes almost their entire diet. The legs are long and equipped with long, curved talons (claws), and the undersurface of the toes is covered with short spines that allow the bird to hold on to slippery prey. As for fishing technique, the plumage is dense and oily



and enables the Osprey to dive into the water, a unique behavior among birds of prey. Other fish eaters, such as the bald eagle, snatch fish from the

surface without entering the water.

During the last several years, the Dataw Island Conservancy has installed five Osprey nesting platforms around the island. Many of us on Dataw have enjoyed observing the adult Ospreys as they build their nests and fledged the next generation. The five Osprey nesting platforms are located in the water adjacent to these sites:

- West of causeway and security gate
- North of Sparrow Nest crab dock
- North of Morgan River #13
- Behind Clubhouse and Cotton Dike #9 green
- Between Cotton Dike #8 green and Cotton Dike #9 tee

Our Osprey nests, along with other nests in the area, are included in the "Osprey Watch" website (www.ospreywatch.org), where observations can be noted for those interested in tracking their presence.

# 3. VEGETATION ON THE ISLAND TREES

#### **Environmental benefits of trees**

While we all admire their inherent beauty, trees provide many benefits beyond their aesthetic qualities. Some of the more measurable benefits are discussed below.

Trees improve air quality, conserve water and shelter wildlife. They moderate the effects of sun, wind and rain. Radiant energy from the sun is absorbed or reflected by leaves, and trees lower air temperatures by evaporating water in their leaves. Trees may also affect wind speed and wind direction. The more compact the foliage on the tree or group of trees, the greater the influence on the windbreak.

Trees reduce storm runoff into the salt marsh and

prevent erosion. Dew and frost are less common under trees because less radiant energy is released from the soil in those areas at night. Leaves filter the air we breathe by removing dust and other particulates. Leaves absorb



carbon dioxide, ozone, carbon monoxide, sulfur dioxide and release oxygen. Air-conditioning and heating costs are reduced for a tree-shaded home.

#### Wildlife habitat benefits of trees

Trees provide shelter and food for a wide variety of wildlife. In particular, pine trees can serve as nesting habitat for numerous birds on Dataw Island, including the Bald Eagle, Red-tailed Hawk, Great Horned Owl, Osprey, Great Blue Heron, and other smaller birds. Pine cones and acorns from the live oaks which are abundant on the island are both excellent food sources.

Even standing dead trees (known as "snags") are beneficial habitat to many species, such as owls. woodpeckers and squirrels. Many insect species spend their larval stages in dead wood and become important food sources



for creatures higher on the food chain. Of course, if a standing dead tree poses a home hazard it should be removed.

#### Tree protection and removal

The Dataw Island Covenants and Beaufort County

ordinances recognize the benefit of trees and have included provisions on tree protection and restrictions on the cutting of trees with particular emphasis on specimen trees. The Covenants state that no tree of any kind having a diameter of six inches measured four feet above ground level may be removed without written approval of the Architectural Review Board (ARB). In addition the ARB reserves the right to have specimen trees preserved and to require that site planning provide for their retention. The Covenants do not specifically define specimen trees; however, the Beaufort County Code of Ordinances defines specimen trees as:

- 1. Understory trees: dogwood, redbud and southern magnolia
- 2. Canopy trees: American holly, bald cypress, beech, black oak, black tupelo, cedar, hickory, palmetto, pecan, red maple, southern red oak, sycamore and walnut.

While Beaufort County has specific requirements for submitting site plans regarding tree removal, the ARB is the first point of contact for residents since it is charged with the enforcement of both the Covenants and County Ordinances.

In areas designated as salt marsh and river buffers, no removal of any kind or size can be done without approval of both the ARB and the County.

#### LIVE OAK TREES

Perhaps the most loved tree here on Dataw Island is the Southern Live Oak. It is a tree common to the lower coastal plains of the southeastern United States from North Carolina to Texas. It prefers well-drained ridges



along the coastal marshlands and has a high salt tolerance. Timber from the live oak was much sought after in the 18th and 19th century as its iron strong, worm-resistant wood was highly valued for shipbuilding. "Old Ironsides" (the U.S.S. Constitution) was constructed from the sea island oaks. Dating of Live Oaks is difficult because of their twisted growth pattern. However, it has been estimated that some predate the first crusade, which took place in 1096 A. D.!

There are two plant species you might notice living on our Live Oaks. One is the Spanish Moss you see draped from the limbs. This is neither a moss nor Spanish, but instead an air plant related to the pineapple. It has no roots and produces inconspicuous green flowers in the late Spring. The moss does not harm the tree but beware because Chiggers love it! If you handle the moss without gloves, nasty bites can result! Chiggers can be eliminated by placing the moss in your microwave for a short time if you want to bring the moss inside for decorative use.

The second plant you might notice on the trunks and

limbs of the Live Oaks is the Resurrection Fern. During dry periods these leathery fronds curl up and may appear dead, only to extend green again when it rains. Hence, the common name, Resurrection Fern.



Dataw Island Club, assisted by the Dataw Island Conservancy, has spent many thousands of dollars to install lightning rods on several of its signature Live Oak trees integral to the golf courses as designed by Tom Fazio and Arthur Hills. What can YOU do to insure that the Live Oaks stay for future generations? Plan your home building carefully so as to save as many trees as possible. Encourage your home builder to access the work area away from tree roots. Mulching is good for tree health as it holds moisture, is a nutrient and discourages grass and weed growth that compete with the trees for nutrients and water. If you notice any

pest problems on your lot or on an unoccupied one, notify the DIOA Landscape Director immediately. For those golfers out there, please keep in mind that even your golf carts can damage tree roots. When possible, avoid driving over the mulched areas under trees.





#### PINE TREES

The most prevalent tree here on Dataw Island is the Pine. We have Yellow, Loblolly, Short leaf, Long leaf and Slash to name a few species. To those of you new to the Island, fair warning about pollen season. Keep your doors and windows closed at the occurrence of the Spring Equinox. At that time, noticeable clusters of yellow male flowers will crowd lower pine branches and seem to release their pollen overnight. This will last for approximately three weeks and will often get so thick it looks like haze or smoke in the air. At this time of year, you will find the pollen everywhere!

#### NATIVE VEGETATION

Dataw has a wide variety of shrubs and trees native to the Island. We encourage you to leave areas in your yard natural and to plant native trees, shrubs and plants as these are the ones that provide food and shelter for our abundant wildlife. There are native species appropriate for every corner of your yard. An ever-increasing number of native trees and shrubs are being commercially propagated for ease of transplanting. Once properly placed or planted, your native plant or tree will not need the care or coddling of a non-native plant. Since they originated in the Coastal Area, they are adapted to the fluctuations in winter temperature and summer moisture or lack thereof. As more and more of their natural habitats are destroyed, give them a refuge in your garden so that their species will be able to survive. You won't be sorry. On the other hand, if you are thinking of removing a tree from your property please remember that the removal of any tree must first be approved by the Architectural Review Board (ARB). Call (843) 838-2716 to arrange for an inspection prior to doing any cutting or removal.

#### TOP 12 NATIVE PLANTS FOR BIRDS

Our thanks to the Lowcountry Institute on Spring Island for providing this list. Information about native plants (trees, shrubs and flowers) and where to plant them can be found by using the Carolina Yards and Gardens website at https://hgic.clemson.edu/factsheet/carolina-yards-an-overview-of-sustainable-landscaping-practices/, or call them at (843) 470-3655. In addition, there are several well-written gardening reference books available to you at the St. Helena Public Library.

Brambles-Dewberry, Blackberry, Raspberry, etc. Cabbage Palmetto Elderberry Red Mulberry

Grapes Pokeberry Southern or Eastern Red Cedar Wax Myrtle Black Cherry Black Gum Tupelo Virginia Creeper Trumpet Creeper

# Native trees:

To give you an idea of the variety of native trees, shrubs, azaleas, annuals and perennials available, the following is but a partial listing:

Florida Maple
Flowering Dogwood
Southern Magnolia
Red Maple
American Beech
Cabbage Palmetto
Red Buckeye
Loblolly Bay
Southern Crabapple
River Birch
American Holly
Laurel Oak
Eastern Redbud
Yaupon Holly
Live Oak

# Native Azaleas:

Alabama Azalea Coastal Azalea Florida Swamp Azalea Hammock-sweet Azalea Oconee Azalea

# Native Shrubs:

Dwarf Bottlebrush Yucca Oakleaf Hydrangea Inkberry Lantana Fragrant Sumac Florida Anise Star Anise Wax Myrtle Spicebush Possumhaw Viburnum Groundsel Bush Native Annuals: Annual Phlox Queen Anne's Lace Blanket Flower

# Native Perennials:

Yarrow
Blue Star
Columbine
Swamp Milkweed
Blackberry Lily
Trillium
Rose Verbena
Violet
Resurrection



# SOIL SAMPLES

Several nutrients are essential for plant growth. A soil test is used to determine the amounts



of these nutrients present in the soil and to identify the pH value - how acidic or basic is the soil. This allows you to customize your fertilizer and lime applications to meet the plants' needs. It is highly recommended that you test your soil two months prior to planting a garden, establishing perennials, or fertilizing. A standard soil test costs about \$6.00 and takes seven to fourteen days to complete. Your soil sample should be dropped off at the Clemson Extension office located at 18 John Galt Road, Beaufort, SC 29906. For further information, call (843) 473-6021 or log on to www.clemson.edu/beaufort.

# INVASIVE PLANTINGS

In 2013, the ARB agreed to modify its guidelines to prohibit the planting of Tallow trees contained in all submitted landscape plans on Dataw. They also suspended their rule (requiring ARB approval to cut down trees over 4" in diameter measured 4" above the ground) for Tallow trees only. In 2019, the DIOA Board passed a resolution requiring property owners to remove any and all tallow trees from their property.

The Dataw Conservancy's "Tallow Tree Terminators" with

the cooperation of the Dataw Landscape Director. the Dataw Golf Course Superintendent and many resident owners, have waged a war on the Tallow tree on Dataw. To date, we have eliminated this invasive species from most of our island. Diligent observation of each property is still needed to ensure that new growth does not occur.

The following plants are considered invasive and it is highly recommended that residents NOT include any of the species listed below in their landscape plans.

Mimosa Chinaberry Tree Russian Olive Princesstree Tree-of-heaven Cherokee Rose Chinese Tallow Tree (prohibited)

#### GRASSES

Giant Reed
Tall Fescue
Chinese Silvergrass
Bamboos
Johnsongrass
Torpedograss
Water Primrose
Mint (grow only in pots)

#### **SHRUBS**

Privets
Thorny Olive
Autumn Olive
Tamarisk
Salt Cedar
Nandina
Sacred Bamboo
Multiflora Rosa

#### **AQUATIC PLANTS**

Alligatorweed Water Hyacinth Water Lettuce Purple Loosestrife American Lotus Water Chestnut Giant Salvinia

#### **VINES**

Japanese Honeysuckle Kudzu Chinese Wisteria Japanese Wisteria Japanese Climbing Fern Greenbriars

#### SPECIES OF CON-

CERN
Rattleboc
Showy Crotalaria
Bicolor Lespedeza
Chinese Lespedeza
Sericea
Vincas
Periwinkle
English Ivy
Oriental Bittersweet
Winged Burning Bush
Hydrilia

Other plants of concern include Green Hygro, Hygrophilia, Common Reed, Tropical Soda Apple, White-flowered Wandering Jew, Mexican Petunia, Sword Fern, Camphor Tree, Coral Ardesia, Winged Yam, Air Potato, Bradford Pear, and Wild Taro.

# RECOMMENDED SHALLOW WATER OR BOG PLANTS

Following is a partial list provided by Clemson University cooperative extension service. For more information you can contact them at (843) 255-6060, or visit their website at hgic.clemson.edu.

Sweet Flag (Acorus calamus)
Water Plantain (Alisma platago-aquatica)
Native water canna (Canna flaccida)
Gray canna (Canna glauca)
Southern swamp lily (Crinum americanum)
Umbrella palm (Cyperus involucratus)
Egyptian paper reed (Cyperus papyrus)
Water bamboo (Dulichium arundinaceum)
Hardy white butterfly ginger (Hedychium coronarium)
Swamp rose mallow (Hibiscus moscheutos)
Variegated spider lily (Hymenocallis caribaea-Variegata
Yellow water iris (I. pseudoacorus)
Blue iris (Iris versicolor)
Japanese iris (I. ensata)

# **BUTTERFLY GARDEN**

Lavender musk (Mimulus

ringens)

In 2000, the Dataw
Garden Club took over a portion of a field near the entrance to Dataw Island to create a garden area that was later redesigned into a Butterfly Garden.
The Garden is 100% maintained by Dataw
Garden Club members



and is planted specifically to attract butterflies, bees, and birds. The Garden contains several bird houses, a large bird bath, a butterfly house and, tucked away

from the paths, are bee "homes". This is a working laboratory of approximately 6,000 sq. ft.. The club practiced soil enrichment and studied indigenous plants as nectar and host sources as well as shelter for the butterfly population.

Host plants are the nurseries of the garden. The female butterfly lays her eggs. Sometimes on the top of leaves but usually on the bottom, hidden



from predators. The light green female common Olive Wing butterfly is often seen in the garden. Host plants range from flowering plants like Milkweed and Passion Vine to herbs like Fennel, and to bushes and trees like Sweet Bay Magnolia. The Vitex and Yaupon trees give shade in the hot Southern summer. Italian flat leaf parsley is a host plant for the Swallowtail butterfly and milkweeds for the Monarch, our most frequent visitor.

Along with host plants there are many nectar plants that provide the nourishment butterflies and bees need to keep doing their job as pollinators, Nectar plants found in the Garden include Coneflower, Butterfly Bush, Tall Verbena and Lantana. Also Zinnias and butterfly weed.

Each Spring and Fall, plants are added that will entice the pollinators and the birds to stop by on their way to the Island or points North or South. You are also invited to stop by and enjoy the color, the calm and the serenity of this special place.

### ANTEBELLUM GARDEN

This verdant area located between the Sams' Family Cemetery and the Sams Family Tabby Ruins, is populated with trees, shrubs and flowers whose origins date back to pre-Civil War times. The orange trees remind us of the 35 acres of orange trees which once thrived here. They gave rise to the claim that Dataw Island was where the American citrus industry was born and of the many crates of oranges that were shipped to northern and southern ports in the early 1800's. Our Dataw Landscape Director is responsible for plant selection and planting. The Dataw Historic Foundation paid for installation of the irrigation system with additional donations from the Dataw Garden Club.

# 4. THE IMPORTANCE OF THE SALT MARSH

These wetlands have a heartbeat with the coming and going of the tides. Marshes are flooded to grass tops at high tide and drained down to mudflats at low tide. Tidal differences here on Dataw on average occur approximately every six hours and can be as much as 10 feet during certain phases of the moon.

Biologists estimate that salt marshes produce 5 to 10 tons of organic matter per acre annually, compared to 1 to 5 tons in



the most fertile agricultural soil.

One acre of marsh can support one million fiddler crabs. If these tidelands somehow vanished most animals and birds on our beautiful island would not exist. We might appear more



picturesque and tidy but we would be biologically barren. Please help us by taking care if our marshes. Marsh banks are under Beaufort County regulation, changing to State control at the cord grass. The basic regulation is that the marsh bank is to remain intact, serving as the buffer to filter any runoff.

Spartina grass species (cord grass, salt marsh cord grass and marram) are by far the dominant plant life in salt water marshes. Using photosynthesis, marsh grasses convert solar energy into plant tissue. As the grasses die, large amounts of nutrients are released into adjacent estuary waters.

These go on to feed perhaps 95% of the fish, shrimp and shellfish harvested in our ocean sounds and high seas.

Have you heard the term "pluff mud"? This is essentially a Lowcountry mudflat made when rain and river water bring in topsoil that has run off from dry land. The silt follows the slower currents into steep banks of the tidal stream. With time, the ooze slows the channel flow and the marsh grasses then colonize the sediment fields. A word to the wise, be careful about stepping out of your boat and into this mud. It can be anywhere from 2-6 feet deep and can make getting out very difficult.

# SEASONS OF THE SALT MARSH

Spring: As the March rains arrive, cord grass sprouts anew and seedlings turn green.

Summer: June through September finds the marsh teeming with life and decay and the waters reach 85 degrees. The cord grass grows to a height of 5 feet. This plant alone feeds and covers 90% of marshland animals.

Autumn: The grasses turn a yellow-orange and migrating wildlife flock to the marshes through Thanksgiving.

Winter: Cord grass dies back, building peat from the rotting stems and coloring the marsh brown.

Again, the Dataw Island Conservancy hopes this gives you some appreciation of your surroundings and helps you understand why the marsh should be left undisturbed. Please do not walk into the marsh to retrieve those errant golf balls. Walking into the marsh is ecologically unsound and may do serious damage to the marsh.



# 5. PROBLEMS/SOLUTIONS

# FIRE ANTS

Unfortunately, Dataw Island has an infestation of imported red fire ants. These infestations are found in areas where the ground receives direct sunlight. Fire ant hills are recognizable and appear as large mounds of soft dirt. In addition to a painful sting, the ants can cause anaphylactic shock to those allergic to them. Fire ants have significant detrimental impacts on the environment; for example, elimination of native insects that are used as food by nesting songbirds, reduction of butterfly populations, reduction of ground nesting birds and mammals due to the eggs or young being swarmed and attacked by the ants, and reduction or elimination of certain types of plants that have seeds preferred by the fire ants.

If you want to rid your property of these ants, we request you use the bait Amdro which is sold at most garden departments. Amdro has a low environmental impact. Care should be taken to keep children and



pets away from treated areas. The bait should be applied mid to late afternoon since ants forage at night and carry the bait underground to their colonies and queen. This treatment should occur annually.

The golf course also treats for fire ants in irrigated and fringe areas.

# **PETS**

Our pets give us joy and companionship: however, we must

understand that they are not always good companions to our wildlife. State and County ordinances and our DIOA Covenants state that pets (dogs and cats) must be leashed at all times once they leave our property. There are several good reasons for this requirement. Not the least of which is the protection of our pets, wildlife and habitat. Loose dogs and cats can be very destructive to small mammals, amphibians and birds. While your cat or dog in your yard may attempt to chase those wretched moles away be sure the pet is under your control so that it doesn't go hunting elsewhere for other prey. They may become prey We have several predators that threaten pets: alligators, snakes, foxes and large raptors. Definitely keep your pets under control and out of danger.

While walking pets, please have with you a container (e.g. a plastic bag) to pick up any fecal matter your pet produces. Runoff from fecal matter left unattended can cause long range problems for our lagoons and ponds, not to mention pollution of our shellfish beds.

# **MOSQUITOES**

Dataw Island contracts Island wide mosquito spraying through the DIOA and DIC. Typically, eighteen sprayings are done each year with special or extra sprayings before special events such as golf and tennis tournaments. We as property owners can do our part to lessen the mosquito population by being sure we have no standing water anywhere on our property. Empty



buckets, cans, trash containers, flower pots, etc. should be turned upside down or stored so that water does not collect in the open containers. Low areas of property can be graded or landscaped to prevent water collection.

Mosquitoes have created another problem in our area: West Nile Virus now has a presence in Beaufort County. A dead bird could be a health concern if it is infected with the virus. What should we do if we find a dead bird? The Beaufort County Environmental Health Department, DHEC (Department of Health and Environment Concerns) encourages the public to report the finding of certain species of birds freshly dead birds, such as crows, blue jays, and northern cardinals. A list of current species of concern can be found at https://scdhec.gov/health/diseases-conditions/insect-or-animal-borne-disease/infectious-diseases-diseases-spread-3.

DHEC sends dead birds of concern to Columbia to be tested for West Nile Virus. The Health Department suggests that you use double plastic bags inverted over your hand, pick up the dead bird, bring the bags over the bird and tie the bags securely. If not submitting a bird for testing, place the bag in your weekly trash pickup. Do not touch the bird with your bare hands.

# **MOLES**

Is your yard a playground and restaurant for that small, gray, furry, burrowing mammal called a mole? Seeing our yards undermined by mole tunnels is frustrating. The majority



of the tunneling is in a random search for food. Thereby explaining the appearance of the haphazard patterns

that appear in your grass and your garden, These tunnels are rarely reused. Reused or active tunnels usually show up as straight tunnels along driveway edges, fences and borders, If you want to trap the mole, set your trap over one of the active tunnels. Moles travel to where food can be found. They feed almost exclusively on soil insects such as earthworms and grubs; therefore, reducing insect populations will eventually require the moles to seek other areas for feeding. Check your local garden shop for grub control insecticide materials.

# NO-SEE-UMS

Ceratopogonidae is a family of flies commonly known as no-seeums, or biting midges, generally 1-3 mm in length. The family includes more than 5,000 species, distributed worldwide, apart from the Antarctic and the Arctic



What can be done to treat no-see-um bites? www.WebMD.com advises:

If an insect bite or sting causes a severe reaction, get medical help right away. If you're pregnant, be sure to tell your doctor that, too. For a bite or sting that isn't serious, the main goal is simply to ease pain and discomfort. Try these tips to nurse basic stings and bites at home.

Stinging? Burning? Tingling? Soothe them all with an ice cube, a cold washcloth, calamine lotion, a paste of baking soda, or an over-the-counter hydrocortisone ointment. For mosquito or other minor bites, try calamine lotion.

## TICKS AND CHIGGERS

Ticks are small, bloodsucking arachnids that can transmit diseases including Rocky Mountain Spotted Fever and Lyme Disease. To help avoid tick attachments, particularly when working in your yard or walking in wooded areas, wear clothing that fits snualy ground wrists, ankles and



neck. More thorough protection will come from taping pants legs to socks or boots. Light colored clothing will help you see the tick better. Do an entire body tick check and shower or bathe as soon as possible after returning indoors. Use a blunt forceps or tweezers to grasp the tick being careful not to twist or crush. Pull steadily away from skin. Do not use heat such as a lit match to detach the tick. If tweezers are not available. grab the tick close to the skin with a non-porous material such as waxed paper. Wash the affected area with alcohol. Also wash your hands. It is wise to kill the tick in alcohol and save it for a few weeks just in case you become ill as it will be helpful to determine if the tick was infected at the time of attachment. Wash clothing rather than allow it to lie around in a soiled clothes container. Repellents with "deet" applied to your skin and clothing will repel ticks.

Only the very lucky among us have not experienced the uncomfortable itching of chigger bites. Chiggers are small, round, multi-legged arthropods, not insects. These tiny mites are closely related to ticks. In the spring of the year, tiny, red multi-legged larvae hatch. The larvae need human or animal digested tissue from the host skin to develop to the next life stage (nymph). Larvae moves around on a host until encountering an obstruction such as a belt or elastic band on clothing. It

is at this point that the chigger inserts a tube that carries digestive juices into the skin. The inserted tube is the cause of the severe itching. After 1-7 days the larvae drops off its host leaving a red welt that itches severely sometimes for a week or longer. Contrary to popular belief, nail polish or kerosene will not help because the chigger has not burrowed into the skin. Mild antiseptic may help control the itching. Use repellents with "deet" to repel the chiggers. Although a chigger bite can become infected from repeated scratching, chiggers are not known to transmit any disease. Wash infested clothing in hot water. Washing clothes in cool water will not kill the chiggers. Shower as soon as possible.

# POISON IVY, POISON OAK, AND POISON SUMAC

These three plants contain irritants called urushiol oils that cause irritation to those who are allergic to them. The oils may stay active for 4-12 months on clothing, shoes, tools, etc. To avoid these plants, we need to be able to identify them. It is handy to remember "Leaflets of three, let it be." Poison Ivy has three bright green, waxy-looking, heart-shaped leaflets, sometimes with white flowers, which turn yellow to red in the fall. White berries may be present in the fall.

Even when the vines are dormant in the winter, they can still cause irritation. Poison oak has three leaflets as well. The



leaves have uneven margins and tan berries in the fall. Both of these plants can occur as climbing vines, shrubs, thickets or ground cover. Poison Sumac is a shrub-like plant that has green, compound leaves divided into 7-15 leaflets This plant displays greenish flowers and greenish-white berries.

Allergic reactions can result in inflammation in the area of contact from within a few hours and up to 5 days. These symptoms include itchiness, swelling, pink-colored inflammation and tiny pimples followed by tiny blisters. Minor reactions can be treated with non-prescription topical creams that contain calamine. Severe cases should be seen by a physician.

Prevention is, of course, the best action. When working or walking in an area where these plants may exist, wear clothing that covers exposed skin. If you have come into contact with one of these plants, wash contaminated areas with a strong soap as soon as possible. Be sure to immediately launder clothing that has been contaminated with the urushiol oils. Commercial urishiol oil removers such as Teenu Poison Oak -N-Ivy Cleanser(TM) or Zanfel are effective for cleansing your body, clothing, and other exposed items. These products are available at your local pharmacy. These poisonous plants can be chemically controlled by herbicides. However, indiscriminate use of herbicides such as Roundup (TM) is stronaly discouraged, particularly adjacent to our marshes. Runoff from these chemicals may cause serious damage to aquatic wildlife. More information is available at: www.clemson.edu/extension/haic/pests/ weeds/haic2307.htm.

#### CHINESE TALLOW TREES

Previously, the Dataw Island community developed an extensive Chinese Tallow population. Led by Dataw Island Conservancy volunteers known as the "Tallow Tree Terminators", landscaping staff, golf course maintenance personnel and



individual property owners have nearly cleared the Island of the scourge of this highly invasive plant.

Chinese Tallow, popularly known as the "popcorn tree" is an ornamental tree that can survive full sunlight and shade, flooding, drought and, in some cases, fire. To horticulturalists, this kind of tree may sound like a dream. But to ecologists, land managers and land owners, this tree can be a nightmare. Tallow is highly invasive and when it invades it eventually monopolizes an area, creating a forest without native animal or plant species. It can be potentially harmful to humans and animals because its berries and plant sap contain toxins. There is some concern that leaves may shed toxins that change the soil chemistry and make it difficult for other plants to grow.

Chinese Tallow has the ability to reach reproductive age in as little as three years and to remain productive for at least sixty years. Tallow reproduces and grows quickly and can cause large-scale ecosystem modification. A tree population that doubles every year

will grow in 15 years from 1 to 32,000. These trees are difficult to permanently remove. Trees must be girdled or felled, and then an herbicide must be applied. The Dataw Island Conservancy's "Tallow Tree Terminators" are trained in application of the herbicide. If you think you have a Tallow tree on your property, please call a member of the Conservancy board.

More information can be found on the Dataw Island member website.

# TURKEY/BLACK VULTURES

Although both Turkey
Vultures and the smaller
Black Vultures do a superior
job of clearing carrion, they
can cause problems when
they decide to make a
particular home their regular
roost. These birds not only
deposit unsightly excreta
and smelly reguraitations, but



occasionally damage roof tiles, rubber waterproofing strips and screen doors, etc.

So what can a homeowner do? First, do not shoot them. These vultures are protected under the Migratory Bird Treaty Act of 1918 and all its subsequent versions. It is a Federal offense to kill them. A professional golfer was arrested recently for successfully aiming his golf ball at a vulture in a tree whose noise he found distracting! Sentences of 5 years' probation and fines of up to \$150,000 have been imposed for killing vultures.

Although you cannot kill or injure the birds, there are no restrictions on scaring them away. The best offense is

to disturb the birds as soon as you notice that the birds are becoming regulars and a nuisance. The longer the vultures are allowed to stay, the harder it is to get them to move. Disturbance can be as simple as shouting and clapping hands but reports suggest that more elaborate methods are likely to be more effective. Chris Marsh, the former naturalist on Spring Island, moved some birds by shooting shotguns near them every evening. Others suggest fireworks, water jets, starter pistols, or even an old-fashioned scarecrow equipped with water jets. The South Carolina Department of Natural Resources offers advice and assistance as does the Turkey Vulture Society: https://turkeyvulturesociety.wordpress.com.

There is a procedure that grants a license to shoot vultures in extreme circumstances; probably for municipal, hospital, or school buildings. This license is obtained through the U.S. Fish and Wildlife Service. Note that it is unlikely that such licenses are ever granted for a residential building development and the procedure is formidable.

# 6. SPECIAL ECOLOGICAL PROJECTS ON DATAW ISLAND

# HABITAT MANAGEMENT PLAN

The Dataw Island community is committed to maintaining the beauty and mystique of this special place for generations to come by creating and maintaining a habitat management plan



(HMP) that identifies where native vegetation is to be protected, how these areas should be managed on an ongoing basis, and how native plants can be used throughout the community to attract birds, butterflies and other desirable species of wildlife.

The Dataw Island Conservancy developed a Habitat Management Plan (HMP) for the island in November 2020. The HMP identifies 20 Natural Areas as valuable wildlife habitat to be conserved for the future. Both DIOA and DIC endorsed the conservation of the 20 Natural Areas, which comprise a total of 48 acres, or 5.6% of Dataw Island. In addition, the Dataw Island Conservancy secured an undeveloped residential lot of outstanding habitat value. The "Gleason's Landing Conservation Preserve" is located between Hillfield Lake and the cart path connecting Longfield and Gleason's Landing Drives. The continuing implementation of the HMP is a key objective of the Conservancy in protecting the natural beauty of

CERTIFIED
WILDLIFE
HABITAT

FOOD • WATEN • COVER • PLACES TO RASE YOUNG

This property is recognized for its commitment to suited habitat. In refortly agreen.

The Dataw Garden
Club and the Dataw
Island Conservancy
are working
together to educate
and encourage
homeowners to get
their yards certified
as a National
Wildlife Habitat.
The certification
is administered
by the National

Wildlife Federation. It provides a means by which we can support the beautiful variety of animals, birds, trees,flowers and plants that we all love in our community. How? It's easy! Go to www.nwf.org/certifiedwildlifehabitat and answer a few simple questions. Once completed, there is a small fee and your certification is on its way. When you have the certification, please notify the Dataw Island Conservancy so that you can receive a flag signifying this achievement.

# THE AUDUBON COOPERATIVE SANCTUARY PROGRAM

Dataw Island maintains its designation as a "Certified Audubon Cooperative Sanctuary" through the Audubon Cooperative Sanctuary Program for Golf Courses, an Audubon International program. The Sanctuary program is endorsed by the United States Golf Association. To become certified, Dataw's Cotton Dike and Morgan River courses have had to complete six program components including: environmental planning; wildlife and habitat management; chemical use reduction and safety; water conservation; water quality management; and outreach and education.

# AUDUBON: MONARCHS IN THE ROUGH

The monarch butterfly is a North American icon, but the butterfly's population has declined by more than 90% over the last two decades. To combat this decline and the decline of other key pollinators, Audubon International and Environmental Defense Fund



have teamed up to create Monarchs in the Rough, a program that partners with golf courses to restore pollinator habitat in out-of-play areas. Working to create essential habitat for butterflies and increase awareness of the golf sector's contribution to the monarch conservation challenge, Monarchs in the Rough connects and supports superintendents and other golf course staff as they plan, install, and manage habitat projects for the monarch butterfly on their courses.

Monarchs in the Rough provides regionally-appropriate milkweed seed to Audubon International member golf courses – enough to establish an acre of high-quality monarch habitat to US states West of the Mississippi & Great Lakes when planted with wildflowers supplied by the course.

The Golf Maintenance Department collaborated with the Dataw Island Conservancy to implement the Monarchs in the Rough program. A wildflower meadow was planted behind the pump house on Island Circle West (next to the comfort station and across the pond from CD 13) in April 2021. Both groups are maintaining the wildflowers to foster the monarch butterfly population.

# AUDUBON ANNUAL WINTER BIRD COUNT

Each December, on a date designated by the National Audubon Society, volunteer birdwatchers assemble at the Community Center and comb the island to identify the many species of birds that have chosen to winter here on Dataw Island. Homeowners, golfers, tennis, bocce, and croquet players also join in and report on birds they see during the day as they work or play. This information is tallied on forms supplied by the Dataw Island Conservancy and combined with data gathered

at Fripp Island. It is then sent to the Audubon Society national office where it is combined with other winter bird count data for research and public use.

#### GREAT BACKYARD BIRD COUNT

Each President's Weekend the Cornell University
Ornithology Lab sponsors the Great Backyard Bird
Count. This is an opportunity for all residents to help
gather important data about our island bird population
by taking a few minutes on each day of the weekend
(Friday through Monday) to count birds wherever they
wish.

#### OYSTER SHELL RECLAMATION

From time to time, The Dataw Island Conservancy invites

volunteers to participate in projects that use bags of cleaned, recycled oyster shells to build reefs along our shoreline that provide secure and safe places



for seed oysters to attach and grow to maturity. These natural reefs serve to prevent beach erosion during tidal cycles as well as during storms. We coordinate closely with SC DHEC staff to ensure that shells are delivered when the tide is low and the weather is conducive to this outdoor work.

## ADOPT-A-HIGHWAY PROGRAM

The Dataw Island Landscape Department performs litter cleanup from the Polawana Road entrance gate down to Rte. 21 (Sea Island Parkway). Ten groups of resident volunteers from the airport to Dulamo Road. The Dataw team periodically solicits volunteers to meet, divide into teams and then pick up litter for about two hours. The work is fairly easy. They provide the trash bags, pick up sticks and safety vests. This is a good way to meet our Island neighbors, and most importantly, to perform a public service for the County. This program also improves the appearances of the approaches to our island.

# HEALTHY POND INITIATIVE

There are no less than 27 fresh water and salt water ponds on Dataw Island. They are part of the original stormwater runoff management system designed by ALCOA



engineers and have become an important part of the ecologically friendly way in which Dataw disposes of stormwater runoff - water that is drainage from streets, private and public properties, and our golf courses. Fertilizers, insecticides and herbicides also run off into our ponds. Stormwater inflows that exceed the pond's capacity are released to outfall structures and then to the surrounding marsh. The temporarily-detained pond overflows benefit from some of the particulates, nutrients and bacteria settling in the pond. Water from

certain ponds are used for irrigation of the golf courses. The DIOA and DIC formed an Ad Hoc Committee to evaluate the potential use of our ponds for irrigation in the future. Additional information is available on the Dataw member website under "Resources."

The ponds are maintained throughout the year by a professional pond management company that visits the ponds approximately 21 times a year and treats any issues. The main pond issues include shoreline weeds, planktonic algae, alligator weed and torpedo grass. Several of our ponds have active rookeries, Caution is always taken when treating those ponds to disturb the rookeries as little as possible.

# ELECTRONICS RECYCLING PROGRAM

Twice a year, the Dataw Conservancy collects unwanted or obsolete electronic items from Dataw residents and properly recycles these items at the Beaufort County Solid Waste and Recycling Center on Shanklin Road. Items include but are not limited to, computers, printers, monitors, telephones, TV's, radios, electric shavers, hair dryers, etc. Upcoming dates are usually also announced by email via the DatawNet.

# **EDUCATIONAL PROGRAMS**

Each year, the Dataw Island Conservancy sponsors a series of educational programs/activities to educate and entertain residents on a wide variety of ecology issues presented by local and regional experts. Our semi-annual lecture series has presented subject matter on oak trees, shrimping, the marshes, tallow trees, etc. The annual Conservancy Memorial Dinner in remembrance of Dr. Alex Marsh features prominent naturalists, ecology activists and environmental

scientists lecturing on a wide variety of current issues and abuses which threaten our health and the health of our planet. Recently the Marsh Memorial was a dinner and boat cruise launched from the Port Royal Sound Foundation dock.

The Dataw Conservancy also participates in Camp Dataw by sponsoring "up close and personal" demonstrations of raptors, snakes and reptiles given by naturalists.

# 7. RESOURCES

## **NEWSLETTERS**

"GREEN WOOD," the Dataw Conservancy's semiannual newsletter, is distributed island-wide and contains educational articles reporting on conservation activities and upcoming volunteer opportunities for the community. We invite your questions and comments so we may be guided for future articles,

# ADDITIONAL RESOURCES

#### **WEBSITES**

- Armadillos www.rsha.utexas.edu www.animals.nationalgeographic.com
- Bird Count www.audubon.org
- Clemson Extension www.clemson.edu
- Fox squirrel www.gpnc.org/fox.htm
- Low Country Institute www.lowcountryinstitute.org

- Marshes of the Low Country www.co.beaufort
- Mosquitos www.howstuffworks.com
- National Wildlife Federation www.nwf.org
- Oysters www.csc.noaa.go/scoysters
- West Nile Virus www.scdhec.gov/news/westnile/html

# PAMPHLETS, BROCHURES AND BOOKLETS

"Birds of the Carolinas – A Field Guide," by Steve Tekielia (available in local book stores)

"Carolina Yards and Gardens" Interactive CD, Clemson Cooperative Extension Svc. (843) 470-3655

"Outdoor Safety Notes," Clemson University Cooperative Extension Service

"South Carolina Rules and Regulations for Hunting, Fishing and Wildlife Management Booklet," available free wherever S. C. Fishing licenses are sold.

"Tideland Treasure," by Todd Ballantine

# We don't inherit the earth from our ancestors, we borrow it from our children....

Unknown

