

Nature Notes

SEPT.–OCT. 2026



All About Bats!

Bats are the only mammals capable of flight and are a part of a healthy ecosystem.

They are known to control crop pests such as moths, corn borers, and beetles.

They pollinate plants and disperse seeds.

Bats consume mosquitoes at high rates, catching 500 or more mosquito-sized bugs in an hour.

Bats do not catch insects with their mouths but scoop them up in the membrane that stretches between their hind legs to consume later.

There are at least 14 species of bats in South Carolina and 8 species that have been found on Dewees Island. Bats are capable of sustained flight and can fly up to ten miles per hour, at heights above 10,000 feet.

Their wings are the anatomical equivalent of a human hand and are made of a thin, hairless membrane that stretches between their long fingers.

A bat is a nocturnal creature sleeping during the day, hanging upside down, while its body temperature drops so that it can conserve energy. Bats live much longer than we would expect for their size, often as long as 20 years in the wild. A little Brown Bat can live as long as 30 years.

Bats mate in the fall. After mating, males live by themselves, and females roost together in dark, secluded places awaiting the birth of their young. Roosting bats can often be found in places like dead palm fronds and trees, Spanish moss, and old wooden structures. Infant bats are born in June or July. Most bat species have only one offspring called a “pup”. When its “pup” is ready to be born, the mother hangs right-side up and catches the baby in her pouch. The “pup” will remain with its mother for 50-60 days until it is ready to be on its own.



Have you ever wondered how bats can fly through the night without bumping into things?

The answer is echolocation, a way of seeing in the dark by making sounds and listening to echoes. Bats emit high-pitched sounds that bounce off objects, and then they listen. This way, they figure out where an object is and what it is made of. Bats also have highly developed radar and excellent vision. Scientists say that a bat’s sonar is a billion times more sensitive and efficient than any radar or sonar device ever invented by man. Researchers continue “to study bats to try and unravel their secrets to improve such things as military equipment and navigational aids for the blind.”

Bat populations are rapidly declining worldwide due to disease, climate change, pesticides, invasive species, and the threat to roosting locations. Bat roosts are most vulnerable during pup season (May–July). When trimming vegetation, be mindful and help protect bat roosts. You can even install a bat house on your property!



Dewees has a “Bioacoustics Recorder”!

This device records ultrasonic bat calls, like a trail camera, but for sound.

The recordings can help identify individual bat species. It can also capture the sounds of insects, amphibians, and birds. The recorder is mounted on the tall slash pine near the Landings building.

BATS OF DEWEES ISLAND



Evening



Brazilian/Mexican Free-tailed



Hoary



Big Brown



Northern Yellow



Seminole



Eastern Red



Tri-colored

A Bird's Eye View!

Did You Know
that seabirds
like gulls and
pelicans can
desalinate salt
water?



Listen for the
Chuck-will's-widow's
unique call at twilight
on summer and
early fall evenings.



Purple Martin Update

Ferry Dock: 35 fledglings, 18 banded

Crab Dock: 21 fledglings, 19 banded

Chapel Pond: 21 fledglings, 15 banded

Totals: 115 eggs, 86 hatched, 77 fledglings

- 75% hatch rate
- 67% fledge rate



Motus is the technology used for understanding bird migration, and it is an international tool that records movements of birds, animals, and even insects across the hemisphere.

The Dewees Island Conservancy provided a grant for Dewees to have a Motus Tower. Our Motus Tower is on top of the landings building, and it receives signals daily from nanotags placed on the migrating animals. These tags produce little pulses with a unique identification code that are picked up when the animal (bird) moves within 15km of the receiver. We are lucky to have a building with a great location, power, and internet that can upload data to the network.

Marsh Matters

Look for the *Spartina* grass to turn to gold soon!



Tidal Talk

FISHING IN OLD HOUSE LAGOON AND LAKE TIMICAU

Late summer can be a stressful time for fish in Old House Lagoon (impoundment). Salty, warm water holds less oxygen but can get a boost from rainfall, flushing from incoming high tides, winds, and submerged aquatic vegetation. However, when warm water temperatures, calm winds, lack of rainfall, low-level high tides, and morning low tides occur at the same time, they can put significant stress on the ecosystem.

This time of year, impoundments can also attract large schools of baitfish, such as menhaden, during flushing incoming tides. This can further stress conditions as more fish compete for a limited supply of dissolved oxygen.

This past weekend, as well as at times over the years, we have observed fish kills in the impoundment during these compounded stressful conditions, particularly when associated with low morning tides.

While we cannot predict exactly when these events will occur—since wind speed, wind direction, and rainfall are unpredictable—we adjust water-control gates during the summer with best management practices in mind.

Please help protect fish in Old House Lagoon and Lake Timicau:

- Be mindful of natural conditions and limit fishing during periods of warm water temperatures or when water is flowing out of water-control structures.
- Catch-and-release fish and out-of-slot fish may have a harder time recovering when released back into warm, low-oxygen waters.
- Per SCDNR guidance, consider avoiding fishing for adult or "bull" red drum while water temperatures remain high, until temperatures cool and spawning ends in October.

New red drum laws beginning

July 1, 2026

Bag Limit
1 Person/Day

Size Limit
18-25 inches

Boat Limit
2 Boat/Day



Look for these Fall Plants on the Island



Marsh Mallow



Climbing Hempvine



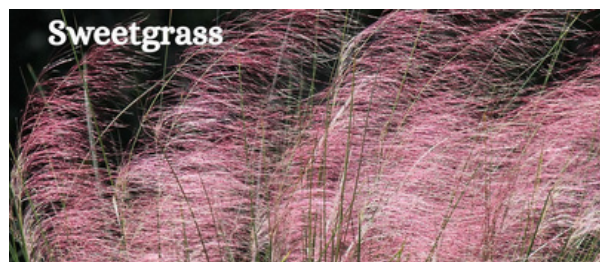
Camphorweed



Beautyberry



Groundsel



Sweetgrass

Collecting Native Plants for Propagation



Kosteletzkya Virginica - Marsh Mallow

1. Wait until seeds are dry, brown, and split open
2. Wear gloves and collect seeds in a paper bag
3. Separate the seeds from the outer capsule and store in a paper bag in a cool, dry place
4. In the spring, soak the seeds in water for 12 hours before planting to help germination
5. Plant in a moist, sunny place.



Callicarpa Americana - American Beautyberry

1. Collect seeds when purple
2. Toss on the ground where you would like them to grow
3. Check back in the spring for the new sprout

Autumn Tree Care Tips

1. **Enrich the soil** by feeding with well-rotted homemade compost, such as worm castings or mushroom compost.
2. **Allow the natural ground cover to exist within the dripline of trees.** Use 2-3 inches of organic mulch such as leaf litter to retain moisture and insulate roots against fluctuating coastal temperatures.
3. **Keep mulch clear of trunks** to prevent rot, pests and fungal diseases. Water deeply to encourage strong root growth.

Gentle Berry Bug Spray

Scientists with the USDA Agricultural Research Service have isolated compounds from crushed leaves of the American beautyberry plant, and laboratory tests show these compounds deter mosquito bites significantly, matching or exceeding the effectiveness of DEET in specific trials.

INGREDIENTS

- 1 cup fresh, clean American beautyberry leaves (washed well)
- 2 cups water
- 1 tbsp witch hazel (optional, helps it dry better on skin)
- 5 drops lavender essential oil. or other favorite oil (optional, for a pleasant scent)

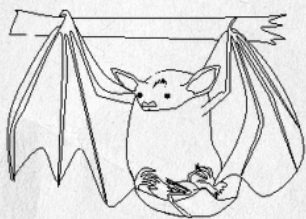
INSTRUCTIONS

1. Harvest and wash the fresh beautyberry leaves, removing any stems or dirt.
2. Chop or crush the leaves slightly to help release the natural oils.
3. Simmer the leaves in 2 cups of water on the stove for about 15 to 20 minutes.
4. Cool and strain the liquid into a clean jar or spray bottle, discarding the used leaves.
5. Mix in the witch hazel and essential oil if you are using them.
6. Patch test a small drop on your inner arm and wait 24 hours to ensure there is no allergic reaction

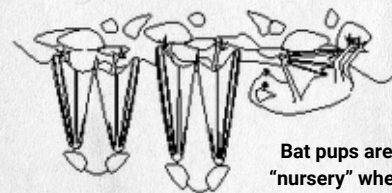


TURTLE TRACKS

- We have 21 turtle nests this season.
- 11 nests were relocated.
- Hatching season is only halfway through!
- **Last nest:** August 14; expected to hatch in early October.
- **Nest 11:** Despite being washed over several times, all 91 eggs hatched successfully!



Baby bats are called 'pups'. They are born live after about 50-60 days in their mother's body. When the pup is born the mother hands upright (that's upside down for them!) and catches and cradles the pup in a basket she makes with her wings.



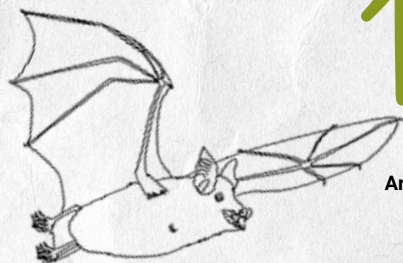
Bat pups are taken care of in a "nursery" when the mother bat is hunting. They hang from the ceiling of the cave. At night they get to sleep hanging onto their mother.



Baby bats use their teeth and claws to hold onto their mother while she flies and roosts. If the pup lets go, he or she will fall and could die. The pup will start to fly at 2-3 months of age.



Around the age of one year, the bat is an adult.



Life Cycle Of A Brown Bat



THE BUZZ

CELEBRATE BAT WEEK

- Oct. 24-31!

SAVE THE DATE

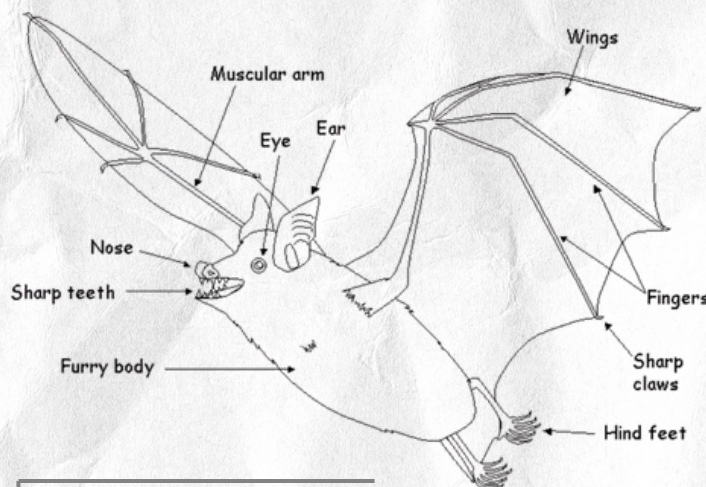
- **Sept. 19 | 10 AM - Nature Center.**
International Observe the Moon Day.
- **Nov. 12 - Next ERB Meeting.**
- **Saturday Mornings | 10 AM - Nature Center.**
Join Haley, the Wildlife Intern, for a morning of nature exploration and activities. Please check the Community Calendar and bulletin boards for details.



MOON - SEPT 19TH



NATURALIST CHOICE
SEPT 26TH



Little Brown Bat: This is one of the most widespread bat species in the USA. It weighs about 0.28 oz, and its wingspan is about 8.66 in. The brown bat likes to make its home in attics and barns and hibernates or migrates in the winter.

The Little Brown Bat's diet consists mainly of insects. It can eat 100% of its own body weight in insects every night! That is a lot of mosquitoes! The bat finds its food using Echolocation.

From the Editor

As always, the newsletter is the work of many. Lori gives me such great suggestions and insight because she has done it already! Esther never stops coming up with amazing artistry AND research. Judy just shares everything!!!! AND I love bats! Happy Fall and Happy Halloween!!

Lee Miller



Bat Houses

If you would like to order an unassembled kit to build a box, please contact Lori.



The Environmental Program will be submitting a bulk order for boxes and the cost is \$110 per box. The kit includes material to build a 2-chamber house from Habitat for Bats LLC out of Georgia. If you would like to build your own, the recommended style is a **rocket box**. Scan the QR CODE for plans.