

Snowy Plover Patrol 2021

Helping shorebirds nest in peace



Duties

- Complete surveys and nest monitoring that you have signed up for
- Accurately record data
- Coordinate survey dates with survey partner(s) and Volunteer Coordinator ●
- Notify survey partner and Volunteer Coordinator ASAP if unable to make survey ●
- Coordinate nest checks with other surveyors on the site
- Report plover nests and horned lark observations ASAP!
- Use Survey123 to submit data

Equipment

Required

- Binoculars; some may be available to borrow at each park
- Data recording devices (smart phone, paper, map, etc.)
- Timepiece
- Access to internet for reporting

Recommended

- Cell phone/radio
 - Camera per team (strongly recommended!)
 - Spotting scope/tripod per team (we have scopes available to borrow, contact Volunteer Coordinator to request)
 - Emergency contacts
 - Protective attire: Hat with bill or visor, layered clothing for hot or cold or rain ●
- Drinking water and snacks

Survey Conditions

- Sunny day or overcast sky
- High tide, ONLY if safe passage available
- Calm (slight breeze up to 15 mph – if sand is moving, don't go)
- Dry (no more than slight drizzle)

Paperwork

Volunteer Paperwork

- OPRD Volunteer Agreement and Code of Conduct
- We encourage volunteers to become official Portland Audubon volunteers.

Click on this link to learn more and sign up:

<https://audubonportland.org/get-involved/volunteer/>

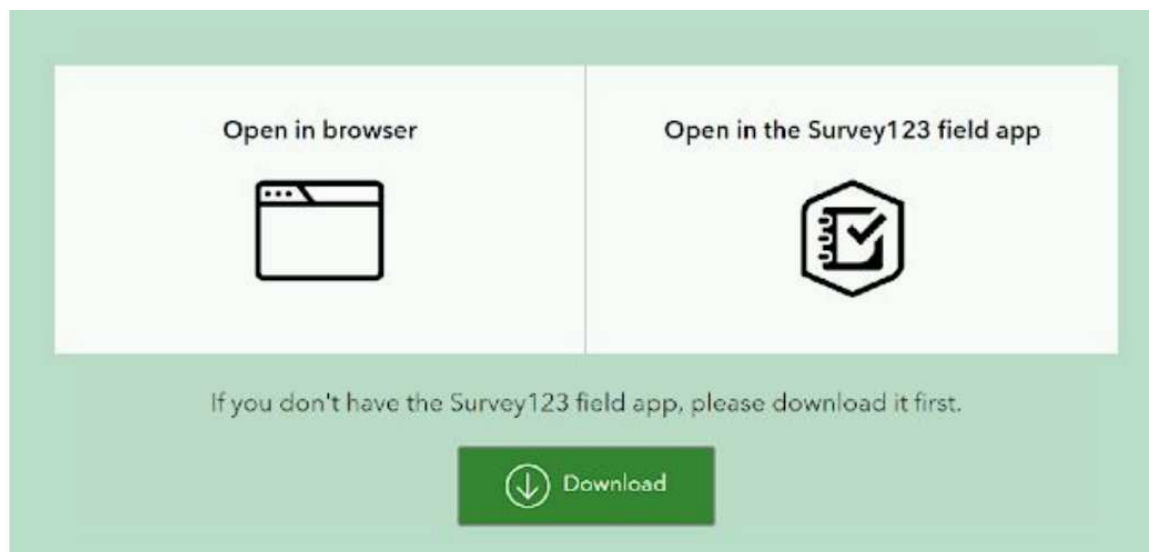
To report volunteer hours:

- **Community Science volunteer only.** (You do not volunteer in other areas with Portland Audubon): **Click here to document your hours**
- **Portland Audubon volunteer.** (You have gone through an orientation, have a name tag and t-shirt, involved in other areas as a volunteer, you want to receive other communication about volunteer opportunities): **Log your hours on Better Impact**

Turning in Data

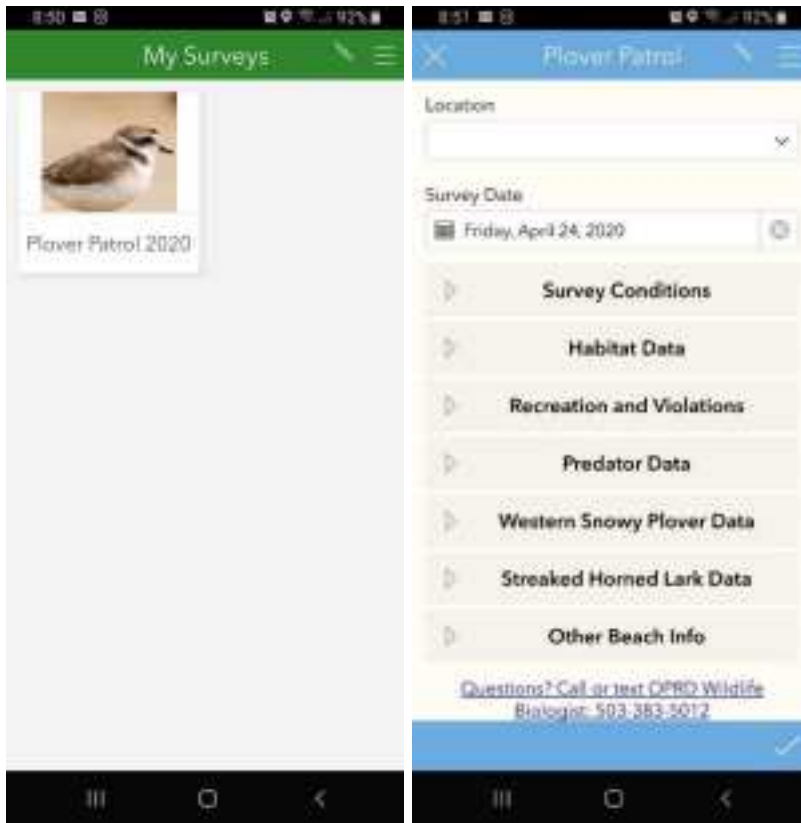
Smart Phones: Survey123

- Download Survey123 app onto your phone. Do not open it yet! If you open the app now you'll be prompted for login credentials. If you do not use smartphones, skip this step. ● Click this link: <https://arcg.is/1WTeWa0> - this will open a webpage that gives you the option to open the survey in a web browser or in the app. If you have a smartphone, select "Open in the Survey123 field app"



- The survey will now open the app for you, and you will not be prompted for any log in credentials. From this point forward you can just open the app on your phone and the survey will be available to you
- If you do not use smartphones, select "Open in browser". Note that you will have to manually enter location data this way.

2021 Snowy Plover Patrol Survey Protocol - 3



Computers:

- Take data forms with you in the field, collect data
- At a computer, click this link: <https://arcg.is/1WTeWa0> - this will open a webpage that gives you the option to open the survey in a web browser or in the app. Select “Open in browser” to enter in computer.



Interactions with Park Visitors and Beach Users

Everyone loves the beach, but not always for the same reasons. As a volunteer, the way you interact with the public reflects on OPRD, Portland Audubon, and the snowy plovers themselves!

- If beach users inquire about your activities, feel free to tell them you are surveying the coast for shorebirds, information about snowy plovers specifically, and the other programs Audubon is hosting to further north coast conservation. If the public expresses interest in learning more please collect contact info and provide to Audubon Volunteer Coordinator.
- If you see someone violating Ocean Shore regulations that are not plover-related, please do not engage the individual(s) yourself. Contact a District Ranger or the Park Office.
- Many people are very sensitive about beach use, and may be unaware of recreational restrictions for plover conservation. Contact with beach visitors should be educational, informative, and positive. If a contact is not received well, abort the conversation and withdraw. If the visitor is violating plover recreation restrictions after your conversation, contact a District Ranger or the Park Office.

Beach Safety

- Know the tides and the weather
- Work with a partner
- Ensure the Volunteer Coordinator knows you will be out on the beach.

Survey Methods

- Walk survey area
 - Survey all potential habitat
 - If surveying with a team, one person should walk along the wrack line and the other near the foredune. Try and stay even with one another.
 - Focus on snowy plovers, and note their behaviors
 - *Take a picture if you see a bird*
 - Check for color bands
 - Watch for plover tracks, follow to find nests
 - Document other interesting information if you can; humans present, potential predators, etc. ●
- If you do see a plover, OPRD will initiate follow-up surveys to double check for pair behavior

Snowy Plover Patrol: Nests 101

If you do not have previous experience surveying with Snowy Plover Patrol: Field training is REQUIRED before you survey on your own! Vanessa or Audubon Coordinator will take you into the field for on-the-ground training.

Nest Searching:

Look for plover tracks leading up from the wrack line towards the dunes, or plovers themselves running up into dry sand. An adult running in a straight line for more than 10 seconds is heading to a nest or fleeing from a predator.

“Nesty”: Pattern of plover tracks that suggest frequent use rather than foraging. The sand is right, the detritus is right. A snowy plover in the area is behaving like it has a nest. Snowy plovers with nests will either completely disappear, or run off and stop to watch you, with head bobbing. *If you retreat far enough away and watch, they will often return to the nest in a direct line.*

When an area feels “nesty”:

- Check to see if there are corvids (i.e. crows, ravens) nearby or following you.
- If not you can follow tracks in dry sand frequently stopping and scanning 5-10 feet in front and around you to see if you are approaching a nest or nest scrape.

A **nest scrape** will be a hole 1-3 inches deep and 3-4 inches wide dug into the sand with many plover tracks leading to and from it. An **active nest** will have a snowy plover sitting in it or 1 or more eggs in it. *Do not spend more than 5 minutes near the nest or nest scrape. Your presence may be keeping a snowy plover away.*

If you have an active nest:

- Take the GPS location (in Survey123 or alternative)
- At the nest: take a picture, then move away to finish filling out nest data.
- Take another picture that shows some landmarks and note nearby identifiers that will help others find this nest (logs, vegetation, signs, etc.)
- Congratulations on finding a nest!

If you find an active nest and have walked within 15 feet of it: Grab beach grass or seaweed and erase your tracks as you walk away back the way you came.

If you are 20ft away or more: Arc away from the nest and continue walking, leaving tracks that dead end near a nest may draw the attention of corvids.

2021 Snowy Plover Patrol Survey Protocol - 6

Nest Monitoring:

Before monitoring a nest you have not visited:

- View map location
- Read descriptions from previous surveyors
- Check any photos before going into the field to look for it

To monitor the nest:

- Find a viewpoint either outside of the signage or up in the dunes where the plovers are not reacting to your presence.
- Set up a scope focused on the nest and watch for the adult to move and show you nest contents ●
Do not stay more than 20 minutes

Take note:

- If an incubating adult is present
- Any band combinations
- Number of eggs seen
- If there could be more eggs present

DO NOT approach a nest if:

- Predators are watching
- Sand grains are skittering across the dune/wind is above 15mph
- Raining

If an active nest with known eggs is gone:

- Approach the nest location carefully (check for nearby predators and scan for nearby plovers) ● Look for egg shells, take many detailed close up pictures of any shells found. Vanessa may be able to determine whether these birds hatched or predation occurred.
- Note: with our coastal winds nests may move up to 15 feet during the month of incubation from a female constantly uncovering the eggs.

2021 Snowy Plover Patrol Survey Protocol - 7

Brood Monitoring

Once a nest hatches: Snowy plovers stay near the nest for a few hours while the chicks dry. Then the male will lead the chicks away from the nest. Knowing the band combination on the male is helpful in following his brood through fledging, as the chicks will stay with him until they can fly.

Tips for finding hatched chicks and parent:

- Look for a set of adult tracks with one or more smaller tracks following
- Look for males that are behaving “broody.” The male may run away and bob his head. Similar to what they do around their nests. He may have a very rapid run and halt, watching to see what you do. You may hear soft vocalizations as he tells his chicks what to do. Males that are brooding their chicks will have itty bitty sticks coming out of their feathers (the chicks’ legs!) They may appear to be sitting on the sand but seem elevated and extra poofy.

If you find an adult with chicks: Make note if the male is banded and what the band combination is. It could be a nest we didn’t find! In this case label it as <SITECODEYEARBROOD> and we will assign it a number once we have enough information. An example would be SISE2020BROOD2021

SPMA Site Details

Cape Lookout State Park/Netarts Spit

Location: Off US 101, 12 miles SW of Tillamook

Tips: This survey is very long! Park at the Park Office; other parking areas will require a park pass. The walk to the SPMA is about 3 miles, plus the survey area itself. Expect an 11-12 mile round trip and 4-5 hours of survey time. Go at or before LOW TIDE. The tide comes up high on the beach along the middle of the spit, and can trap you against the shelf.

Fort Stevens State Park/Clatsop Spit

Location: Off US 101, 10 miles W of Astoria

Tips: *Plovers nest here!! Also watch for horned larks!* Park at “Fisherman’s Lot” and begin your survey. SPMA boundaries are marked with a wooden post with a shorebird sign posted on them (see map). Once complete, head back to “Fisherman’s Lot.” If the water is low enough you could also park at Parking Lot C (near the observation tower) and walk from this direction. Be sure to check the tides to make sure crossing into the SPMA is possible!

Nehalem Bay State Park

Location: Off US 101. Manzanita Junction is closest exit to the park.

Tips: *Plovers nest here!!* Park at southernmost parking area/day use. You will need a park pass. You can obtain a temporary pass at the Park Office if you do not have an annual pass. Survey the ocean side of the spit from the SPMA south the southern border of the new restoration area. Survey in the morning to avoid wind.

Sitka Sedge State Natural Area

Location: Off Sand Lake Road 0.75 mile south of the bridge to Clay Meyers/Whalen Island Road.

Tips: *Plovers nest here!!* Park in the parking lot and head through the park to the beach access. Fork in trail leads to either end of the Snowy Plover Management area. Pick which end you want to start at: North or South.

2021 Snowy Plover Patrol Survey Protocol - 9

Cheat Sheet for the Beach

Before You Go

- Check weather and tides
 - Confirm plan with partner
 - Check the Plover Map (<https://arcg.is/1Ln08b>) for most recent nest IDs, locations, and status ●
- Notify emergency contact/check in person and provide them with park contact numbers

Plover Physical Keys

- Short, dark bill
- Incomplete neck collar just above wings
- Dark patch behind eye,
- Dark bar on forehead
- Grey legs

Plover Behavior

- Flocks in summer = family groups of 2-6
 - Hunkered down behind items or in divets in sand, such as footprints or tire tracks. ●
- Adults often try to run away without being seen... “ghost of the dunes”
- Adults will feign injury to draw you away from a nest. If you see a bird flopping around in front of you, fluttering wings: STOP. Look at the sand, and back away to the wet sand!

Tracks and Sign

- Inward-pointed toe prints at a near 45-degree angle
- Tracks are often little highways running from the wrack line to the dry sand and back. Following a line of tracks may lead you to a nest.

- Nest scrapes are sure signs of breeding; shallow depressions lined with shell or other debris

Nests

- Do not approach if predators are watching
- Stay as far back as possible while getting the data you need
- Erase your tracks, don't leave dead-end scent trail

2021 Snowy Plover Patrol Survey Protocol - 10

Reading Color Bands

- Read top to bottom
- Read left leg, then right leg (plover's left!)
- Some color bands are wrapped with a narrow stripe of a second color

Color	Description	Code	Band Material	Sometimes mistaken for, or may fade to
Aqua	Light blue	a	Darvic	Mistaken for lime
Blue	Medium blue	b	Darvic	
Green	Medium green	g	Darvic	
Black	Black	k	Darvic	
Lime	Light green	l	Celluloid	Mistaken for aqua
Brown	Brown	n	Darvic	Mistaken for tan, yellow, dull gold
Orange	Orange	o	Darvic	
Pink	Pink	p	Celluloid	Older stock, light pink bands -> white
Red	Red	r	Darvic	
Violet	Purple/violet	v	Celluloid	Fades to pink
White	White	w	Darvic	
Yellow	Yellow	y	Darvic	

Snowy Plover Identification & Tracks

Adult male plover, breeding season



Juvenile plover, note scalloped feathers



Plover tracks



Nest scrape and plover tracks

Contact Information

Allison Anholt, Coastal Community Science Coordinator- 609-751-7972 (call or text), asopcoastalbirds@gmail.com

Laurel Hillmann, Oregon Parks and Recreation Department- laurel.hillmann@oregon.gov

North Coast District (2019)

