



NEWSWAVE

NEWS FROM THE U.S. DEPARTMENT OF THE INTERIOR: OCEAN, GREAT LAKES, AND COASTS

Special Feature— Restoring Native Fish to the Great Lakes, see page 12

Winter 2021

BOEM: First Wave Energy Research Project

Advancing Marine Hydrokinetic Technology

By John Romero (BOEM)

On February 16, the Bureau of Ocean Energy Management (BOEM) announced they have issued a lease for the first wave energy research project in Federal waters off the U.S. west coast.

“This is the first time a lease has been issued to support the testing of wave energy equipment in Federal waters off the U.S. west coast,” said BOEM Director Amanda Lefton. “Ocean waves contain a tremendous amount of energy, and this opportunity offers exciting potential to demonstrate the viability of wave energy technology

and expand the nation’s renewable energy portfolio.”

The Federal marine hydrokinetic energy (MHK) research lease was offered to Oregon State University (OSU) for the PacWave South project.

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Read the press release: <https://www.boem.gov/boem-issues-lease-first-wave-energy-research-project-federal-waters>



A conceptual illustration shows how marine hydrokinetic technology harnesses energy from ocean waves, tides and currents, and converts it into electricity to power our homes, buildings and cities. The wave energy converters that will be tested at PacWave South are floating or underwater devices that are moored to the seafloor and capture energy from the moving waves. Image credit: BOEM

Newly Constructed Resting Houses Share Cultural Traditions

By DOI’s Office of Insular Affairs

The Kosrae Island Resource Management Authority has completed the construction of several traditional resting houses using Kosraean traditional knowledge and resources in the Mahkontowe Conservation Area (MCA). These projects are part of a



Kosrae's Utwe Resting House.

larger effort to protect cultural and natural resources and to develop eco-heri-

tage tourism. The local resting houses will have a dual purpose of supporting tourists as well as local Kosraean agriforesters.

The project was funded through the Compact of Free Association in Kosrae State in the Federated States of Micronesia. The resting houses are named for and located within the 4 municipalities of Kosrae; Utwe, Malem, Lelu, and Tafunsak that each have areas located within the MCA. This unique use of Compact funds helps Kosrae preserve cultural traditions while also promoting the protection of natural resources for tourism and economic development.

See Kosrae page 5

Tracking Elusive Male Sea Turtles with Satellites

By Kristen Hart and Andrew Crowder (USGS)



Dr. Kristen Hart with a recently satellite tagged male loggerhead sea turtle in Biscayne National Park. Photo credit: Jackie Guzy, USGS

Through satellite telemetry, researchers have discovered patterns of migratory behavior of long-lived imperiled marine reptiles.

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CMA continued from page 30

The CMA is an initiative that will strengthen BOEM's role as a driving force within the regulatory community on sound in the marine environment.

Staffed by highly skilled and knowledgeable acoustics and modeling experts, the CMA will address both naturally occurring sounds and sounds generated by the industrial activities that we regulate, including offshore oil and gas, renewable energy, and marine minerals development. The CMA will augment and focus our marine acoustics expertise on cutting-edge research and applications, including studies of sound source impacts and customized underwater acoustic impact models to inform agency decision-making. It will make sure we are fast, nimble, and forward-thinking on marine acoustics. Most important, we expect the CMA to establish BOEM as a trusted voice on marine acoustics. This includes being a trusted source for research to understand the biological impacts of machine-made sound, models for characterizing impacts, and standards for drawing the line between what levels of noise are acceptable and what levels are not. We expect that every person and organization with concerns about ocean noise will come to trust and rely on the CMA for accurate, dependable, transparent, and scientifically rigorous data and information on acoustics.

Dr. Jill Lewandowski, the CMA Director and Chief of BOEM's Division of Environmental Assessment, and I are excited to share this new development and we encourage you to learn more about the new CMA and what we have already accomplished. We also welcome your ideas to address the CMA's data gaps and information needs. Please send any comments to BOEMPublicAffairs@boem.gov.

Learn more: <https://www.boem.gov/center-marine-acoustics>

A New Shorebird Management Manual

USFWS Supports the Coalition for Shorebird Conservation

By Danielle Smaha (Manomet) and Ann Tihansky (USGS)

Shorebirds are undergoing one of the most dramatic declines of any bird group worldwide. Recent studies show that we have lost more than one-third of all coastal shorebirds since 1970.

Manomet developed a new Shorebird Management Manual with guidance from The Shorebird Management Manual Steering Committee, a group of shorebird experts, contributing authors, and the cumulative work of hundreds of conservation scientists, ornithologists, and land managers, including members from USFWS, USGS along with academic experts, state resource managers, and

international conservation groups. The new manual updates the first version by Doug Helmers published in 1992. Shorebirds face many challenges, including habitat loss and degradation, human disturbance, unregulated and illegal hunting, increasing predation, and climate change. These challenges are greater than any single organization can address alone. That means the most important thing we can do to safeguard shorebird populations is to build coalitions that work together to address these threats. Manomet's Coalitions for Shorebird Conservation

See Manual page 32

Conserving Shorebirds in the Atlantic Flyway

Shorebird conservation takes many partners. In this geonarrative, learn how partners are addressing threats to shorebirds and working to meet the Atlantic Flyway Shorebird Initiative's conservation goal of increasing focal shorebird populations 10% by 2025.

Explore the geonarrative: <https://fws.maps.arcgis.com/apps/MapSeries/index.html?appid=87690c02be3c4c0094bc59cfbfa5ed28>

Learn more: www.atlanticflywayshorebirds.org



The Whimbrel (*Numenius phaeopus*) is one of the largest shorebirds in the Atlantic Flyway and is notable for its long curved bill, which it uses to probe crabs on beaches and in tidal flats. Whimbrels can often be found in salt marsh meadows during migration. Photo credit: Pete Richman, Creative Commons

The Coalition for Shorebird Conservation

Since Manomet's beginnings as a bird banding operation in 1969, its science and research have expanded to focus on ecosystem management and resilience, shorebird conservation, and educating tomorrow's leaders about the importance of the natural world. Diversity, science, and climate change are the fundamental principles driving Manomet's work today.

Manomet launched the Coalitions for Shorebird Conservation approach to stabilize and rebuild shorebird populations and safeguard their vital habitats, to accelerate and support targeted conservation efforts at 13 of the most important shorebird sites in the Americas. At each location, coalition activities are improving the quality and quantity of critical shorebird habitats and increasing local capacity for conservation action.

Through this targeted approach to site conservation, Manomet is helping these sites bridge the divide between local and global action, to inspire and to inform coordinated and comprehensive shorebird conservation in the Americas.

Learn more: <https://www.manomet.org/project/coalitions-for-shorebird-conservation/>

Read the manual. You can download the full manual here: https://www.manomet.org/wp-content/uploads/2021/01/Iglecia_and_Winn_2021_AShorebirdManagementManual-012021-web.pdf

Read more: <https://www.manomet.org/publication/manomet-releases-shorebird-management-manual>

A SHOREBIRD MANAGEMENT MANUAL



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approach connects site-based and hemisphere-scale conservation planning and action.

“Through Monica Iglecia’s hard work and dedication, combined with significant contributions from many other experts, we have compiled this overview of management approaches and shorebird ecology to help inspire and guide beneficial habitat improvements everywhere these birds go,” said Brad Winn, Director of Shorebird Habitat Management.

“As we have developed flyway-scale conservation frameworks for shorebirds, a common theme is the continued education and outreach to land managers on the when, how,

and where to improve and expand habitats for shorebirds. The revised manual will be a great resource for all land management agencies who want to improve their management for shorebirds. USFWS staff from the NWRs and Migratory Birds Program served on the steering committee and contributed to the development of the manual,” said Brad Andres, USFWS National Coordinator, U.S. Shorebird Conservation Partnership and a member of the Shorebird Management Manual Steering Committee.

The manual includes 13 case studies in habitat management from across North, Central, and South America. These real-world scenarios, written by field experts, focus on strategies to

improve shorebird productivity and survival within the Americas, south of the Arctic. Each case study includes:

- information on the species benefited;
- the threats at the site;
- the actions taken to protect shorebirds at the site; and,
- outcomes and advice.

Through the use of the updated Shorebird Management Manual—a good foundation of information about shorebirds and overview of management actions—the coalition of experts and partners hope it can be adapted and applied to reduce the impacts of threats to shorebirds wherever they fly.

Read the manual. You can download the full manual here:

https://www.manomet.org/wp-content/uploads/2021/01/Iglecia_and_Winn_2021_AShorebirdManagementManual-012021-web.pdf

Read more: <https://www.manomet.org/publication/manomet-releases-shorebird-management-manual/>



A snowy plover and chick. Photo credit: Florida Fish and Wildlife Conservation Commission