

PROTOCOL:

How to count birds & submit your data



1. [Registration, Set up an Account](#)
2. [Printing Data Forms](#)
3. [Survey and Monitoring Protocol](#)
4. [Entering Data into Website](#)

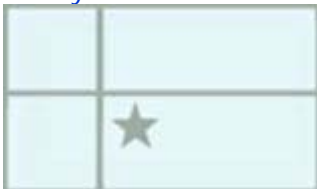
① Registration, setting up an account.

If you still need to set up an account, [register here](#). Remember to keep a record of your user name and password since they will be necessary each time you enter data onto the website.

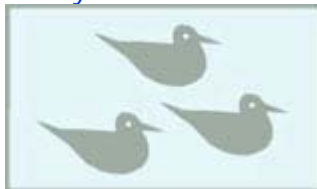
② Print out your data forms.

Forms (Links also found on left-hand menu bar under "data sheets")

[Colony Site Form](#)



[Colony Count Form](#)



[Solitary Nest Form](#)



Colonial Birds (What species are colonial? [Click here](#))

Notice there are two separate forms for colonial birds: a "Site" form (specific information about a location) and a "Count" form (number of nests or birds counted). A site form needs to be completed only once for each colony being monitored, and a new count form will be necessary for each visit you make to a colony. See [example site form](#) and [example count form](#) for additional help.

Note: a colony can be one pair of colonial birds, and although they are technically solitary, they are not solitary nesters for the purposes of our program.

Solitary Birds (What species are solitary? [Click here](#))

Site (location data) and count (mainly species data since your count should be one) information are combined on one data sheet. Use a new form for subsequent visits. See [example solitary nest form](#) for additional help.

③ Survey & monitoring protocol. *important to read*

Following the guidelines

In order to make your counts comparable with others entered into the site, it is important that everyone follow the same "rules" when counting. If you or your organization already have a standardized protocol, contact the shorebird partnership coordinator.

Rule 1. If nests not found and breeding behavior observed, then count "pre-nesting" adults

When submitting data into the beach-nesting birds website, it is important to separate loafing, feeding, or resting birds from birds that are actually attempting to breed. The following territorial and courtship behaviors should help you determine whether a bird is pre-nesting (Note: these behaviors also associated with nesting):

- a. Birds vocalize when you approach.
- b. Birds hover over your head and vocalize when you approach which is a good indication a nest maybe in the vicinity.
- c. Birds exhibit territorial or defensive behaviors towards other birds nearby (see figure 1).
- d. Birds perform "broken wing display" when you approach, another excellent sign a nest/chick is in the area.
- e. Bird approaches with food and feeds another bird (see figure 2). While this is definitely pre-nesting behavior, this activity can take place well away from the actual nest.
- f. Birds mating (see figure 3). This behavior is also common away from the nest.



figure 1

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figure 2



figure 3

Reporting

Birds exhibiting any of the above behaviors should be recorded as "pre-nesting" adults. Subsequent visits to the area should focus on nest searching. Try not to disturb the birds too much as they can be particularly sensitive at this stage.

Rule 2. Once nesting starts, count nests, not birds

Counting nests provides a much better estimate of reproductive effort than just counting adult birds. It is extremely important to count nests from a safe distance to avoid disturbing the birds. When counting look for the following:

- a. Adult in incubating posture (see figure 4).
- b. Nest (often just a shallow scrape in the sand) with eggs and/or nestlings (see figure 5).



figure 4



figure 5

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Reporting

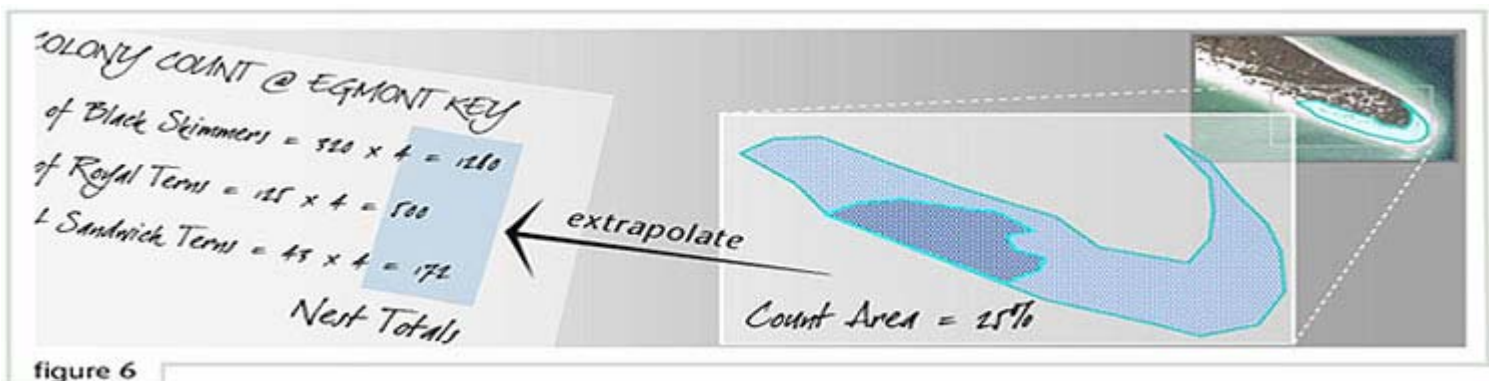
Often, you will be observing adults sitting low in a slight depression either incubating eggs or protecting nestlings from the sun. Carefully count each individual in this position as a separate nest. Do not count birds standing or walking around inside the colony or on the beach.

Rule 3. For small colonies and solitary nesters, count each nest directly (direct count)

For colonies of approximately 200 birds or less, try to count every nest (incubating adults and nests with eggs/young exposed). Count the entire colony at least twice to double-check your count total. Your precision should increase with more repetition. During later stages of nesting, it will be very important to try and count the number of nestlings (in the nest) and fledglings (outside the nest) in the colony since hatching success provides an indication of productivity.

Rule 4. For larger colonies, make a rough estimate (estimated count)

Larger colonies of many hundreds or thousands of birds are almost impossible to count accurately without causing significant disturbance to the colony. For these situations, position yourself where a large portion of the colony is visible and delineate this section as your count area. Try to determine approximately what percentage of the entire colony comprises your count area (attempt to count an area at least 20% of the entire colony).



For each species, tally the nests in your count area, and use these totals and the percentage of the colony covered to extrapolate values for the entire colony (see figure 6). Keep in mind these counts are considered to have a very high degree of error.

Remember to stay out of posted areas when performing counts. Disturbing colonies leaves eggs and nestlings exposed to the sun and predators when the adults are flushed from their nests.

Rule 5. Roof colonies

Roof colonies present many challenges, and it may not always be possible to get an accurate count. Safety and landowner consent are important considerations. Climbing atop roofs is not advisable (risk to you and birds), and unless you can view the rooftop from an adjacent structure and actually count nests, recording a rough estimate of the colony size by reporting the maximum number of adults seen flying at any one time is acceptable. Remember to record these adult counts on roofs as "estimates".

Management of rooftop colonies can improve nesting success if there is cooperation from landowners, learn more by contacting the shorebird partnership coordinator.

Rule 6. When to count

Time of day

Counts should be conducted between 9:00am -4:00pm, when colony attendance is most stable. Counts performed earlier in the day provide added safety to the birds since eggs/young will not be exposed to extreme sun and temperatures when adults are accidentally flushed. Avoid counting when conditions are foggy, rainy, and/or windy.

Time of year

The nesting season extends from February 1 to October 1 as there is considerable variation in peak nesting dates between the various species of shorebirds and seabirds nesting in Florida. For colonial nesting seabirds, we encourage monitors to conduct at least one count from **May 15 to May 31**. By coordinating counts during the same period of time, we can minimize double-counting (birds moving from one colony to another, and subsequently getting counted twice).

One exception to the May 15-31 window concerns Black Skimmers. This species requires a **June 1 to June 7** count, since peak egg-laying occurs during these dates.

We strongly encourage participants to conduct as many counts during the nesting season as possible. Early counts help us identify important sites and allow management actions (i.e. posting) to be carried out early on. Later counts are equally important since determining how successful a colony was at fledging young is critical information for proper management of a species.

4 Entering data into the website.

Step 1. Go to the Site

Once you have collected data in the field, it will need to be transferred from the forms you carried in the field to the online database. Go to [enter data](#) (link also located on left-hand menu bar on the [beach-nesting birds homepage](#)).

Step 2. Colony or solitary site

Enter information for a colony or for a single nest site. What species are colonial and what species are solitary? Find information [here](#).

Step 3. For colonies, find a historic site record or fill out a new site record

Colonial nesters often nest in the same location each year, so a completed site record might already exist for the colony you have started monitoring. If this is the case, then a new site record does not have to be created, and, instead, you can activate the old record. Determine whether your colony is a historic site by searching with the drop-down menus by "county" and/or "nest type" (a more advanced search can be conducted by clicking "more extensive search"). As you search through the records that are retrieved, you can view each of the sites in a view in mapquest (star pinpoints the location of the colony).

Is your colony already archived as a historic site?

For Shorebird Colonies:

Step One: Check to see if the site where you wish exists in our Beach-Nesting Bird database. To do this, use the Nest Type search function below or perform a [map](#) check all colonies in your county and find your site. You need to [fill out a new shorebird site form](#). If you locate your site, you will need to proceed to step two.

Search by County and/or Nest Type to see if the site exists.

County: Nest Type:

Step Two: If you located the site where you counted birds on the list, the "Enter Counts" button will take you to a screen where you can enter your count information. If this is a historical site from a previous year, you'll need to click the "Enter site for this year" button before you can add counts to the site. Once you've entered your count information, click on the "Submit" button.

ex. if counts already
 county = Duval
 nest type = ground colony

City/County	Status	Action
/ Duval	Archived	<input type="button" value="Edit Site"/> <input type="button" value="Enter Counts"/>
/ Duval	Archived	<input type="button" value="Edit Site"/> <input type="button" value="Enter Counts"/>
/ Duval	Archived	<input type="button" value="Edit Site"/> <input type="button" value="Enter Counts"/>
Jacksonville / Duval		<input type="button" value="Edit Site"/>

Archived Historic sites

If you want to update information for a site (such as contacts or access information), you can do this by clicking "edit site" on the site record (see above). Site name and latitude/longitude information cannot be edited. If you find a problem with this information, contact the shorebird partnership coordinator.

New sites

If you fail to find a historic record which matches your site, then click "fill out a new shorebird site form", and you will be sent to a blank record. Only boxes highlighted in this form are required.

Step 4. For solitary nesters, always complete a new site record

Solitary nesters nest in a different location each year, so it will be necessary to fill out a new blank site form for each nest you find. Only boxes highlighted in this form are required. Once you fill out and submit this form, you will be taken to a page where you can enter counts for your new site.

Step 5. Enter counts for your site

If a site record has already been entered or activated (historic sites), just click "Enter Visits" on the site record to enter your counts. If the site is new, then proceed to enter counts. You will first be required to enter general information such as the date and time you conducted the count.

Species

Use the drop-down menus to enter the species counted. Do not include solitary species in colonies, please submit a separate site record for these individuals.

Counts

Count the number of pre-nesting adults, nests, and chicks.

Count type

Select your count type (direct count/ estimate count/ nesting but no count). Remember, direct counts refer to counts where each individual nest was counted, and estimate counts are counts were extrapolation or counting adults (i.e. rooftops) was all that was feasible. The nesting but no count option are for visits were nesting was observed but no counts were performed for whatever reason which is still valuable information.

Nest stage

For colonies, enter the nest stage of the most advanced pair at the colony, and be aware that there may be considerable variation throughout the colony.

Submitting and reviewing your data

Once you have completed your data entry, click the "submit" button to save your count to the website. Be sure to check whether your records were properly submitted in [review my sites](#) and [review my counts](#) (links also found on left-hand menu bar on the beach-nesting birds homepage). You can review, edit, or withdraw your data at any time up until October 1, 2008. Proof your data periodically throughout the season.