



M A N O M E T

**STRATEGIC  
PRIORITIES**

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## Using science to create positive change

For over five decades, Manomet has earned a reputation for being laser-focused on quality science and applying our science collaboratively to address real-world challenges.

In 2020, we embarked on a strategic planning process to refine our mission and identify strategic priorities that build on our history, knowledge, and talent. We have identified opportunities to address developing threats to the wildlife values we are safeguarding while promoting human well-being. In this document, we are excited to share with you these priorities for Manomet's next chapter.

Moving forward, we will focus on avian flyways and coastal ecosystems. To improve the habitat of these systems and increase our impact, we will grow our geographies, partnerships, monitoring, scientific research, and education and outreach. This means adding diverse staff in key locations, and bolstering scientific talent. We will continue to ground our work in science, and integrate climate change and diversity, equity, and inclusion across all that we do.

We are excited about the growth and impact we expect with our renewed focus. We hope you will share our enthusiasm for Manomet for years to come!



**Elizabeth Schueler**  
PRESIDENT

# MISSION

Manomet uses science and collaboration to improve the health of flyways, coastal ecosystems, and working lands and seas.

# VISION

Manomet envisions a world where ecosystems and human communities thrive together.

Lesser Yellowlegs Credit: Brad Winn.



# OUR VALUES

## Lead with excellence

We pursue excellence in everything we do and commit to continuous improvement. We will lead by example and hold ourselves to the highest quality of work.

## Uphold scientific rigor

We conduct and apply scientific research with integrity, making our research available to all to promote informed decisions.

## Create equity

We pledge that Manomet and our programs will take action to become more diverse, equitable, and inclusive for the success of our team, our partners, and the communities in which we work.

## Work boldly

We relentlessly seek solutions to reach our shared goals and use creativity, curiosity, and passion to pursue our mission.

## Commit to accountability

We commit to open communication and transparency to each other and our partners worldwide, and assume responsibility for the actions and decisions we make.

## Collaborate with all

We thrive by working as a team, recognizing all perspectives, dedicating support to each other and our partners, and leading with trust and mutual respect.

## Stay focused

We commit to staying focused on our goals to achieve our mission while ensuring that we adapt to changes in our working environment.

## Nurture wholeness

We value each team member for their whole self, encouraging their emotional and physical wellness, and supporting balance in all we do.

*We aim to inspire, mentor, and guide educators and students both in and out of the classroom to create the next generation of informed citizens and future conservationists.*



# Achieving Our Mission

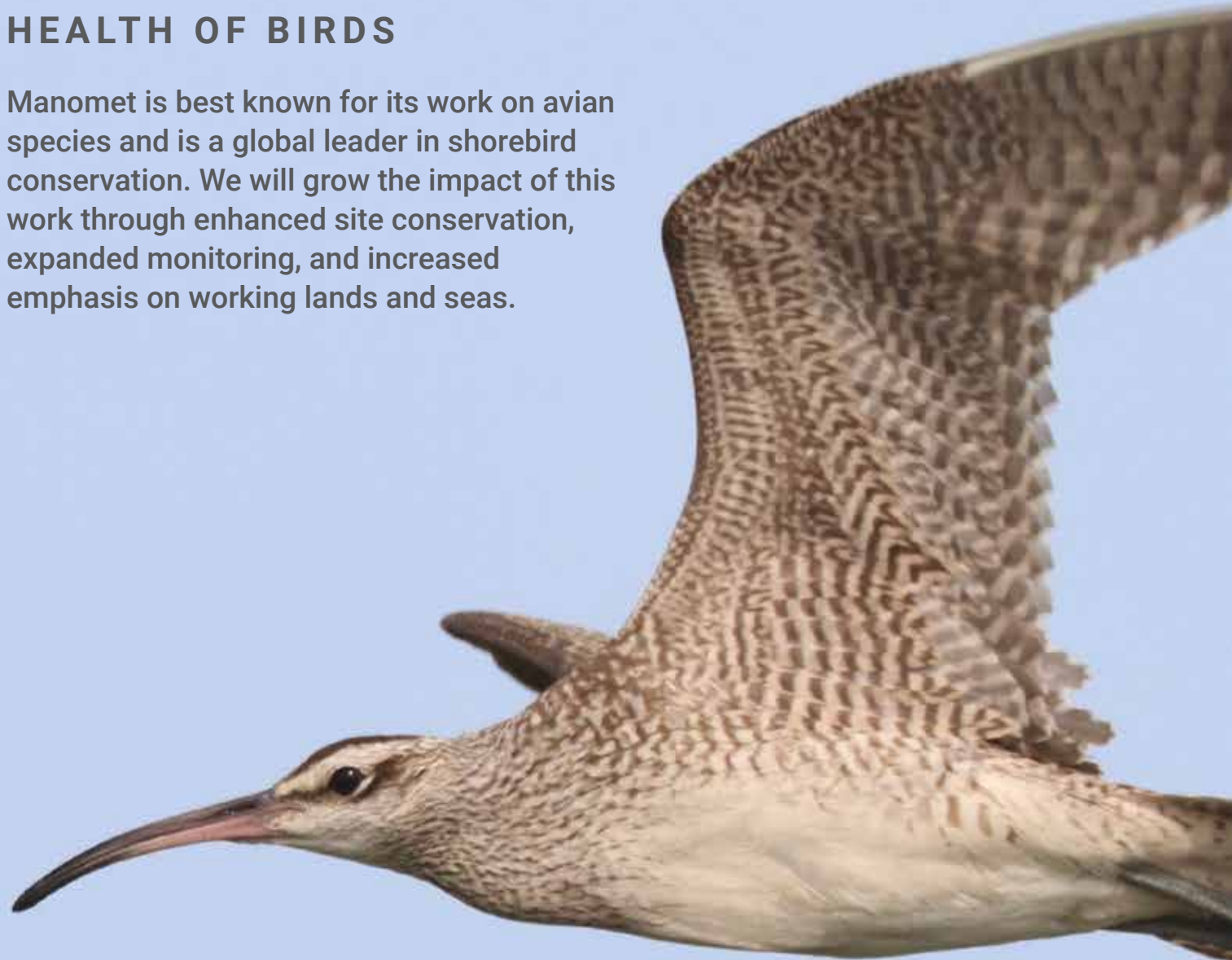
## PROGRAM PRIORITIES 2021-2024

Flyways, resilient habitats including coastal ecosystems, and education and outreach are our core program priorities. Much of our work is in landscapes that provide food and other resources for people. Our approach of balancing biodiversity and people on working lands and seas is embedded in these programs.

# Flyways

## SAFEGUARDING THE HEALTH OF BIRDS

Manomet is best known for its work on avian species and is a global leader in shorebird conservation. We will grow the impact of this work through enhanced site conservation, expanded monitoring, and increased emphasis on working lands and seas.



### Monitor all shorebird populations across the Western Hemisphere

Increased monitoring of all shorebirds will better inform priority locations for site conservation work. Based on our long-term data on critical shorebird stopovers, we have identified the most important sites to focus on in the coming years. Given the current trends in habitat loss, we need to understand how every shorebird species uses habitat to prioritize future conservation efforts. We will grow our monitoring to develop a full picture of species at risk, including the many species about which we know very little.

### Ensure the effective management and protection of the most important sites for shorebirds throughout the Americas

Partnerships are key to achieving shared conservation and sustainable development goals. Manomet staff helps partners maintain and increase engagement to promote effective conservation measures at the highest priority sites for shorebirds in the hemisphere. Nested within our work is an effort to maintain productivity of working lands for local stakeholders while enhancing shorebird conservation. These efforts include working with ranchers, shrimp farmers, and salt producers to manage their lands to benefit shorebirds and other wildlife.

### Expand Western Hemisphere Shorebird Reserve Network designation to 41 million acres of shorebird habitat at 120 sites in 20 countries in the Americas

Manomet hosts the Executive Office of the Western Hemisphere Shorebird Reserve Network (WHSRN), a partnership-driven conservation initiative for protecting critical habitats for shorebirds throughout the Americas. Manomet staff provides WHSRN site partners with training and expertise in conservation planning, good governance, community engagement, ecosystem service assessment, habitat management, shorebird monitoring, and fundraising. By focusing on the best available information, including traditional and local ecological knowledge, we will add over a dozen new WHSRN sites of critical importance to shorebirds.

### Catalyze and coordinate local to global conservation to restore shorebird populations at national and international scales

The conservation of migratory species requires coordinated action across borders and throughout their lifecycles. Manomet has been at the forefront of national and flyway-scale efforts to conserve shorebirds for more than 30 years. We are leaders in the Arctic Migratory Birds Initiative, the Convention on Migratory Species, and the Atlantic, Midcontinent, and Pacific Shorebird Initiatives. By developing national plans within the framework of these broader initiatives, we will continue to ensure connections between local and global actions and address global drivers of threats to shorebird populations.

## WHIMBRELS ON THE WING

Manomet is studying Whimbrels (*Numenius phaeopus*) to help understand where and when conservation actions are needed to improve the life-supporting conditions on the ground for this and all shorebirds. Through tracking species like Whimbrels, we are able to inform critical decisions that can help protect the areas shorebirds rely on most. *Photo: Whimbrel in flight. Credit: Alan Kneidel.*

# Resilient Habitats

## MENDING NATURE TO BENEFIT WILDLIFE AND HUMAN COMMUNITIES

For animals that travel tremendous distances — like migratory shorebirds that span continents, or fish that leave ocean life to spawn in rivers and streams — a diverse network of healthy and intact coastal, riverine, wetland, and grassland habitats are critical to ensuring that migratory populations thrive.

At Manomet, our greatest conservation accomplishments involve our ability to work with others, integrating cutting-edge science, targeted management actions, and long-term monitoring to improve habitat. We identify threats to nature and develop measures to alleviate pressure on the most valuable and sensitive ecosystems. Healthy ecosystems and vibrant wildlife populations are critical to ensuring that human communities thrive.

Manomet is committed to understanding these issues and working toward maintaining and restoring resilient habitats to benefit wildlife and people. We have an ambitious goal of implementing improvements on 500,000 acres of priority habitats throughout the Americas.

### Reverse coastal habitat declines on 1,000 acres of critical habitat in the Georgia Bight

We are improving at least 1,000 acres of priority habitat over the next three years for shorebirds, sea birds, and other wildlife along the South Carolina and Georgia barrier coasts. By collaborating with local land managers and conducting targeted research, we will implement conservation actions to address threats at specific sites. We apply strategies from international conservation plans locally to protect critical places and reduce human disturbance to nesting and migrating birds.

### Protect and restore tidal zone habitats with engineering best practices

We engage state partners from Maine to Florida to implement habitat improvements to benefit coastal biodiversity. Working with the Coastal States Organization, the US Army Corps of Engineers, State Coastal Zone Management authorities, state wildlife resource agencies, and the US Fish and Wildlife Service, we will help steer sediment management decisions for the parallel outcomes of habitat improvement and coastal community resilience. We will increase our capacity and scope through training and outreach with federal and state partners. This work will contribute to our overall goal of improving 500,000 acres of habitat for wildlife and affiliated coastal communities.

### Apply our understanding of climate change impacts on nearshore coastal ecosystems and fisheries productivity to strengthen resource management and conservation

Productive and healthy coastal and nearshore ecosystems include thriving populations of intertidal invertebrates and fish that use both marine and freshwater habitat. We work holistically with fishers and partner organizations to understand and improve habitat conditions and fisheries productivity in rivers and estuaries to benefit wildlife, fisheries, and people. We are also working to understand coastal invertebrate populations as part of our fisheries and shorebird work, including a focus on Red Knots. A growing area of our shorebirds and fisheries research is employing environmental DNA (eDNA) to monitor the distribution and abundance of species. This eDNA research will inform conservation and management priorities.

### Partner and teach across the Americas to improve habitat conditions for shorebirds in natural landscapes

We will amplify local conservation efforts across North, Central, and South America, focusing our work largely at designated WHSRN sites. Working closely with our Flyways staff in 2021 and 2022, we will be delivering shorebird conservation trainings in Arkansas, Mississippi, Louisiana, and Texas. We are building lasting connections within communities and between countries toward a unified goal of maintaining and restoring imperiled shorebird populations. We will grow the sites where we are teaching local stakeholders (including land managers, wildlife biologists, and community leaders) about shorebirds and the role their area plays in the full life-cycle needs of these birds.

## SETTING THE STAGE FOR FISHERIES RECOVERY

“The only way we’re going to make progress in our efforts is to ensure that the right partners are working together, whether it’s an economic organization, a policy organization, a research entity, or the fishery’s managers.”

— MIKE THALHAUSER, MAINE CENTER FOR COASTAL FISHERIES

# Working Lands and Seas

## BALANCING CONSERVATION WITH PRODUCTION ACROSS FLYWAYS AND RESILIENT HABITATS

High-quality habitat conditions for wildlife can exist alongside resource-based industries such as agriculture, fisheries, and salt production. Using our experience developed over several decades, we are expanding our efforts to secure greater conservation impacts. We will continue to design and then help implement better management practices for the benefit of nature, wildlife, involved businesses, and human communities.

### Deliver effective science-based management practices to 500,000 acres of working lands and seas

Applying science is core to everything we do. By providing technical guidance and clearly communicating scientific results to stakeholders, we ensure that our science is applied toward solutions. Our science team will work closely with our program teams to ensure our guidance and metrics are thoroughly integrated at priority sites. Key stakeholders include:

#### *Coastal communities*

In the coastal zones of New England, Nicaragua, Mexico, and Chile, we partner with fishers and aquaculture farmers to identify and build shared community values and goals that support ecosystem restoration, sustainable harvesting and production practices, and improve adaptive management efforts. This includes our fisheries work in the Gulf of Maine, where ecosystems and livelihoods are under threat from unprecedented ocean warming. We are working to build both ecosystem and community resilience by identifying shifting fisheries patterns and promoting fisheries diversification. We are also working to expand the adaptive capacity of shellfish co-management and tribal fisheries management and elevating the importance of local and indigenous knowledge of marine resources.

#### *Priority Producers*

We have identified resource-based commercial enterprises on lands and coastal areas that provide feeding, roosting (resting), and in some cases, nesting opportunities for shorebirds. To enhance shorebird habitat benefits, we will expand our work with salt, rice, catfish, crawfish, cattle, sheep, bison, clam, and blueberry producers. On these productive land and seascapes, we are working to improve conditions for migrating shorebirds. In Saskatchewan, Ecuador, Honduras, and Venezuela, we work with salt producers; in Kansas, Brazil, and Uruguay, with cattle ranchers; and in Louisiana, with rice and crawfish farmers. Our successes partnering with producers continues to unveil new opportunities to find common ground to benefit shorebirds and local economies.

#### *Shrimp Farmers*

We provide significant benefits for shorebirds and other species by working with shrimp farmers. Many thousands of acres of shrimp farms have replaced areas of natural coastal habitat — mostly salt-pan flats and mangrove forests — which are critical areas for shorebirds in Mexico, Central America, and northern South America. Shrimp farms that are managed to benefit shorebird species fill critical habitat gaps for roosting and feeding. We work with local partners and producers to implement practices that integrate shorebird conservation into shrimp farming.

### SHOREBIRDS AND CATTLE

The most impactful use of land in modern history is agriculture. 49% of WHSRN sites report grazing as one of the uses of their land. Of those sites, 1.6 million acres are considered important for grazing.

Recognizing and respecting both conservation and commercial values, Manomet scientists are working together with ranchers to figure out how to manage cattle in ways that support shorebird habitat and sustain their business. *Photo credit: Joaquin Aldabe.*



# Education & Outreach

## EMPOWERING THE NEXT GENERATION

Environmental education is a powerful tool to improve environmental literacy and inspire stewardship across diverse communities. Manomet empowers students, teachers, and community members as scientists and environmental stewards by putting tools and resources into their hands and by connecting them to locally important conservation issues. At Manomet, we use our five decades of conservation science and environmental monitoring experience to inspire the next generation of conservationists and decision-makers.

### Expand the scope and impact of Manomet's education programs

Manomet will establish itself as a regional leader in high-quality environmental education by committing to hands-on, inquiry-based science instruction and aligning our programs with national best practices and the curricular needs of schools. This work will take place at Manomet HQ, virtually, and also in classrooms and schoolyards across the region through our Wandering Classroom initiative. We will also leverage Manomet's existing global reach and partnerships to amplify and deliver education programming that follows migratory bird flyways across the western hemisphere, connecting schools and communities with conservation science and birds.

### Promote sustainable business practices and environmental stewardship through education and engagement

U360 is an online experiential education and professional development program for college students to learn soft skills, environmental science, and sustainability concepts and apply them in the real world through direct engagement with small businesses. Giving both young adults and small business owners strategies for reducing environmental impact can lead to lifelong stewardship that can advance Manomet's conservation goals. We will grow the U360 program by diversifying the student applicant pool and seeking new strategic partnerships with diverse colleges and universities.

### Reduce systematic barriers to environmental stewardship and conservation careers

We acknowledge that the fields of conservation biology and ornithology in the United States are lacking in diversity. We will prioritize diversity by intentionally recruiting students from historically excluded groups into our U360 college internship program, banding lab internship program, K-12 student and teacher programs, and public programming such as the Massachusetts Young Birders Club. We will prioritize equity by providing career training and marketable experiences in sustainable business practices to underserved students through the U360 program. We will prioritize justice by revising our internship application practices to de-emphasize or eliminate criteria related to privilege and emphasize criteria that reveal potential for growth. Finally, we will prioritize inclusive pedagogy and curriculum through intensive staff training and partnerships.

### Develop the Manomet Observatory property to maximize biodiversity and to serve as an outdoor laboratory and demonstration property for science and education.

We will build on Manomet's rich, 50+ year history of bird-banding and scientific data collection to expand scientific and educational opportunities for our partners, visiting students, and community members. We will identify priority conservation targets and engage teachers and students in stewardship through participation in our environmental monitoring and restoration work. We will continue to leverage our long-term banding lab dataset to partner with scientists focused on climate change, flyways, and resilient habitats. We will also establish an accessible interpretive nature trail that will be open to the public.

## THE IMPACT OF THE BANDING LAB

*"Manomet's hemispheric and global impact has deeply enriched my classes through visits to the banding lab and an authentic connection to Manomet's scientists and the impact of their critically important research."*

— DEB HARRISON, MANOMET TRUSTEE AND HIGH SCHOOL SCIENCE TEACHER

# Foundational Principles

Manomet has identified three key themes that we are integrating across all of our work: science, climate change, and diversity, equity, and inclusion.



## SCIENCE

Science has always been at the core of our work. Manomet remains focused on science-driven solutions to improve ecosystem health and human well-being, and we will continue to carry out original science to help drive change.

Research and monitoring drive our science activities. Our research efforts include shorebird and landbird conservation, fisheries, forestry, and social science applied to conservation. These disciplines are core to understanding and informing our work to address flyway health, resilient habitats including coastal ecosystems, and working lands and seas. In all cases, we are working to understand the impacts of climate change on species distribution and health.

### Grow our ongoing species-focused monitoring and research programs

Manomet conducts long-term science in many areas, including shorebird and landbird conservation, fisheries management, and climate impacts on forest systems. Long-term data sets in these fields are extremely valuable, especially for measuring and adapting to impacts from a changing climate. We plan to expand our work in each of these fields, focusing on science directly connected to improving conservation outcomes. We are also expanding our expertise in social science, so conservation actions in these fields can be applied more effectively.

We are prioritizing several initiatives in the coming years, including the use of cutting-edge technology, like satellite tracking and advanced audio recording

techniques and analysis methods, to help monitor wildlife populations. We are expanding the International Shorebird Survey, the longest-running citizen science program on shorebirds, to better measure changing populations and the impacts of conservation activities at critical sites. We have been successful in our efforts to recover American Oystercatchers, achieving a 24% increase in the population on the US coast, and aim to reach the 30% increase goal we established with our extensive partnerships. Finally, we are expanding our survey work across the Arctic, working with a large partnership to reach our goal of measuring population size and trends in half the time originally planned so that we can more effectively guide our hemispheric shorebird conservation activities.

### Ensure that all of Manomet's science is open and widely accessible

Across all of our work, we share a commitment to making science more accessible and inclusive. In early 2021, we launched an Open Science initiative to increase access to our science, which will include open-source publication whenever possible, openly documented research methods and analyses, and efforts to make our scientific results widely accessible.

## CLIMATE

Climate change is impacting every aspect of our natural, social, and economic systems. By embedding climate science into every facet of our work, Manomet can scale impact to combat climate change more effectively.

### Infuse strategies to adapt to and mitigate climate change into all of our work

The latest climate science informs all of our efforts, and we incorporate strategies to address climate change and its impacts into all of our work. Climate change risk planning will also be incorporated into all management plans.

### Reduce GHG emissions and promote climate smart practices on over 400 million acres of land

Given that severe climate-related events continue in frequency and that agriculture is both impacted by climate and contributes to greenhouse gas emissions (GHG), Manomet will grow the Climate Smart Land Network to help agricultural land managers navigate decisions to optimize habitat diversity and ecosystem health in light of a changing climate. By improving forest and agriculture management, we will increase habitat suitability for birds, promote coastal ecosystem health, create new opportunities for climate mitigation, and adapt ecosystems to a changing climate.

### Understand the changing patterns of species distribution and risks from climate change

Climate change drives all the work we do in the Gulf of Maine, as we strive to understand the population trends of marine species impacted by unprecedented warming of these waters. Understanding this dynamic is paramount for local communities and decision-makers

to manage fisheries resources and build resilience. We will ensure that climate change and its communication is incorporated into monitoring and research findings. And, we will incorporate climate adaptation and mitigation strategies into all of our site conservation and management plans.

### Equip the “climate generation” to tackle the climate crisis in all spheres of their lives

The climate crisis will disproportionately impact Millennials and Gen Z, yet they have little or no power to make decisions and create solutions today that will most affect their futures. By giving today’s youngest adults practical sustainability knowledge coupled with professional and interpersonal skills, Manomet’s U360 program helps these individuals gain agency over their futures and become active and effective change-makers.

## DIVERSITY, EQUITY, & INCLUSION (DEI)

We are committed to achieving our mission and solving today’s complex issues in a meaningful way that balances economic and environmental concerns and social justice issues. We will continue to bring together people with diverse points of view, skills, values, and knowledge to increase the impact of all that we do.

### Incorporate diversity, equity, and inclusion into every aspect of our organization and work

We have begun the process of integrating inclusive principles across all that we do. We are incorporating DEI into programming, including an aggressive effort to expand the diversity of our U360 program. 45% of students enrolled in the 2020-21 U360 class were BIPOC



Through shorebird training workshops throughout North, Central, and South America, we connect partners and diverse stakeholders from across the Western Hemisphere to improve shorebird conservation. Credit: Monica Iglecia.

(Black, Indigenous, and People of Color) students; we plan to incrementally increase the number of students participating every year, ensuring that at least 55-65% of each class is composed of underrepresented and/or disadvantaged individuals.

Additionally, we will:

- Strengthen human resource policies to ensure greater diversity, equity, and inclusion internally;
- Establish an Open Science initiative, and increase science accessibility to all;
- Ensure historically excluded groups are included in our programming;
- Build an annual internship program for BIPOC students;

- Create a bird-banding training program for BIPOC participants;
- Equip staff with the tools and skills necessary to engage diverse stakeholders thoughtfully and respectfully;
- Strategically review our programming to determine whether it appropriately integrates marginalized groups;
- Maintain and improve DEI achievement metrics that will ensure our accountability;
- Remain agile and innovative so that we can foster meaningful relationships with diverse groups, anywhere, and at any time.

# Where We Work

## NORTH AMERICA

- North Slope, Alaska
- Yukon River Delta, Alaska
- Chaplin Lake, Saskatchewan, Canada
- Bay of Fundy, New Brunswick, Canada
- Gulf of Maine
- The Pine Barrens and Cape Cod, Massachusetts
- Flint Hills, Kansas
- Lahontan Valley, Nevada
- Delaware Bay (New Jersey and Maryland)
- Georgia Bight (Georgia and South Carolina coast)
- Louisiana wetlands
- Texas coast
- Ensenada Pabellones, Mexico
- Bahía Todos Santos, Mexico

## CENTRAL & SOUTH AMERICA

- Gulf of Fonseca of Honduras, El Salvador, and Nicaragua
- Llanos and Coastal Venezuela
- Delta del Río Iscuandé, Colombia
- Llanos of Colombia
- Bigi Pan, Suriname
- Coastal Maranhão and Pará States, Brazil
- Lagoa do Peixe, Brazil
- Coastal Lagoons, Uruguay
- Paraguay
- Chiloé Island and coastal Chile
- Laguna Mar Chiquita, Argentina
- Patagonia, Argentina and Chile

### ARCTIC RESEARCH

We are conducting research on breeding populations of shorebirds across the North Slope to unravel the mysteries of shorebird migration and track changes in population sizes. Understanding where shorebirds go to breed, as well as determining nesting success in different habitats, helps inform conservation decisions to reverse population declines.



### GULF OF MAINE

The Gulf of Maine is one of the fastest warming bodies of water on the planet, leading to big changes in the marine environment and a changing mix of species that survive and thrive. Manomet is on the doorstep of the Gulf of Maine and the forefront of developing sustainable adaptations to a changing climate.



### DELAWARE BAY

We work with partners to build a constituency of support to protect shorebirds and horseshoe crabs, whose eggs provide critical food for shorebirds. Through reTURN the Favor, hundreds of volunteers have saved over 600,000 stranded horseshoe crabs, while also inspiring others and learning about additional actions to support conservation.



### PLYMOUTH, MASS.

Manomet has a long history of education and outreach in southeast Massachusetts through our landbird banding program. We aim to expand our experiential learning opportunities to underrepresented communities as we focus on training the next generation of conservationists and sustainability leaders.



### CHILOÉ ISLAND

The eastern wetlands of Chiloé Island are a WHSRN Site of Hemispheric Importance, home to 99% of the Pacific coast population of Hudsonian Godwit. Since 2010, Manomet has worked with local partners to integrate shorebird needs with economic development at key sites, and build local capacity to manage, safeguard, and protect critical habitats.



# How We Work

## We work locally to create global impacts.

For the place-based work Manomet conducts, we lead the work with local staff who are sprinkled throughout the Western Hemisphere at priority landscapes. They are local experts embedded in the community who are able to effectively build on their knowledge and forge partnerships with local stakeholders, whether they be community organizations, businesses, farmers, or fishers.

Working locally, we are able to access and benefit from the global network of Manomet, including our science and experience working throughout the Western Hemisphere, to most effectively navigate complex management decisions on the ground for the benefit of wildlife and people.

## We apply science in all we do.

Manomet has been steeped in science since its beginnings and values research and monitoring to inform management decisions on the ground. There has never been a greater need to monitor changes in our natural world and to apply this information to understand where to target our efforts and which management strategies are most effective.

## We develop partnerships to influence and scale.

We work in partnership to more effectively influence and scale our work. It is only possible to influence decisions with a firm understanding of the local dynamics including social and economic conditions in a landscape. We have partnered with producers, businesses, communities, government, and non-government organizations to provide scientific expertise to achieve impact. We often serve a role as facilitator and help identify threats, bring science to stakeholders, and navigate management decisions to benefit nature and people.



# Thank You!

Thank you for your interest in and support for Manomet over the years. We are committed to continuous improvement and look forward to further honing our strategies for maximum impact as we navigate our ever-changing world.

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*Semipalmated Sandpiper. Credit: Ian Davies.*



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