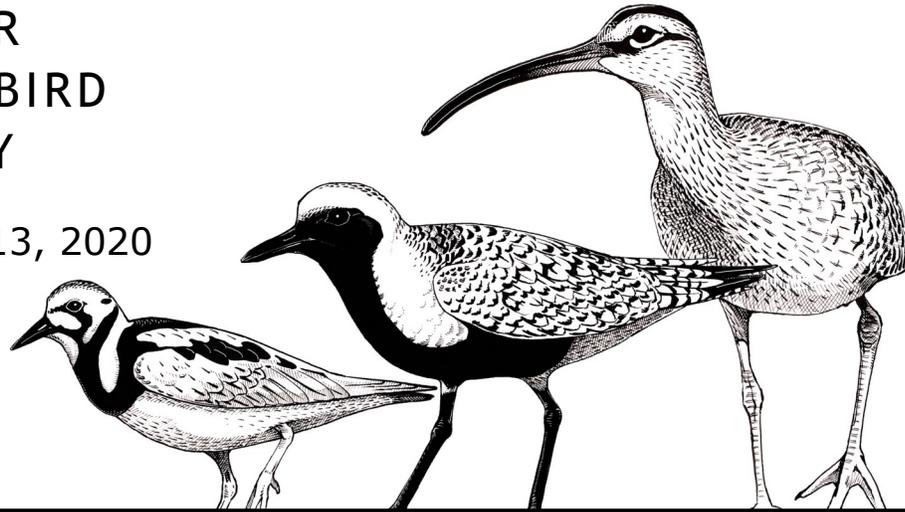


WINTER SHOREBIRD SURVEY

Feb. 7 - 13, 2020



OVERVIEW

The Winter Shorebird Survey is a week-long, statewide survey of shorebirds and seabirds in Florida. Experienced birders who can identify multiple species of wintering shorebirds and seabirds are invited to participate in this survey. Observers have the option to conduct a survey for only the focal species (American Oystercatcher, Piping Plover, Red Knot, Snowy Plover, Wilson's Plover, and Black Skimmer). We encourage new participants to communicate with regional coordinators and local partners.

OBJECTIVE

The primary objective of the Winter Shorebird Survey is to better understand the winter distribution of shorebirds and seabirds in Florida. This annual survey will allow us to recognize long-term trends or changes in winter population sizes and distribution. It will also help us identify key wintering sites- information that is much needed to guide future conservation efforts, particularly for our state or federally listed focal species.

BACKGROUND

The Winter Shorebird Survey was initiated in Northeast Florida in 2008 as an extension of the statewide survey in Georgia and the International Piping Plover Census. In 2009, partners within the Florida Shorebird Alliance (FSA) expanded the scope of the survey to include the rest of Florida. In 2014, we modified the survey for consistency with Florida's *Monitoring Protocol for Non-Breeding Shorebirds and Seabirds*. **Review the [Survey Instructions](#).**

DATE AND TIME

Surveys need to be performed **between Friday, February 7th and Thursday, February 13th, 2020**. Choose the tide that gives you the best opportunity to count birds. Consider coordinating surveys with people surveying adjacent routes to minimize double counting birds.

PROTOCOL

The Winter Shorebird Survey involves counting birds along a stretch of beach or marsh. It is preferable to walk your survey routes, since areas can be checked more closely on foot. Shorebirds resting on the beach or within the wrack line can be difficult to observe and may get overlooked. However, long stretches of beach may require the use of a vehicle, and driving between flocks while scanning is acceptable as long as you strictly adhere to the [Beach Driving Guidelines](#).

For safety purposes, please survey with a partner (i.e., someone willing to lug the scope and tripod). Equipment list should include:

- 1) Binoculars and/or spotting scope;
- 2) Field guide (even the experts get stumped);
- 3) Data sheets;
- 4) Writing utensil;
- 5) GPS or mobile device with GPS capabilities;
- 6) Sun protection;
- 7) Clothing layers (rain and wind can be unpredictable along the coast).

BANDED BIRDS

It is important to carefully record information on any color-banded birds that you observe during your survey. Many shorebird species have colored bands and/or flags on their legs. On the data sheet, please note the exact position of each band on the leg. If the birds have bands or flags with alpha-numeric codes, please note the codes as well. [Read here](#) for instructions on resighting and reporting banded birds.



SURVEY COORDINATORS AND HOW TO SUBMIT YOUR DATA

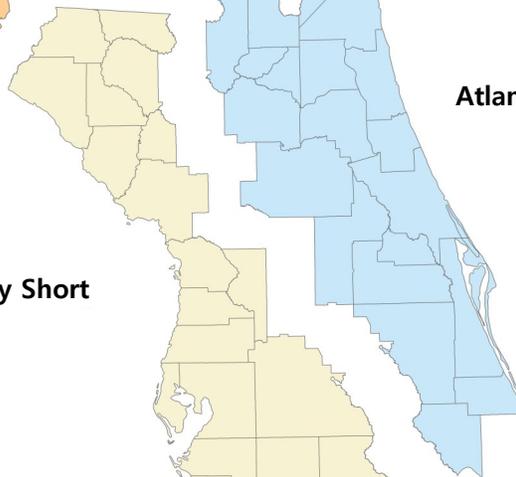
Please sign up for an existing route or add a new route on the [Survey Route List](#). Contact your regional coordinator if you have any questions. [Enter your data online](#) by **3/1/2020**. If you are unable to enter the data online, please submit the data to your regional coordinator:

- **Florida Panhandle** (Escambia to Jefferson Counties): Raya.Pruner@myfwc.com
- **Atlantic Coast** (Nassau to Martin Counties): Jean.Olbert@myfwc.com
- **Central Gulf Coast** (Taylor to Lee Counties): Holley.Short@audubon.org
- **South Florida** (St. Lucie to Monroe Counties, Collier County): Ricardo.Zambrano@myfwc.com

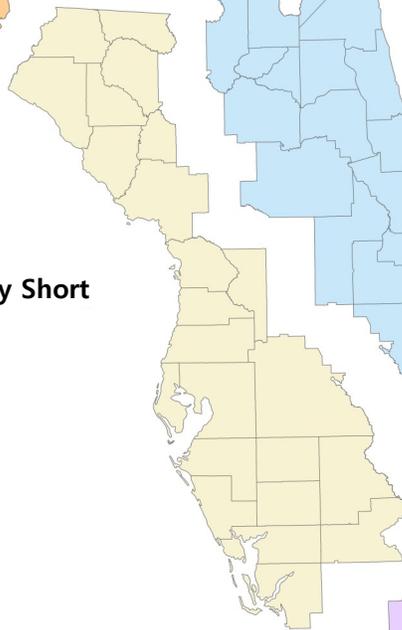
Florida Panhandle– Raya Pruner



Atlantic Coast– Jean Olbert



Central Gulf Coast-Holley Short



South Florida– Ricardo Zambrano



Winter Shorebird Survey- Instructions

STEP 1 - Please visit the [Survey Route List](#) to sign up for the route you would like to survey. Select or add a survey route. The list includes routes names associated with past winter survey routes. If someone has already selected your route, please coordinate with that individual or the regional coordinator to see how you can work together to cover the area. If you would like to add a survey route not included on the list please add it to the bottom of the list and provide survey start and end points for the route. Please indicate any adjustments to current routes and adjust on your datasheet and remember to include this information under Step 6 below.

STEP 2 - Coordinate your survey(s) with other local efforts to ensure all important areas are covered. Visit the [Survey Route List](#) for your region to determine where help may be needed.

STEP 3 - With a GPS unit, mobile device, or using google maps, determine the latitude and longitude of the starting point and end point of your survey route(s). The start and end point should mark the furthest distances covered and may not reflect where you entered and existed the route (see figure). Mark those points on [Data Sheet 1](#). **Please report all GPS points in Decimal Degrees!** *Tip to use Google Maps—right click on your location and select 'what's here'. Google Maps will give you an accurate location in decimal degrees.



During your survey, you will also need **GPS locations (in decimal degrees)** for the following:

- 1) **Focal species:** Observations of American Oystercatchers, Piping Plovers, Red Knots, Snowy Plovers, Wilson's Plovers, and Black Skimmers.
- 2) **Banded birds:** Individual birds that have color leg band or flags.

Each time you see a focal species or banded bird, assign the observation a unique Group or Point number and note that number in the first column of [Data Sheet 1](#). The first observation will be Group/Point #1, the next observation will be Group/Point #2, and so on. Feel free to use additional lines for multiple species encountered in a group (see example of Group/Point #3 on [Data Sheet 1](#)). An additional form ([Data Sheet 1 – continued](#)) is available in case you need more room.

Note: GPS locations are only required for *focal species*. Observers also have the option to conduct a survey for only focal species (American Oystercatcher, Piping Plover, Red Knot, Snowy Plover, Wilson's Plover, and Black Skimmer), however we encourage complete surveys where possible. If time allows, also record GPS locations for groups of 50 or more shorebirds.

Total counts of the species observed should be tallied on [Data Sheet 2](#) (see Step 4).

Do not count birds that are flying overhead. Take care not to flush the birds. If birds move, note where they go so that you do not double-count them. Report birds where you initially saw them.

Dead birds should be reported to the [Florida Fish and Wildlife Conservation Commission](#).

STEP 4 - Report the total number of birds counted for each species on [Data Sheet 2](#).

STEP 5 - Enter your observations of banded birds in [Data Sheet 3](#). Make sure your Group/Point numbers correspond with those on [Data Sheet 1](#).

STEP 6 - Submit your data by entering it online using this [Google Sheet](#).

Note: Similar to previous years we are using Google Sheets to standardize data entry and facilitate data analysis.

2020 Winter Shorebird Survey- Data Sheet 2

Date: _____ Lead observer: _____ Route name: _____

Please keep a running tally of all the seabirds and shorebirds that you see during your route survey, then add up the total in the Survey Total column.

Remember to note GPS locations of **Focal Species (listed below in bold)** and banded birds on [Data Sheet 1](#).

SHOREBIRDS

Species	Running tally	Survey Total
Amer. Oystercatcher		
American Avocet		
Black-bellied Plover		
Dunlin		
Greater Yellowlegs*		
Killdeer		
Least Sandpiper		
Lesser Yellowlegs*		
Long-billed Curlew		
Long-billed Dowitcher*		
Marbled Godwit		
Piping Plover		
Red Knot		
Ruddy Turnstone		
Sanderling		
Semi-palmated Plover		
Semi-palmated Sandpiper*		
Short-billed Dowitcher*		
Snowy Plover		
Spotted Sandpiper		
Western Sandpiper*		
Whimbrel		
Willet		
Wilson's Plover		
Wilson's Snipe		

SEABIRDS

Species	Running tally	Survey Total
<i>e.g., Royal Tern</i>	### ### ### ### III	23
Black Skimmer		
Bonaparte's Gull		
Brown Booby		
Brown Pelican		
Caspian Tern		
Common Tern		
Double-crested Corm.		
Forster's Tern		
Franklin's Gull		
Glaucous Gull		
Great Black-backed Gull		
Herring Gull		
Laughing Gull		
Lesser Black-backed Gull		
Ring-billed Gull		
Royal Tern		
Sandwich Tern		
Vega Gull		
White Pelican		

*UNKNOWN SPECIES

If you are uncertain about the identification of difficult species (e.g. Lesser Yellowlegs vs. Greater Yellowlegs), record the bird with the general species group below (e.g. Yellowlegs sp.).

Species	Running tally	Survey Total
<i>Dowitcher sp.(unknown)*</i>		
<i>Sandpiper sp. (unknown)*</i>		
<i>Yellowlegs sp. (unknown)*</i>		

CONDENSED RESIGHTING PROTOCOL FOR BANDED BIRDS

[\(Read the Supplemental Resighting Protocol for Banded Birds here\)](#)

Recording bands and flags

Band re-sighting information is very useful to researchers. Delegate one person to read the code/combinations and record data on the datasheets. It is important that the **entire code or color band combination** is recorded and band position on the leg is noted. When possible, every combination should be read twice, either by the same observer or a second observer, in order to ensure accuracy; colors can be misread due to lighting, faded color bands or grime on the band.

Most banded birds will have a single band or flag on a section of their leg with a metal federal band on a different leg. However, it is not unusual to encounter a bird that is missing a federal band; sometimes a bird may never have been fit with one or the band may have fallen off. Red Knots can have two bands with unique color combinations on the lower section of the leg. Plovers may have multiple color bands on either the upper or lower section of the leg. Piping Plovers may have a variety of color bands, flags and/or alpha-numeric flags. Many American Oystercatchers have a combination of an alpha-numeric flag and band.

Bands and flags that may be encountered in the field

Unique codes on Bands or Flags

American Oystercatchers, Black Skimmers, Piping Plover, Red Knots, Ruddy Turnstones, Sanderlings, Semi-palmated Sandpipers are commonly banded with a colored flag or band displaying a unique combination of printed numbers and letters (2 or 3 per flag or band). The color of the coded band/flag is just as important as the codes and must be recorded. The coded flag or band is typically located on the upper portion of a shorebird's leg and a metal federal band is placed below, just above the foot.

Occasionally, you will see a non-coded colored band on the opposite leg. American Oystercatchers have horizontal, vertical (stacked), or triangular (read counter-clockwise) codes:

AMOY Band Code Orientations		
Horizontal	CX	15
Vertical	0	m
	8	∞
Triangular	C	Recorded:
	EU	CEU

Common colors for bands and flags (indicated by an "F" before the color code) with unique alpha-numeric codes and color abbreviation used on the field sheet:

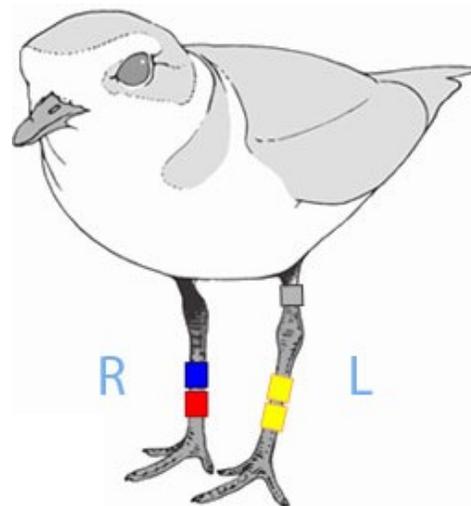
Color Bands	Color Flags
Black (K)	Light Green/Lime (Fg)
Blue (B)	Green (GF)
Green (G)	Red (FR)
Orange (O)	Orange (FO)
Red (R)	Yellow (FY)
	White (FW)

Solid colored bands

Snowy Plovers are commonly banded with a combination of color bands and a metal USFWS band. However, you may encounter bi-colored bands on the upper legs that were added as regional brood markers.

Common solid color bands and abbreviations for banded Snowy Plover and Piping Plover:

Common Solid Color Band Codes		
Black (K)	Light Blue (b)	Pink (P)
Blue (B)	Light Green (g)	Red (R)
Green (G)	Orange (O)	White (W)
Gray (A)	Metal/USGS (S)	Yellow (Y)



The band combination for the bird above is: Upper left: S, Lower left: YY, Upper right: X, Lower right: BR

Combination of colored flag and colored bands

Piping Plovers can be banded with a combination of a colored flag, colored bands and a metal USFWS band. Sometimes a single plastic band will include up to three different colors. These are called split color bands and are primarily used on Piping Plovers. To see the full list of split band color combinations, visit the [Great Lakes Piping Plover Color-band Information website](#).

Possible Piping Plover colored flags (indicated by an "F" before the color code) without unique flag codes:

Flag Colors (Piping Plover)	
Black (FK)	Orange (FO)
Gray (FA)	Pink (FP)
Green (FG)	White (FW)
Light Blue (Fb)	Yellow (FY)
Light Green (Fg)	