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South Carolina Department of Natural Resources

Table
of Contents



Photo by Felicia Sanders/SCDNR

About.....2

Year in Review.....3

Posting: Sites.....4

Posting: Efforts.....5

Nesting: Seabird Census.....6

Nesting: Least Terns 7

Research: Black Skimmers.....8

Research: Red Knot.....9-10

Research: Semipalmated Sandpiper.....11

Sites: SCDNR Seabird Sanctuaries..12-13

Sites: SCDNR Barrier Islands.....14

South Carolina Shorebird Project.....15

Partnership: Cape Romain NWR.....16

Thank You.....17

Cover photo by Kaitlyn Hackathorn/SCDNR

Program: About Us

South Carolina is home to many coastal bird species, including seabirds and shorebirds. Our state plays a vital role in the lives of these species, providing nesting and feeding habitat, migration stopover and wintering grounds. The coastal program monitors population trends, protects nesting and feeding areas, manages and enhances habitat, raises public awareness through outreach and stewardship, and conducts research to better understand coastal bird populations in South Carolina.

Staff:



Felicia Sanders



Janet Thibault



Mary-Catherine Martin



Camille Duquet

Year In Review *2025*

This past year brought meaningful recognition to our program in many ways, for which we are deeply grateful. Deveaux Bank officially received its designation as a site of International Importance within the Western Hemisphere Shorebird Reserve Network. In addition, Felicia Sanders, Program Coordinator, was recognized both statewide and nationally - First as a Palmetto Award recipient in South Carolina for her outstanding work, and later by the American Ornithological Society as a recipient of its Conservation Award.



Photo by Erin Weeks/SCDNR

From left to right; Amy Tegeler, Cami Duquet, Felicia Sanders, Janet Thibault, and Mary-Catherine Martin at Santee Coastal Reserve for Felicia's Palmetto Award Reception.

These remarkable achievements reflect the strength of our partnerships and the support of local, regional and broader communities for coastal bird conservation.

Our seabird sanctuaries experienced notable successes throughout the spring and summer. Statewide, Black Skimmer nest numbers surpassed 1,000 for the first time since 2019, Deveaux Bank hosted more than 3,000 Brown Pelican nests, and Tomkins Island rebounded from recent predator pressure to support over 7,000 Royal and Sandwich Tern nests. Each seabird sanctuary is highlighted on pages 12 and 13. With extensive efforts to safeguard nesting areas, Least Tern nest numbers and productivity increased this year. Three large and successful natural beach colonies supported a possible shift in Least Tern nesting habitat as availability of alternative sites, such as roof tops changes. Read more on page 7.

Advances in tracking technology continue to expand our understanding of bird movements. This past year, we continued deploying satellite transmitters on Red Knots, leading to new partnerships, connections, and discoveries about the species. We also utilized Motus tracking technology to monitor Semipalmated Sandpipers. More information on these projects can be found on pages 9 and 10.

Connecting people and communities with the fascinating, yet vulnerable, world of coastal birds remains at the forefront of our work. This year, two additional coastal sites received support for seasonal beach closures to protect nesting birds: Litchfield and the Town of Edisto. Outreach and awareness also grew through the week-long celebration of Shorebird Week, in partnership with organizations across the state, and with the educational program Shorebird Safari through the South Carolina Shorebird Project; check it out on page 13. Visitors of Cape Romain National Wildlife Refuge also received special stewardship designed to balance recreational use with nesting success for birds; more on page 15.

We're energized to carry forward this legacy of bringing science and community together for the purpose of conservation! We're excited to head into 2026 continuing to do our part along our stretch of the coast to protect shorebirds and seabirds.

Posting *sites*

From North to South:

- Huntington Beach State Park
- Litchfield Beach
- North Island
- Sand Island
- South Island
- Cedar Island
- North Cape Island
- South Cape Island
- North Lighthouse Island
- South Lighthouse Island
- White Banks
- Marsh Island
- Capers Island
- Dewees Island*
- Crab Bank
- Morris Island
- Folly Beach- Lighthouse Inlet
- Bird Key-Stono
- Kiawah Island*
- Seabrook Island
- Deveaux Bank
- Botany Bay
- Interlude Beach
- Eddingsville
- Edisto Beach State Park
- Edisto Town Beach
- Otter Island
- Harbor Island
- Hunting Island State Park
- Little Capers Island- Bull Point
- Tomkins Island
- Turtle Island



Every year prior to the nesting season, the SCDNR Coastal Bird Program identifies nesting habitat and establishes temporary beach closures so shorebirds and seabirds can nest undisturbed. Staff provides posting materials and works with municipalities, agencies, nonprofit organizations, state parks, and volunteers along the coast to install signs, and, in some cases, rope off potential nesting sites. These areas are monitored throughout the season for activity and to maintain signage. Temporary closure materials are removed once breeding season has ended.

*these sites are independently posted by site managers, municipalities and/or local organizations

Photo by Kaitlyn Hackathorn/SCDNR

Posting *efforts*

32
Sites

94
People



Edisto Town Beach


Hunting Island

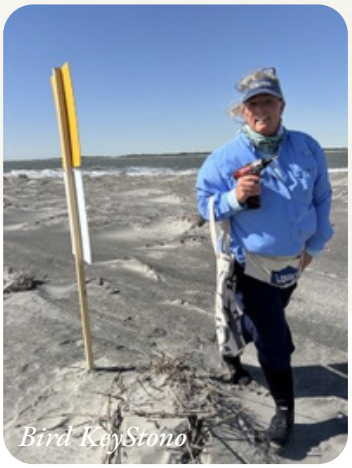

Litchfield Beach


Edisto State Park



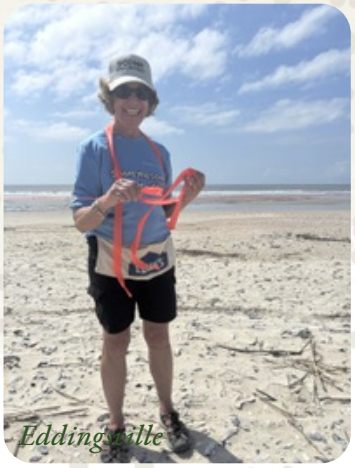
Folly Beach


Hunting Island


Bird KeyStono


Morris Island


Little Caper's Island


Edingsville

Nesting *2025 Seabird Census*



5,501 Brown Pelicans



10,490 Royal Terns



1,032 Black Skimmers



317 Gull-billed Terns



2,685 Sandwich Terns



952 Least Terns

Each year, the state seabird census is conducted to document nest numbers of colonial nesting seabirds in South Carolina. Nests of different species are counted using aerial photographs of incubating birds as well as from ground-based surveys. The majority of the data is collected during a single aerial flight conducted in partnership with an SCDNR Law Enforcement pilot, which took place on May 20 this year. Tomkins Island was surveyed by GADNR on June 3. An additional drone flight on June 11 provided imagery for nesting Black Skimmers and Gull-billed Terns on Bird Key-Stono and Crab Bank. Due to their small size, Least Terns are surveyed by land using optical equipment. These totals represent a snapshot in time and contribute to long-term trend monitoring of seabirds in South Carolina.

Seabird photos by: 1. Kaitlyn Hackathorn 2. Erin Weeks 3. Cami Duquet 4. Canva Stock 5. Erin Weeks 6. Cacky Rivers

Nesting

2025 Least Tern Alternative Sites

7
active sites*



191
nests



*6 rooftops, 1 industrial ground site

Alternative Site Usage:

In 2025, only 20% of Least Tern nests occurred at alternative sites such as flat gravel-covered roofs, which is consistent with a trend of more Least Terns moving to natural beach nesting areas. Flat gravel-covered roofs are disappearing. Building regulations prevent the use of pebble-covered roofs in hurricane prone areas, and the remaining roofs are old and of poor quality for nesting. In the years after Hurricane Hugo, development along beaches grew rapidly; habitat loss and disturbance caused Least Terns to look for nesting sites on roofs and just about any place that was flat and covered with gravel! Alternative nesting sites from 1995 to 2015 supported on average 65% of Least Tern nesting in SC, and these sites helped sustain the population. Now we are looking for SC's Least Terns to return in higher nest numbers to our beaches, and hopefully, we can share the beach!

Two large Least Tern colonies occurred on two very different natural beach sites. At protected Bird Key-Stono Seabird Sanctuary, the largest colony of 273 nests occurred one year post renourishment of the area. The second largest colony was on the south end of busy and developed Litchfield Beach where the last record of nesting was a single nest in 1998, and this season there were 113 nests! Litchfield's sea turtle volunteers assisted with placement of 40 posts with signs and flagged string to close the colony area. All season, in addition to sea turtle management duties, these volunteers kept an eye on the Litchfield colony. Both sites, Bird Key-Stono and Litchfield, show the opportunistic ability of Least Terns to find beach sites for nesting. We can help nesting Least Terns by supporting and implementing management that may involve temporary closures to enable successful nesting, in other words by sharing the beach!



Background photo by Madison Sharrock, rooftop photos by Mary-Catherine Martin/SCDNR

Research *Black Skimmers*

Black Skimmers are listed as the highest conservation priority in the South Carolina State Wildlife Action Plan. These iconic seabirds breed in dense colonies on seabird sanctuary islands and within Cape Romain National Wildlife Refuge. Over the past four years, 40–70% of all Black Skimmer nests in South Carolina have occurred on Crab Bank Seabird Sanctuary in Charleston Harbor. While chicks have successfully fledged there, many questions remain: Where do young birds go after leaving Crab Bank? Where do they spend their non-breeding years? When and where do they return to breed, and for how long?

Since 2024, SCDNR biologists have banded Black Skimmer chicks on Crab Bank to support growing research efforts along the Atlantic Flyway focused on this declining species. This past year, 42 individuals were banded during two sessions in mid-July. These chicks were old enough to safely receive bands but had not yet fledged. Each bird was uniquely marked with a black band and a white alphanumeric code on its right leg. To date, 124 individuals have been banded since 2024, and 34 have already been resighted and reported.



One notable individual, with the band code 00T, was banded on Crab Bank on July 17, 2024. This juvenile was resighted a few months later by Andy Jones at Hunting Island State Park on September 22, 2024. Most recently, 00T was reported on Sanibel Island along Florida's Gulf Coast on December 23, 2025, roosting with a flock of approximately 50 other birds.

Until recently, little was known about the age, survival, and seasonal movements of breeding Black Skimmers. While many birds return to their natal colonies to nest, a significant number seek new beaches and form new breeding colonies. We are excited to follow these Crab Bank natives and learn more about their movements, survival, and breeding behavior.

To support this important research, please be on the lookout for banded Black Skimmers. Report band sightings, along with the date and location, to bandedbirds.gov or contact Janet Thibault at thibaultj@dnr.sc.gov.

Background photo by Camille Duquet/SCDNR

Research *Red Knots*

The federally threatened Red Knot relies heavily on South Carolina's coast during spring migration. Banding and tracking efforts have identified South Carolina as the final stopover site for some individuals before they depart for boreal and Arctic breeding habitats. Between February and May, approximately 27% of the estimated rufa Red Knot population passes through Kiawah and Seabrook Islands, with the total passage population of South Carolina perhaps even higher.

This year, a region-wide partnership between the SCDNR, GADNR, Manomet Conservation Sciences, and most recently Clemson University continued its focus on understanding Red Knot use of the southeastern United States as a migratory stopover and tracking their movements to breeding grounds and beyond.

Beginning on March 30, with support from Wildlife Restoration Partnerships, the Town of Kiawah Island, and Shorebird Steward volunteers from Seabrook and Kiawah Islands, Red Knots were captured at Captain Sams Inlet on Kiawah Island. All captured birds were weighed, measured, and fitted with uniquely coded flag bands. This mark–recapture approach, combined with resighting surveys, helps estimate local population size and determine how long birds remain in the region. Resightings included birds banded in South Carolina, other Atlantic U.S. states, and countries in South America.



Photo by GADNR

In addition, 14 Red Knots were outfitted with satellite transmitters that emit location data every few hours via orbiting satellites. Because the transmitters were deployed early in the spring, this effort provided valuable insight into how individuals dispersed across the region before migrating north. Data revealed a high degree of variation in movement patterns: no two tagged birds followed the same route or even remained together. Some traveled south into Georgia and stayed there until departure, while others moved north to Cape Romain National Wildlife Refuge. Overall, the birds used a wide range of habitats, including barrier islands, offshore sandbars, and inland mudflats. These movement data are prompting even more research questions on their diets that we hope to dive into in 2026!

Research

Red Knots



Migration track of Red Knot LN5 from May 18, 2025 to September 20, 2025.

On May 18, 13 additional Red Knots were captured in Cape Romain National Wildlife Refuge, each receiving a satellite-transmitter. Included in this cohort was LN5, named after its flag code. LN5 traveled to its Arctic breeding grounds on Victoria Island in northern Canada. After the breeding season, it departed from Hudson Bay, Canada on August 11 and made a 5-day nonstop flight over the Atlantic Ocean, skillfully navigating around hurricane-force winds from named storm, Erin. It then landed in coastal Suriname, where it remained within the Coppenamemonding Nature Reserve for three weeks.

The tag stayed on long enough for us to follow LN5 on another multi-day nonstop flight from Suriname over Brazil, Bolivia, and Paraguay, before finally landing in coastal Argentina. World-renowned Argentinian shorebird biologist Patricia Gonzalez was contacted to share the exciting news, and she connected us with local biologists who had recently conducted surveys in the Bahía Blanca region. Through aerial surveys, they have identified the network of islands and mudflats, where LN5 was last detected, as a newly discovered wintering site for Red Knots.

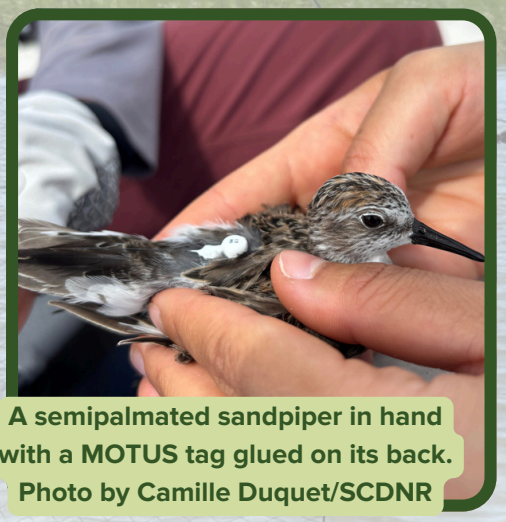
LN5's tag fell off a couple of days after its arrival in Argentina. The Southeast Red Knot Working Group will be watching closely for this flagged bird to show back up in the Southeast during spring 2026 resighting surveys. Since being tagged in South Carolina, LN5 traveled more than 12,000 miles before its transmitter stopped transmitting on September 20; an extraordinary record of endurance and navigation for Red Knots that visit our coastline each year.



Red Knot LN5 in hand at the time of capture. Photo by Nora Futrell.

Research *Semipalmated Sandpipers*

Much like other shorebirds, Semipalmated Sandpipers have experienced significant population declines—approaching 30% over the past three decades—and are therefore considered a species of high conservation concern throughout their range. This small sandpiper species breeds in the Arctic and winters in tropical regions ranging from Central America to northern South America. During spring migration, they rely heavily on South Carolina's extensive coastline, where they feed on invertebrates along beaches and mudflats.

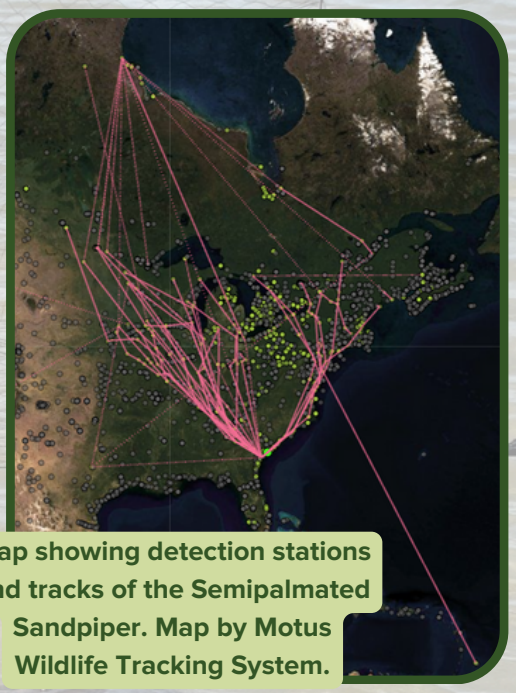


A semipalmated sandpiper in hand with a MOTUS tag glued on its back. Photo by Camille Duquet/SCDNR

This past spring, we partnered with GADNR, with assistance from Manomet Conservation Sciences, to deploy Motus tags on Semipalmated Sandpipers prior to their departure for breeding grounds.

Motus tags are small electronic devices that use radio transmitter technology to communicate with receiver stations within the Motus Wildlife Tracking Network. Each tag broadcasts a unique identification code, allowing individual birds to be detected as they fly by or "ping" the receiver stations strategically placed around the world.

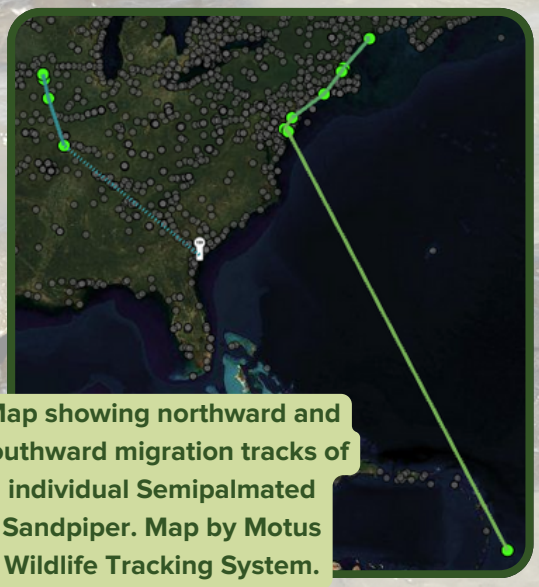
At the end of May, 40 Semipalmated Sandpipers were captured using mist nets on Turtle Island, a SCDNR owned barrier island just north of the Savannah River. Each bird was weighed, measured, and fitted with a Motus tag before being released. Of the 40 individuals tagged, 29 showed substantial northward migration detections, and 5 were detected during southward migration following the breeding season.



Map showing detection stations and tracks of the Semipalmated Sandpiper. Map by Motus Wildlife Tracking System.

Northward migration data revealed three distinct strategies: 15 birds (52%) traveled a northwest route west of the Great Lakes, 8 (28%) migrated directly north through the Great Lakes, and 5 (20%) followed a northeast coastal route through Delaware Bay before continuing northward.

One particularly notable migration involved an individual that traveled west of the Great Lakes during its northward journey and was last detected on June 3 as it entered remote Arctic regions with limited receiver coverage. The next detection occurred on July 26 off the coast of Maine on Metinic Island, presumably after breeding. The bird then continued south along the eastern U.S. coastline, reaching Delaware Bay on August 26. From there, it departed southeast over the Atlantic Ocean and was ultimately detected in Barbados on August 30.



Map showing northward and southward migration tracks of individual Semipalmated Sandpiper. Map by Motus Wildlife Tracking System.

Sites *SCDNR Seabird Sanctuaries*



Photo by Janet Thibault/SCDNR

Deveaux Bank

Deveaux Bank experienced a standout year for Brown Pelicans, with nearly 3,100 nests recorded, making it the largest Brown Pelican colony in South Carolina and the largest on the U.S. East Coast! This represents the second-largest nesting total ever recorded on the island. This success is particularly encouraging given that recent storms and tidal erosion have reduced available nesting habitat. Despite these losses, sufficient habitat remains to support large pelican colonies. In addition, Deveaux Bank's extensive sand and mud flats continue to provide critical foraging and roosting habitat for almost 30 species of shorebirds, including Red Knots and Whimbrel. Additionally, Deveaux Bank and the adjacent sandbar serve as important nocturnal roost sites for seabirds and shorebirds. This year, partners and supporters celebrated Deveaux Bank's designation as a Western Hemisphere Shorebird Reserve Network (WHSRN) site, recognizing its international importance for shorebird conservation.



Crab Bank

Now in its fourth breeding season since renourishment, Crab Bank welcomed back Brown Pelicans. The colony was relatively small, with just over 150 nests, and settled later in the season, beginning in late July. Because Brown Pelican chicks require approximately three months to fledge, this late nesting prompted emergency regulations that delayed by an additional month, public access to the portion of the island containing the colony. This extension allowed chicks sufficient time to become independent from their parents. Black Skimmers also continued to thrive on Crab Bank, with the largest colony in the state recorded for the fourth consecutive year. Skimmer chicks were banded with unique identifiers for ongoing monitoring. American Oystercatchers were closely monitored as well, with 14 pairs nesting in 2025 and 4 chicks banded. Vegetation growth on the island has accelerated significantly. Areas that were historically bare sand are now fully or partially vegetated. An annual botanical inventory is conducted in partnership with SCDNR botanists to document plant species presence, track changes over time, and manage invasive species.

Photo by Camille Duquet/SCDNR



Sites *SCDNR Seabird Sanctuaries*

Bird Key-Stono

Bird Key-Stono hosted a record-breaking number of Black Skimmer nests this year, with over 200 nests, which was only recorded once before on the island in the late 1980s. The colony was successful, with many chicks and fledglings observed in the intertidal zone in late July. In addition, SC's largest nesting colony of Least Terns was found on Bird Key with 273 nests! Gull-billed Terns, American Oystercatchers, and Wilson's Plovers, also successfully raised chicks on the island. These species primarily occupied the western portion of the island, an area renourished in partnership with the U.S. Army Corps of Engineers in 2024. On the eastern side of the island, facing Folly Beach, Brown Pelicans nested in the vegetated dunes but ultimately abandoned their nests during the incubation period due to coyote predation.

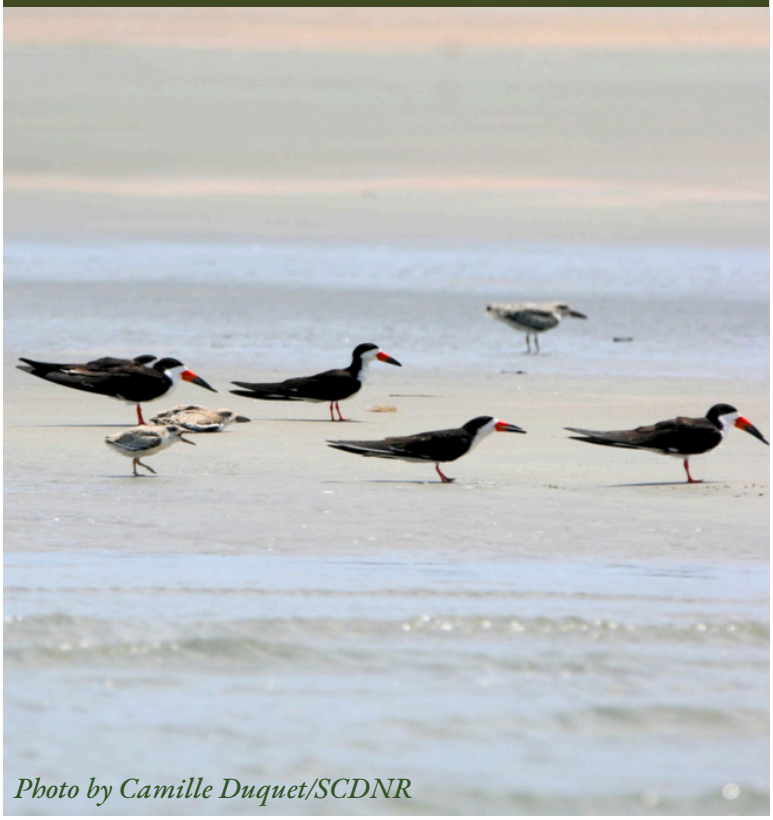


Photo by Camille Duquet/SCDNR



Photo by Tim Keyes/GADNR

Tomkins Island

This year, Tomkins Island supported 63% of the state's Royal Tern nests, with just over 6,600 nesting pairs. Additionally, 248 Brown Pelicans and 949 Sandwich Terns nested on Tomkins Island. The island, co-managed by SCDNR and the U.S. Army Corps of Engineers, continues to provide critical habitat for colonial nesting seabirds. Its elevation remains a key factor in its success, protecting nests from over wash during extreme high-tide events.

Prior to the nesting season, the island's vegetation was reduced through a cooperative agreement between SCDNR and the Army Corps of Engineers – Savannah District, further enhancing nesting conditions. Tomkins Island also serves as an important nocturnal roost and resting site for shorebirds and seabirds, supporting thousands of Arctic-nesting shorebirds during migration and winter months, including Whimbrel, Ruddy Turnstones, Sanderlings, and Black-bellied Plovers.



Sites *SCDNR Barrier Islands*

Check this out!

SCDNR-Managed Barrier Island StoryMap

The barrier islands of the South Carolina coast are iconic stretches of lands with cultural, environmental, and economical significance. SCDNR owns and manages roughly 10 barrier islands, ranging from North Island in Georgetown County to Turtle Island in Jasper County.

At the recommendation of the SCDNR Board and with the support of partner organizations, the S.C. Legislature approved in Spring 2022 a suite of regulation changes designed to ensure the continued protection of these barrier islands for wildlife including shorebirds, seabirds and sea turtles. Customized interpretive and regulatory signage is installed on each of the islands, and a website featuring maps, rules, and wildlife viewing opportunities was created. These outreach tools are maintained and updated as needed each year, in partnership with property managers.



Field updates from:

North Island

North Island is part of the Tom Yawkey Wildlife Center. The north end of this island is closed to protect wildlife, especially shorebirds and sea turtles. Shorebirds such as Wilson's Plovers and Willets nest on the north end. The closure rules are well posted and reduce human disturbance to these nesting birds as well as to migratory shorebirds. Waterbird surveys are conducted on the beach on the north end at North Inlet. Single counts of over 2,000 roosting waterbirds, including the federally threatened Piping Plover and Red Knot, demonstrate the importance of this protected barrier island.

Otter Island

The extensive open beach habitat on the north end of Otter Island and the additional benefit of having no disturbances from domesticated pets, offers nesting shorebirds an ideal location to lay eggs and raise their chicks. In 2025, 11 pairs of the state threatened Wilson's Plover were recorded using the area with several pairs seen with young of the year. The temporary fencing put up with SCDNR ACE Basin NERR staff and members from the Sustainability Institute, added an additional layer of protection from recreational boaters and beachgoers. During the non-nesting season, the area is surveyed using International Shorebird Survey protocols and over 14 species of shorebirds were recorded, including multiple sightings of the rare Long-billed Curlew.

Turtle Island

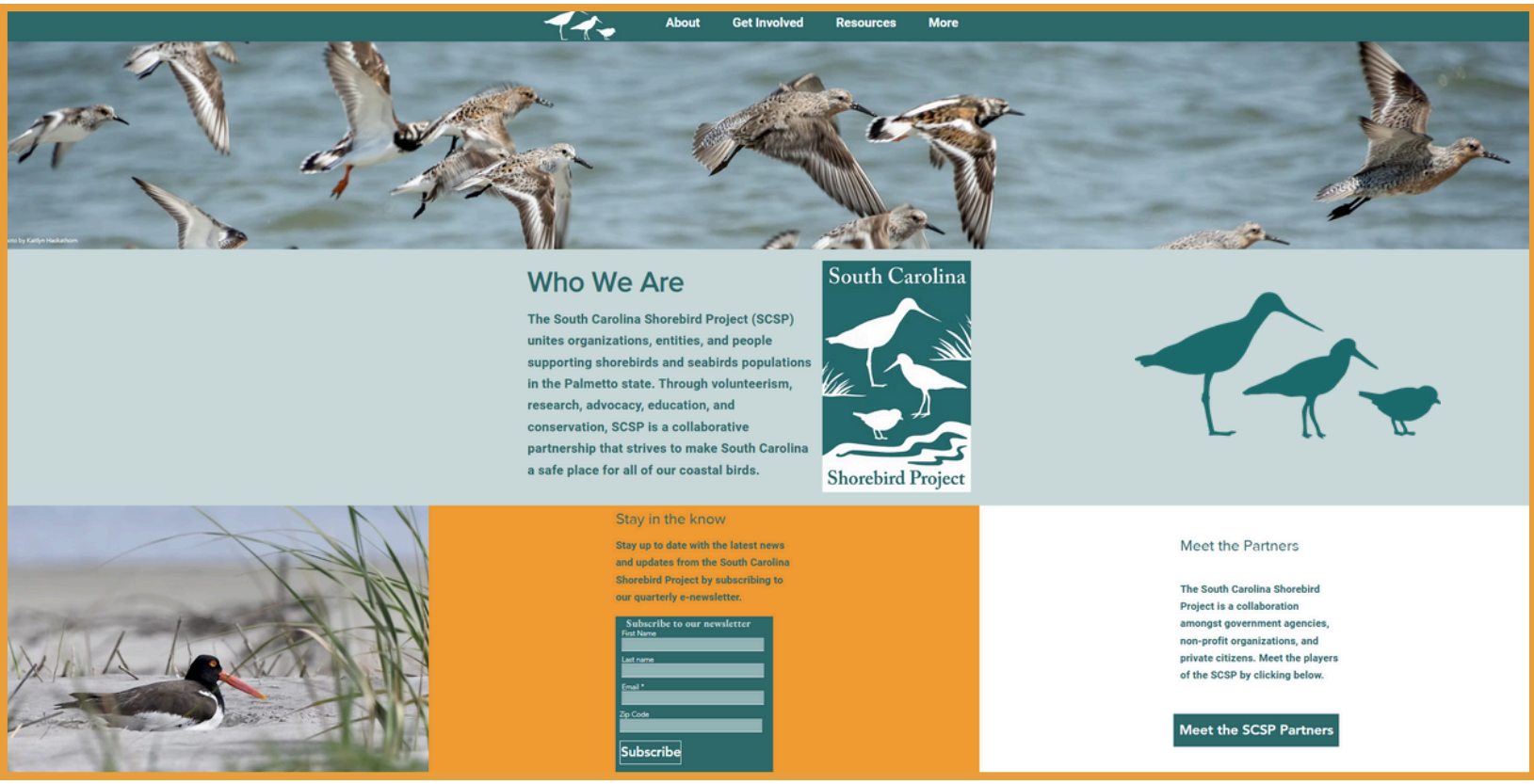
Situated just to the north side of the Savannah River, Turtle Island hosts many migratory shorebird species throughout the Spring. This past April, close to 8,000 shorebirds from 13 different species were recorded using the island at one time, predominantly to feed on horseshoe crab eggs. Additionally, research was conducted on Semipalmated Sandpipers caught on Turtle Island. Results from the project can be found on page 11. The interpretive sign was replaced and continues to educate visitors about the sensitive fauna on the island and the regulations in place.

Outreach *South Carolina Shorebird Project*

The South Carolina Shorebird Project (SCSP) started in 2007 when a group of governmental agencies and NGOs partnered together to further shorebird conservation through surveys, outreach, and education.

Today, partnerships to protect South Carolina's shorebirds and seabirds are happening all along the coast, with different initiatives and priorities based on the needs of communities and bird activity at each site. The SCSP strives to continue promoting partnerships, providing resources and information sharing, and raising public awareness of coastal birds with the ultimate goal of furthering conservation for these vulnerable birds.

Visit our website: **www.scshorebirdproject.com**



• Interactive Map • Resource Library • Volunteer Opportunities • Newsletter • Photo Submission • Events



View the activity and inquire about getting this program started within your community!

This year, the South Carolina Shorebird Project launched an educational activity for school-aged youth, in partnership with the SCDNR Marine Education Team. Shorebird Safari is an interactive activity that covers shorebird prey items, shorebird ID, migration, and banding initiatives in the state! Programs on Kiawah Island, Hunting Island, Fripp Island, and during school trips at SCDNR Marine Resources have used it for their programming, increasing shorebird awareness statewide!

Partnership *Cape Romain NWR*

Recognized as a site of international importance by the Western Hemisphere Shorebird Reserve Network (WHSRN), Cape Romain National Wildlife Refuge (CRNWR) owned and managed by the U.S Fish and Wildlife Service, provides critical year-round habitat for nesting and migratory birds. During the summer months, the refuge comes alive with nesting seabirds and shorebirds. The network of islands and beaches in the refuge support thousands of birds, while also welcoming visitors drawn to Cape Romain's pristine coast line.

Effective stewardship during the nesting season is essential to colony success, as even minor disturbances can have significant consequences for nesting birds. Since 2020, SCDNR and CRNWR have partnered to implement a seasonal stewardship program designed to protect sensitive bird areas while enhancing visitor understanding and enjoyment. Funded by the Friends of Coastal South Carolina and Coastal Expeditions Foundation, Heidi Edens served as the Seasonal Shorebird Steward in 2025, engaging beachgoers and educating them about nesting shorebirds and seabirds such as Least Terns, American Oystercatchers, Wilson's Plovers, Gull-billed Terns, and Black Skimmers. Stewardship conversations frequently addressed the impacts of dogs near nesting birds, the cascading effects of flushing entire colonies, and the importance of maintaining uninterrupted space from dune nesting sites to the water's edge.



Photo by Kai Hudson

One of the summer's most notable successes occurred over the July 4th holiday, when more than 400 visitors accessed South Lighthouse Island without a single disturbance to nesting colonies. Achievements like this are not accidental; they result from sustained community outreach, thoughtful signage, and dedicated on-the-ground stewardship. Continued collaboration among partners and the local community will help ensure shorebirds and seabirds find nesting success along the shores of Cape Romain, while still allowing visitors to enjoy this remarkable refuge.





With logistical support from the Coastal Expeditions Foundation, the students at the Cape Romain Environmental Education Charter School (CREECS) in McClellanville, created signs to help foster a stronger connection between the local community and its surrounding ecosystem. These signs were added to the publically accessible portion of the beach on Lighthouse Island for all to admire!

Thank You

It takes a whole flock, and we are glad you are part of ours !















