

AMOY Working Group 25th Annual Meeting - Day 1

As part of Shiloh's memorial, Stephen Brown shared highlights of his career, recognizing his extensive contributions to shorebird and seabird conservation across the Western Hemisphere, as well as his dedication in the field and talent for photography.

<https://www.shiloharchives.com>

Specific work from Shiloh to get the AMOYWG started and funded.

2006 - initial write up by Shiloh (while doing his PhD) to get AMOY on NFWF's radar

2007 - USFWS selected AMOY as focal species, also published a global assessment

2008 - The business plan

Summary of Range-Wide Breeding- Tim Keyes

Some additional key points

- 2000 - AMOY species of concern
- 2001 - first WG meeting
- 2004 - banding agreement, 2012 - banding database, 2020 - Birds of the World account

Population status: 2003 ~11k birds, then decline, ~14.8 in 2023~45% increase

Most states reported productivity for 2025 (not ME, MA, LA)—0.54 chicks/pair

Before 2009, productivity was 0.29 chicks/pair

Average 0.50 chicks/pair after 2009, which is close to the range-wide goal.

Group Introductions

Then we did intros 😊 lots of wonderful people in person and online!! (would be nice to share that whole list!)

Online count 47 as of 10:10

56 people in person 😊

Funds from registration and from Manomet offered travel grants to come in person.

- Jesse McLaughlin - CUNY
- Kristin Johnson – Mt. Allison
- Jesus Diaz-Morales - Chile
- Kate Goodnough – Larid Research & Conservation

State Updates

Canada: no update, but <10 (~ 4 pairs) in Nova Scotia

Maine and New Hampshire: Shiloh used to update from their bases on eBird.

Massachusetts: Rose Caplan preliminary numbers - pair numbers

- 213 sites monitored, 108 sites with detection, 7-8 new sites
- North shore, Boston Harbor - rocky islands, variable productivity. 27 pairs
- South shore - only 1 pair no fledglings
- Cape Cod - 7 pairs on Cape with low productivity, 41 pairs on Monomoy with good productivity
- Buzzards Bay and Elizabeth Islands - 28 pairs, good productivity
- Marthas Vineyard - 25 pairs
- Nantucket - lots of pairs, low productivity 35 pairs
- Total - 283 pairs, early productivity 0.59 productivity
- Challenges - May nor'easter, later nests vulnerable to predation

Rhode Island: Maureen Durkin (USFWS) (allowed to work during shutdown due to funding source)

- Intensive monitoring and management in south RI, less intensive (once per month) monitoring in north
- Total pairs 2025: 52
- This is another high, increase 5 pairs since 2024
- Still low density, many areas of unoccupied islands
- South county - 0.71 chicks/pair, exceeds coast-wide productivity goal
- First fledge from Truston NWR - first mainland barrier island beach
- Novel behavior: shaking sands of seaside sandwort and extracting large grubs (far from nearest oyster beach)

Connecticut: Beth Amendola (Audubon CT)

- 99 breeding pairs (highest number ever), fledged 84 chicks (highest ever) 0.84 chicks fledged
- 10 yr average productivity is 0.77
- 75% of birds are on islands; mainland productivity much lower
- Two pairs nesting on barges - in past, they had success but this year's did not succeed
- Increasing partnership and funding with law enforcement
- Two workshops for municipal officials
- Continued banding (since 2018, 93 banded AMOY)
- Some yellow bands starting to fade

New York:

- Emilio Tobon (NYC Bird Alliance) giving updates for Breezy Point NY - 52 breeding pairs, 47 chicks hatched, 40 chicks fledged; productivity 0.77
- Chris Allieri (NYC Plover Project) - More interactions between PIPL and AMOY. 3 PIPL nests abandoned nests.
- Shelby Casas (Audubon NY) - monitors 20 pairs on Jones Beach. 26 pairs, 20 nests, 18 nests failed. Fledged 7 chicks
- Kate Robb (Town of Hempstead) – about 70 pairs, about 70 fledglings

New Jersey: Emily Heiser (NJ FW)

- Started in 2003, increased efforts in 2012, mostly on the Atlantic coast
- Not much on marsh nesting birds
- Began monitoring on the Del Bay in 2023 - numbers increased
- 197 pairs (down from 2007 last year) in 0.36/pair
- 53 active sites; losing birds in the north
- Why? Lots of erosion and less replenishment up north
- 55% lost to predation, consistently the biggest cause.
- Tried flagging—(fladry)—worked to get a pair off; then lost chicks; then removed flagging and were successful. They are seeing some success with AMOY and colonial waterbirds. Also trying flashing lights, cameras with sound—seem to be seeing some success with these creative strategies

Delaware: Kat Christie and Shawn Sullivan

- 11 pairs (beaches and inland bays), productivity 0.455
- Began banding again—green F triangle bands with lasso carpets; adding bow nets in 2026

- Going to expand to monitoring marsh

Maryland: Tami Pearl (USFWS) would do Assateague NWR in MD, but shutdown. Chesapeake Bay is not monitored in MD

Virginia: Alex Wilke (TNC)

- Monitor shorelines of Chesapeake Bay, throughout the seaside lagoons and marshes, and along the barrier islands.
- Assateague-Fisherman—most collective monitoring focused there. June Breeding pair survey June 1-9, same window as PIPL count
- Productivity monitoring—covering ~50-60% of all barrier island numbers
- 597 pairs—increasing numbers since 2000
- By island—Metompkin and cedar each support over 100 pairs
- Productivity: 350 pairs, 0.52 productivity this year—so this was up this year! In VA, 0.4 is the goal.
- Incredible spike in productivity this year on Metompkin (personal side note—no big floods!)
- Increased banding efforts recently in big way—lots of great new faces and energy
- Tomorrow will talk about nesting platforms.

North Carolina: Lindsay Addison (Audubon NC)

- Most and best monitored on barrier islands, more than 225ish pairs, productivity >0.5
- Pea Island 6 pairs, 1 chick fledged
- Incomplete data as of now from CAHA
- CALO—North Core Banks had a great year in terms of pairs and productivity.
- No major storms were good—but coyotes are driving the failures.
- They are working on habitat restoration—placing loose shells on degraded shell rakes on marsh islands. Funded by NFWF
- Trying with creative backstop material to allow rakes to move but not completely get washed away. Very creative restoration!
- They are conducting non-breeding surveys.

South Carolina: Janet Thibault (SC DNR)

- Do not monitor every nest, but monitor key sites
- For example, Crab Bank in Charleston Harbor. Nesting pelicans returned in yr 4 😊
- 19 nests-3 fledglings
- Avian predation a big deal (including those pesky RUTUs!)

- Bird Key Stono: 4 pairs, 5 chicks
- >3000 wintering AMOY—resighting work
- Felicia is working on roost side fidelity over non-breeding seasons...14 yrs of data
- Audubon SC—extensive outreach. 95 stewards, 2500 individuals
- Clemson USGS—study of movements and PFAS; used Ornitela tags

Georgia: Tim Keyes (GA DNR)

- Habitat creation—2.5 acre island (ICW dredge) behind Cumberland. Used by AMOY and seabirds; GHOW predation
- Reconstructed rakes—5 touched up. All were used with high productivity
- Their birds are largely abandoning barrier islands and moving to shell rake islands
- Working hard to rope and close islands for protection
- 84 nesting pairs, 112 nests—fledged 26 chicks, 0.22 chicks/pair
- There were high points-Little st simon islands
- GA likely more important for wintering AMOY.
- 28 cannon netted in March, 14 nesting adults using lasso carpets and decoys, 22 young banded
- Recap of bird captured as chick in 2002 as a chick on LSSI
- Moving forward: temp loggers in nest to increase monitoring ability; USDA on predator control of coyotes and hogs

Florida: Raya Pruner (FWC)

- 919 miles of coastline
- 213 pairs (11 on rooftops)
- 250 confirmed nests, 38% hatch rate
- Most nests failed due to overwash, then predation (avian and mammalian)
- Rooftop—need to work with landowners to time roof repairs, 11 pairs, and high productivity
- 0.46 overall FL productivity; the lowest in 2023 was linked to a high level of hurricane activity
- Some sites are dramatically increasing—Tolomoto river; increasing population, increasing use of suboptimal habitat = high overwash in years without tropical activity; Going to focus on restoration activities at this site
- Cotton Island Update: property donated (thanks, Pat and Doris Leary)—house removal is in progress (north of Cedar Key)

Alabama: Olivia Morpeth (Alabama Audubon)

- Currently funded by NRDA Deepwater Horizon and Alabama
- 9 breeding pairs
- Banded 5 fledglings

Mississippi: Emile Stubbert (Audubon Delta)

- 27 pairs on 7 islands
- 8 fledges which was a big deal. Lost one banded bird (presumably an adult? JZ)

Texas: Rebecca Bracken (GCBO)

- Nests found between Feb-June!
- No major storms
- Last fledge on 19 august
- Third highest productivity since started monitoring (between 0.7-0.8)
- Starting a transmitter study to learn about wintering sites and movements
- Created Oystercatcher islands in Jones Bay, part of Galveston bay—wow!!

HUMAN DIMENSIONS PRESENTATIONS AND DISCUSSION

South Carolina seabird sanctuaries rule update - Felicia Sanders

- 5 seabird sanctuaries in SC
- In 2001, Cape Romain had no disturbance, but now, places like Deveaux have seen significant increases in human use
- Recipe for Conservation Success:
 - 1) Science- inventory resources, identify problems, identify solutions
 - Issue with human disturbance reduction - intertidal zone is owned by the state, access can be tricky.
 - 2) Acquire Public and Partner Support - build relationships through hands-on education and positive stories/focal species
 - 3) Legislative Process to Pass a State Law - need public and partner support, plus agency support (and in some cases agency board support)
 - Draft a bill, and work within agency, to General Assembly
 - South Carolina Sanctuaries law on the books from 1925 - this was applied to Seabird sanctuaries in 2006 with an agreement with the state to manage the intertidal zone.
 - 4) Compromise - take wins where you can and publicize that! Using strategic timing to release publicity and footage to build support.

- 5) Patience - closure of Deveaux took 25 years!
- Wins keep happening - once you get support, the momentum continues and grows, example - Kiawah - Let 'em Rest, Let 'em Nest and Crab Bank
- **Questions:**
 - Any recommendations with islands melding on to mainland? Tim: We lost a site because of this. Working with Army Corps could be an answer, but it's very expensive. Felicia's answer: Patience. You don't want stationary places for success!

Critical Wildlife Areas in Florida - Julia Magill

- Focus is human disturbance on nesting shorebird and seabird islands.
- Posting is one of the main tools, but signs for islands might need to be different than signs for the mainland - people use sites differently
- Critical Wildlife Areas (CWA) is a legal designation for a site under the Florida Administrative Code
 - Sites needed for critical life stages, usually monitored for years, and places that need protection
 - This is a last resort option - public access is the main goal
- Four criteria:
 - 1) Must harbor significant wildlife numbers
 - Subject to human disturbance
 - Site should be manageable and distinct- site needs management!
 - Landowner must agree
- 1977-1993- 22 CWAs, then criteria were revised in 2010, and in 2016 12 new CWAs were established. Now, the focus has shifted from designation to protection and management.
- Process:
 - 1) Formal request submitted to FWC
 - 2) Internal Review
 - 3) Stakeholder Engagement
 - 4) Commission Meeting
- Involved parties: anyone can recommend a CWA with landowner approval, established by FWC, coordinated by CWA Coordinator, maintained by many partners and enforced by FWC Law Enforcement
- CWAs- Islands and Sandbars- year-round closure, islands, buoys, can close intertidal and water around sites
- Other options outside of CWAs:

- FWC (Blair Hayman) has a sign about the risks of approaching nesting birds- this worked on two remote sites in south FL
- Cell cam sent a motion triggered notice to the monitoring group for this remote site

Bird island rule in Georgia - Tim Keyes

- Going before the GADNR board at the end of the month - Tim took the board out to a site, and he hopes for more updates next year!

Community-based social marketing influences shorebird responses along the U.S. Atlantic coast - Sarah Saunders and Sami Livingstone

- Using CBSM to use psychology and marketing techniques to change a behavior
- Can be difficult to assess how CBSM impacts biological impacts- larger project with Vtech and Audubon and many partners to try to assess this.
- Looking at counts, reduced vigilance behavior and improved reproductive success
- Point-counts to look at dog leashing to understand how dogs and leashing influenced bird abundance
 - Key three-way interaction - dogs, leashed dogs, bird counts
 - Results: leash campaigns alone don't significantly increase bird counts (varying levels of compliance or campaigns)
 - At sites with leash encouragement, more unleashed dogs are associated with birds counts
 - Leashed dogs consistently reduce bird counts
 - Sites with leash encouragement AND low dog counts had highest predicted bird counts
 - Even leashed dogs are discouraging birds, need both low numbers of dogs and CBSM to increase bird use
- Do CBSM influence bird vigilance based on behavioral surveys- fixed effects include leashing, dog free, walk around campaigns
 - Dog-free sites are the most vigilant- but these sites also have more predators and more people
 - Walk around flocks showed a reduced vigilance for birds
 - Steward presence reduces vigilance, have fewer leashed and unleashed dogs
 - Birds at no-campaign sites leads to a greater variance in vigilance behavior
 - Variance by states - birds in SC are less vigilance in SC

- Key takeaways: Effective human behavior mgmt. is needed, stewards are valuable, context matters, reducing unpredictability helps birds, integrated approaches are ideal

Connecting coastlines: How AMOY practitioners can contribute to conservation social science - Jesse McLaughlin

- Human society is only a part of a large piece of the social-ecological system, need to take a holistic approach to integrate social and natural processes
- Conservation social science is a broad field that includes understanding knowledge, values, incentives, behavior change and more, and includes qualitative and quantitative methods
- Scenario: Dogs are spooking birds- what to do:
 - o Use qualitative methods to assess the values and knowledge levels of people- can reveal important information for addressing behavior change
- How to apply methods:
 - o develop social science questions- how or why questions
 - o use social science methods to collect data and interpret results
 - o collaborate with social scientists
- Research opportunity to participate in interviews to help with Jesse's dissertation to understand how the Working Group is benefiting AMOY conservation. This season or future seasons.

TECHNIQUES PRESENTATIONS AND DISCUSSION

Long Island, NY camera project update - Shelby Casas

- Sporadic monitored, low productivity, increased predation, and continued disturbance reduction efforts
- Be a Good Egg Campaign- seems to have an effect at some sites but not at Jones Beach, Tobay Beach or Town of Hempstead- so they implemented cameras at these sites to understand more about what's happening at these sites
- Piloted cameras in 2023 to set up cameras at nests, launched project at all three sites in 2025 to record causes of nest failures and observe human interaction
- Used Wildlife Insights to manage and identify images
- 9 hatched, 15 failed - predators included cats and foxes, some repeated interactions with cats before predation
 - o Time lapse footage revealed that after the first interaction parental incubation rates dropped

- Nearly doubled the number of nests, chicks and fledges from 2024 to 2025.
- Lessons learned: weather issues and sensitivity to small predators impacted camera detections
- Two years of funding, adding GPS and more analysis.

Using trail cameras to understand threats to nesting AMOY in NYC: Update - Emilio Tobon

- Gateway National Recreation Area- Breezy Point, West Beach, Fort Tilden and Riis Park
- Needed to understand what was causing the declining productivity
- Used Wildlife Insights to manage and identify and process images, used 27 cameras with 107 camera deployments, identified 36 species.
 - o You have to train the ai model but then it automates and works well
- Preliminary results: humans are the most abundant detection, then the cats, dogs, possums and raccoons
- looked at the relative spatial abundance- dogs and cats where widespread, raccoons and possums more restricted
- Different threats at each beach, at busier beaches fewer predators.
- Gulls were not active predators, taking eggs only after nests were abandoned
- Feral cats did not take eggs, but did cause abandonment
- High abundance of possums at Breezy Point, observed ghost crabs attacking nests
- Analysis is underway, will share results with managers

Visually sexing oystercatchers - Lyn Brown

- Important to understand productivity and issues with nesting success
- Most people rely on genetics and eye fleck method (females have eye flecks)
- Visual sexing can rely on males:
 - o smaller with darker mantles, shorter, redder bills
 - o larger with lighter mantles, longer, more orange bills
- Took photos of live AMOY - consistent lighting on back and each side of bill, white balance set for all cameras, and collected breast feathers for molecular sex.
- Sample size was 50 live birds
- Looked at skins to take photos of back feathers
- Used ImageJ to create a multispectral image to measure the back, upper mandible to create metrics around hue, saturation, and value
- Combined color values with body morphometrics to analyze
- Meant to be a field method - can compare birds in a pair.

- Found that the visual sexing was accurate 98% classification in the field was correct, only failure was when one bird was seen once.
- Using the DFA classification, it was 93% accurate. Skins were classified about 74% accurate, but likely due to age of skins.
- What could be driving these difference- males and females have identical diets- disease, stress, genetics?

Adult capture techniques discussion (30 min)

- Luanne started a great spreadsheet with information about banding and capturing adults
- Removing eggs - when do you remove eggs and what are the predation risks
 - o Janet: uses a box trap, heat is the main factor in deciding to remove eggs, avian predators stops any trapping efforts
 - o Lindsay: avian predator presence ends trapping effort, risks of damaging or breaking eggs leads to pulling the eggs, noose traps
 - o Tim: bow nets - birds get entangled in net, but still pull egg to reduce risks of breaking or overheating
 - o Raya: In FL they don't trap on nests because Ghost Crabs are attracted to the nests, targeting adults. Now they trap pre-nesting and luring them below the nests. Attracting them at noose carpets where they are foraging, rather than using decoys and
 - Lindsay felt that pre-nesting trapping may have delayed nest initiation and even might have caused a pair to abandon
 - o Do people use decoy eggs?
 - Yes, birds seem to accept decoy eggs readily in NJ, in NC they don't care about the eggs, they use adult decoys
 - o Noose carpet discussion
 - Lindsay uses 50 lbs, others have used 30-60 lbs test.
 - Some use a gilly suit to be closer to the noose carpet to make sure that they can get there fast.
 - Ezra: we had about half of captures get out until tying monofilament loops to 3/16" elastic shock-cord, now about 90% successful. We use 15 lb mono with shock cord, but have also tested loop construction with 40,50,60 lb but difficult to get good uni-knot
 - o How do you deal with trap shyness after trapping one in a pair?
 - Box traps. Shiloh liked woosh nests.

- Moudry trap for catching bird from the UK - works on beach sand, held down by pegs, useful to predict how birds will enter nest, cost about 110 euros. Using them to catch curlews too...
- Chick capture - corrals
 - Use pvc piping and blueberry netting and guide adults and chicks into the corral. USFWS has implemented this. You need about six people to push them into the coral
 - How to prevent chicks from diving into water? Using handnets instead of just diving. Tim: We always have people close to the water to prevent chicks from getting in the water

North Carolina's breeding season census- Carmen Johnson and Lindsay Addison

- First survey in 2004, included WIPL and AMOY, conducted every three years. Up to eight surveys!
- AMOY nest on barrier beaches, marsh islands, dredge islands, other natural islands and occasional rooftop pairs
- WIPL nest primarily on sandy beaches
- Survey covers the whole coast, divided into plots based off the ISS plots from 2013, ranked by known nesting, and covering the sites with good habitat first
- Two options - cumulative season data- at least 1 visit per week OR census visit (1-3 visits per season).
- Count unpaired singles, non-territorial pairs, and territorial pairs. Can indicate if nests are found- territorial pair relates to AMOY database with breeding confirmed.
- Half nest on barrier island, about 40% on marsh, the remainder on dredge islands.
- Following Florence, perhaps lost some habitat or pairs, so saw a dip in AMOY numbers. BUT did see a huge uptick in WIPL breeding.
- Tried to look at detection rates, but that analysis is on-going. Interested at looking at vulnerability to SLR, changes in predator populations and effects of management.

LIGHTNING TALKS

Swati Banerjee

- Fifth year undergrad at Trent, worked on Assateague Island with Lyn Brown.
- Human disturbance increases predator abundance, and will impact pre-fledging survival. This reduction in survival will impact population viability in Virginia.

- She's working on modeling the population viability with a matrix modeling structure, which will be used for management.

Amber Krauss

- Rockaway Beach endangered species nesting area- about 7 miles
- PIPL productivity was low, but 32 pairs with a productivity of 1.41 chicks per pair
- PIPL antagonism at 26% with AMOY in 2024, and about the same in 2025
- 82.5% of the events recorded were AMOY flushing PIPL off nests
- This is not the only site where it happens...AMOY have been observed preying on LETE and WIPL

Beth Amendola

- New project in CT tracking AMOY. Using solar powered GPS/GSM Ornatela transmitters, put out five. Exciting data coming in.
- 10 gram units, leg loops harness with soft Teflon elastic
- 1 GPS point every hour, data downloaded daily.
- Long Beach nesting pair- had just lost nest. split up and the female went 13 miles away and found a new mate. She went to Cape Lookout and she's at Fort Pulaski! Missed the male track...sorry!
- Sandy Point female- incubated but lost nest, renested, she's hanging out in NJ
- Griswold Point Male- had two chicks when he was trapped, they lost the chicks two weeks later, stopped in Cape Lookout, now he's in Cedar Key
- Pair in Bluff Point Female- lost nest just before trapping, bounced around a lot after trapping, and now it is south in Virginia

Wrap up and adjourn:

- So many fun things happening in person, including boat trips and a bonfire at Kashi's!!