

International Shorebird Survey

Newsletter April 2023



Accelerating declines of Atlantic Flyway shorebirds signal the need for urgent conservation action

In 1974, Manomet biologist Brian Harrington founded the **International Shorebird Survey (ISS)** to document habitat use and population trends for migrating shorebirds. Since then, hundreds of dedicated and enthusiastic shorebirders across the Western Hemisphere have been supplying data to shorebird scientists.

A recent study published in **Ornithological Applications** and authored by researchers from Environment and Climate Change Canada, the U.S. Fish and Wildlife Service, and Manomet reveals that since 1980, nearly all shorebird species along the Atlantic Coast of the U.S. and Canada have experienced steep declines, with most losing more than 50% of their population over the last four decades.

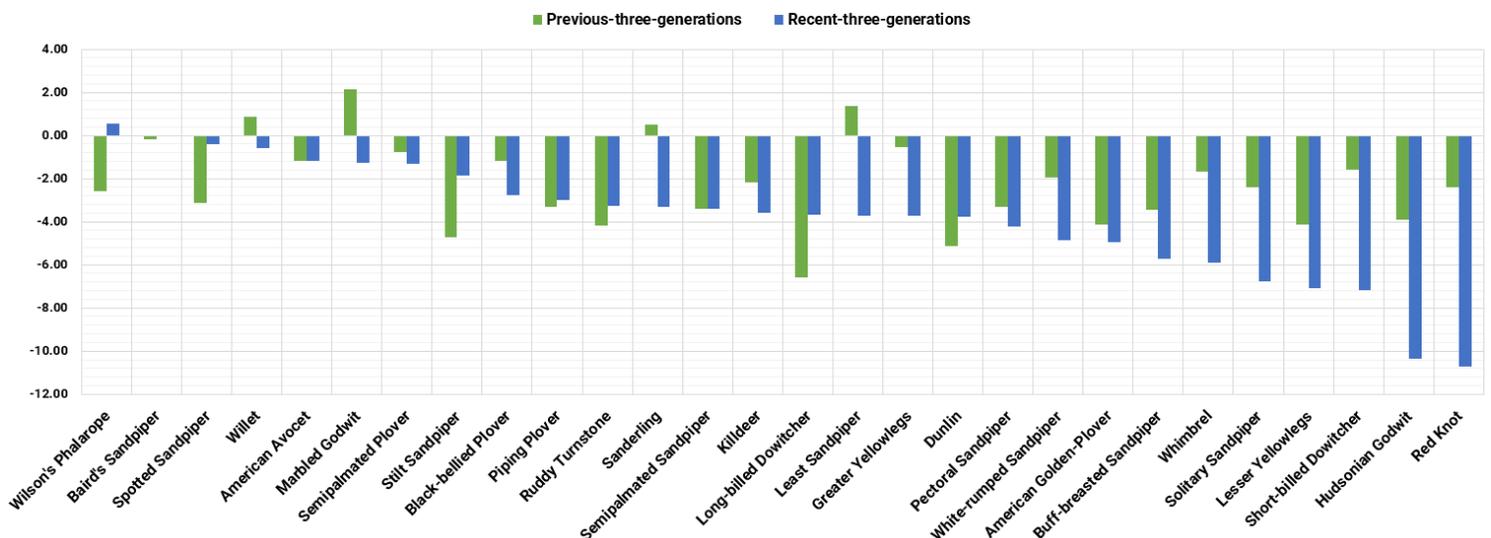
This study is the most comprehensive and up to date analysis of shorebird populations in North America, and was based entirely on **ISS** results, along with the companion surveys in Canada: the Atlantic Canada Shorebird Survey, and the Ontario Shorebird Survey. **Your shorebird counts over the last 40 years made this landmark analysis possible.**

Over the 40 years, 26 of the 28 shorebird species analyzed were found to be declining, and research found strong evidence that 13 of those species are now declining even faster than previously. In the figure, the most recent trends are shown in blue for each species. More than 80,000 surveys were included in this study with 70 million shorebirds counted at nearly 4,000 location sites during south-bound migration in North America.

These results match what ISS contributors are experiencing in the field. We see the decreases at our local patches and sites and understand intuitively these trends and statistics. With the declines being so widespread and dramatic, it may seem easy to be discouraged, but these data can also be used as a call-to-action. Shorebird researchers are calling for state and federal wildlife agencies, as well as conservation organizations, to act to reverse population-level declines.

“It’s important to pay attention to shorebird declines as an environmental indicator of larger changes and understand how we can address current limitations of existing conservation efforts,” shares **Lizzie Schueler**,

Average yearly trends for 28 shorebirds species



Annual percent change in abundance of 28 species of shorebirds for the most recent three-generation period ending in 2019, and the three-generation period prior to that. The rate of decline is accelerating for a majority of species.

Manomet president. "Strategically directed combined with long-term commitment has been shown to work well in stemming declines of species. With the accelerated losses we're witnessing, we need an expanded research footprint, and a significant increase in federal, state, and local conservation commitments. It's not too late to invest in recovery, but time is of the essence."

The American Oystercatcher is an example of a species which has benefited from these concerted conservation efforts. This shorebird, previously declining because of human encroachment, habitat loss, and other threats, has recently increased its population 23% as a result of strategic investments and action from diverse partners.

Manomet and the study's co-authors share their appreciation for all of the ISS contributors who donate their time, energy, and expertise to make a difference for shorebirds.

Dr. Paul Smith, researcher at Environment and Climate Change Canada and lead author on the study says, "The decline of North America's shorebirds is one of the continent's major bird conservation challenges, and studies such as this bring the story of these declining shorebird populations to the world."



What people may not recognize, though, is that the volunteer-based ISS is the key dataset supporting these analyses - it is by far the largest and most widespread survey of shorebirds in the United States. Without the extreme dedication of the numerous volunteers out there, rain or shine, for decades, and without Manomet's longstanding leadership, we would not be in a position to describe the patterns in these population declines. This understanding of the magnitude, timing and location of the declines is a prerequisite for addressing the conservation issues and reversing the declines. So, it is no exaggeration to say that ISS volunteers are at the very foundation of shorebird conservation."

The ISS Team at the Rio Grande Valley Birding Festival

Last November, Sam Wolfe and Lisa Schibley represented Manomet and ISS at the Rio Valley Grande Birding Festival. We helped with shorebird field trips, shared information about Manomet's shorebird program, displayed our shorebird quilt and wings, and recruited for ISS. Given the enthusiasm of the folks who stopped by the booth, the visit was a great success!



Visits to shorebird/birding festivals and presentations to bird clubs are turning into some of the best ways to find shorebird enthusiasts who make great ISS contributors. If you know of a club or festival for us to connect with, please reach out to lschibley@manomet.org.

Site Highlight:

Weg naar Zee, Suriname

Few people know that the coast of **Suriname** is one of the most important wintering areas for North American-breeding shorebirds. The vast tidal mudflats and extensive mangroves attract hundreds of thousands of wintering shorebirds each year, including high numbers of the globally Near-Threatened Semipalmated Sandpiper, but also Black-bellied Plover, Whimbrel, Greater and Lesser Yellowlegs, and Short-billed Dowitcher. Surveys in the 70s and 80s carried out by A. Spaans, R. Morrison and K. Ross documented this significant importance.

Unfortunately, since then, this important region for shorebirds has received little attention. One of the reasons is the difficulty to reach the coast for monitoring. Most of the coast of Suriname is covered with mangroves and traversing those to reach to coast takes quite some effort and complex timing: you need high tide to navigate through them. Fortunately, some sites are easier to access and Weg naar Zee is one of such places.



Weg naar Zee (“Road to Sea” in Dutch) is a coastal area situated 10 km northwest of Suriname’s capital Paramaribo with habitat dominated by mudflats and mangroves. **Otte Ottema**, a Dutch ornithologist and shorebird expert who has lived in Suriname since 1999, started regular surveys at Weg naar Zee in 2000 using the International Shorebird Survey (ISS) protocol. In those days, the Lesser Yellowlegs, his favorite shorebird, were common winter visitors on the mudflats, but by 2009, numbers had dropped an estimated 80%. Although shorebirds are hunted in Suriname, this was not believed to be the main source of the decline.



In fact, the area had suffered from extreme erosion which resulted in an absence of soft sling mud, which is a preferred foraging habitat for shorebirds. To revert the erosion at Weg naar Zee, Professor S. Naipal, a renown hydrologist at the Anton de Kom University of Suriname, developed Sediment Trapping Units (ST Us). By installing permeable walls of double rows of wooden poles in the mud and filling these up with brushwood, new sediments would be deposited after flowing through the walls and entering calmer water. Habitat was restored with the replenished sediments and allowed new patches of mangroves to grow and thrive. Soft sling mud reappeared too.

Consequently, in early 2020, Ottema noted the return of shorebirds and together with **Ashraf Tilburg**, a bird guide trained by Ottema in shorebird identification, reactivated International Shorebird Surveys at the site. During two years of surveys (2020-2022), a total of 59 surveys were conducted, recording over 120,000 shorebirds of 17 species, all but one (Collared Plover *Charadrius collaris*) being North American migrants. By far the most abundant species was the Semipalmated Sandpiper (108,653 individuals), followed by the Lesser Yellowlegs with a total of 4,713 individuals.



Due to its close proximity to Paramaribo, Weg naar Zee makes a great site for training more people in shorebird monitoring. Since last year, Manomet started training students from the Anton de Kom University in shorebird identification, monitoring techniques and the ISS protocol. So far several students joined field trips to Weg naar Zee and are becoming excited about shorebirds. Hopefully more students will follow as there is quite some coast to cover to count shorebirds in Suriname!

Meanwhile, the ISS surveys carried out by Otte and Ashraf at Weg naar Zee serve an important role in documenting the success of the restoration work. They will continue until July 2023 to complete their third full year of surveys and hope to continue surveys

in the future. It is only a tiny site, but it represents habitat that every year is used by thousands of shorebirds.



Volunteer Highlight: The Hilton Head Crew

Since 2013, the Hilton Head Crew has submitted over 100 ISS surveys. Their commitment is impressive! **Carol Clemens** tells us:

"Our shorebird survey started in the summer of 2013, initiated by long-time birder Jack Colcolough who recruited a team of helpers. Jane Hester and I were part of original group and continue the surveys 10 years later. Other members have changed over time and currently include Alan Biggs and Wendy Dickes. Fran Baer who surveyed with us for nine years was our expert photographer and logged the Piping Plovers and their bands. She was a dedicated member of the team who rarely missed a survey until she retired last year.

We survey each month, about 2 hours after a high tide, only missing during Hurricane Matthew and during early COVID when we were not allowed entrance to the site. We normally survey with three people using scopes, binoculars, and cameras. One of us checks the tide schedule, picks appropriate options, surveys the



team to see who can help and when, and then sets the survey date with a backup plan. Another member will post the data, deals with any challenges, and keeps a running log of the birds by species and date."

From **Alan Biggs**: "Carol Clemens invited me to participate in the shorebird survey back in 2016. Jack kindly shepherded me into the group in my initial role as note taker. I learned my shorebird ID as an undergraduate at Bucknell University with an ornithology class summer session trip to Assateague Island in 1975 and continued to visit Assateague every year for over 25 years while I lived in eastern West Virginia. Moving to Hilton Head Island as a retiree has allowed me to rekindle my passion for shorebirds - but almost daily!. Jack, Carol, and Fran Baer welcomed me and brought me up to speed on the SC shorebirds on our island and I've made a commitment to the survey for as long as I am able. Fran Baer taught me the patience that it takes to be certain that you're seeing what you think you're seeing. She was incredibly careful and tenacious with her attention to details." We are grateful to this team of shorebird enthusiasts for all the counts they have sent us over the years. Thank you!

Enjoy a little photography from ISS Contributors

While photographic records are not necessary to ISS counts, we have noticed over the years that some of our contributors are extraordinary photographers. We wanted to share a few shots that keep reminding us how beautiful shorebirds are. Thank you for your counts and your photos!



Pectoral Sandpiper by Davi Pasqualetti . Itanhaém, Brazil



Ruddy Turnstone by Pat Felker. Napatree Point, Rhode Island, USA



Red Knot by John Van Dort. Estero Las Aguas, Honduras



American Golden Plover by Vern Wilkins. Goose Pond, Indiana, USA

There is always more to explore

Explore all ISS data at manomet.org/iss-map

More about ISS at

manomet.org/project/international-shorebird-survey/

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