

Colonial Waterbird Data Entry Guide

Overview and Objective

Beginning in 2020, all Colonial Waterbird Program volunteers will enter their field data into an online database. This will help SFBBO biologists save time and give you a chance to work with the data that you helped collect in the field. It will also allow for immediate feedback on potential inconsistencies within the data or questions about the protocol. Please bring a paper or electronic copy of the datasheet to fill out in the field.

The database can be accessed from any device with Internet access. To get the link, email waterbird_intern_2@sfbbo.org

Once the data has been entered online, please continue to send us your colony maps (send by email to waterbird_intern_2@sfbbo.org or mail to the office). You may also send us a copy of your physical datasheets. This will allow us to proof the data entered for typos and maintain a backup of the information recorded. Please submit your data as soon as possible after visiting your colony, at a minimum do so before your next visit.

Data Entry

The online data entry form is designed to mirror the physical datasheets that you will use in the field, so hopefully entry will be straightforward and intuitive. Here are a few specific tips and callouts.

Metadata

Colonial Waterbird Datasheet San Francisco Bay Bird Observatory

Please use a separate form for every visit. Do not summarize visits here.

Submitter's Name:	<input type="text"/>		
Colony ID:	<input type="text"/>	Date:	<input type="text" value="mm/dd/yyyy"/>
Observer(s):	<input type="text" value="Select..."/>		
Start time (24-hour):	<input type="text"/>	End time (24-hour):	<input type="text"/>
Nest Visibility:	<input type="radio"/> Good <input type="radio"/> Moderate <input type="radio"/> Poor	Comment on what limits visibility (ie, glare, leaves, etc)	<input type="text"/>

Survey Summary Data: Count ALL nests and individuals within the colony.

Count all possible active nests.
For herons, egrets and

- **Submitter's Name** – Include the name of whoever is entering the data online, even if it is the same as the Observer
- **Colony ID** – There is a dropdown list of all of the past and present monitored colonies. You can choose an option in the list or begin typing. If your colony is not in the list or you are not sure of your colony name, let us know.

- **Observer(s)** – This dropdown remembers the name of any observers entered so far this year. If the name you are typing does not appear in the list you can still add them. Type the complete name and click the option to “Create [name]” or simply hit the Tab key.

Survey Summary Data (Page 1)

Survey Summary Data: Count ALL nests and individuals within the colony during this visit.

		Count all active nests within the colony	Count all individual adults within the adults within colony	Count all chicks of the year	Count all possible active nests. For herons, egrets and cormorants use this column ONLY before April 1st
Species code	Common name	Total Active Nest Count	Total Adult Count	Total Young Count	Total Possible Nest Count
HEP	BCNH	Black-crowned Night Heron			
	DCCO	Double-crested Cormorant			
	GBHE	Great Blue Heron			
	GREG	Great Egret			
	GRHE	Green Heron			
	SNEG	Snowy Egret			
GUTE	AMAV	American Avocet			
	BLSK	Black Skimmer			
	BNST	Black-necked Stilt			
	CATE	Caspian Tern			
	FOTE	Forster's Tern			

- **Species Options** - We have updated the species list to reflect the species that we commonly see today. If there is a species breeding at your colony that is not in this list, you can use the blank line in the appropriate section to add its species code and enter data. If you’re not sure what the species code is, ask us. **Birds that are simply foraging in the area should not be recorded here.**
- **Zero vs Blank** – Please fill in 0’s for all of the species in your category (HEP or GUTE) that are not breeding at the site. Entering 0’s tells us that you looked for the species and did not see them, we cannot make the same assumption about blank spaces. Again, do not record foraging adults, only ones that are engaging in breeding behavior and/or in the vicinity of nests.

Disturbance Table (Page 1)

Disturbance: Please describe signs of disturbance to the colony.

Observed or Inferred (O/I)	Description: Including impact to the colony	Type Code(1)	Result Code(2)
▼		▼	▼
▼		▼	▼
▼		▼	▼

¹A=avian, H=human, W=weather, M=mmal, O=observer, P=unknown predator, U=Unknown

²0=No response observed, 1=behavioral response, 2=nest failure, 3=colony abandonment, 4=pre-season disturbance, prior to arrival

+ 3 rows

Volunteers should enter any of the information from the table on their physical copy of the datasheet onto the online form. It is ok to submit a blank disturbance table if you observed no disturbances. If you fill in a row for a disturbance, you should complete every cell in that row.

- Observed or Inferred – From the dropdown menu, select whether the disturbance is observed or inferred. Only input “Observed” if you witness the disturbance and impact of the disturbance occur.

Focal Nests (HEP page 2)

Heron, Egret, and Cormorant Nest Data: collect more detailed data on individual nests, especially to track over the season

HEP Nest Stage

0 Prenesting: birds at or near colony, courtship, mating, roosting, nest construction

1 egg laying or incubation, adult on nest for long periods, standing to turn eggs

2 hatching, small downy chicks, feeding low in nest, watch carefully when adults move

3 chicks (usually) standing; most/all down replaced by juvenile plumage, parents continuously at nest

4 adults not continuously at nest (may remain after feeding); chicks (usually) on nest platform

5 young often off nest, on nearby branches

Nest #	Focal Nest?	Species Code	Active?	Nest Stage	# Adults	# Chicks	Confident on # chicks?	Comments on nest activity (location notes, displays, copulation, nest building, feedings, AND nest failures , etc)
1	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
2	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
3	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
4	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
5	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
6	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
7	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
8	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
9	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
10	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	

+ 10 rows

- **Nest Numbers** – These default to sequential numbering, but you can change them to reflect the actual numbering of your focal nests. Make sure the numbering on your datasheet is consistent with what you enter online.

Subcolonies (GUTE page 2)

Gull, Tern, and Shorebird Nest Data: collect more detailed data on nesting stage, split by subcolony if necessary

GUTE Nest Stage		
adults only:	0	Prenesting stage, birds at or near colony, courtship, mating, roosting. <i>Record these numbers only when other adults of the species ARE nesting.</i>
eggs in nest:	1	Egg laying or incubation, adult on nest for long periods, standing to turn eggs. Numbers of eggs will almost always be "unknown", but numbers of nests at stage 1 can be estimated from adult behavior
chicks present:	2	Downy chicks in nest or colony, watch for feeding or adults standing
	3	Larger, at least partially feathered chicks, adults near
	4	Fledging young, fully feathered chicks in colony

Subcolony	Species Code	Total # Adults	Stage 0 (count # adults)	Stage 1 (count # nests)	Stage 2 (count # chicks)	Stage 3 (count # chicks)	Stage 4 (count # chicks)	Comments
	▼							
	▼							
	▼							
	▼							
	▼							
	▼							
	▼							
	▼							
	▼							
	▼							

+ 10 rows

Submitting the Data

Once you submit your datasheet you will not be able to make any changes to it. Make sure that you have double-checked everything before hitting submit. If you have questions about whether your data were successfully saved or need to make revisions to submitted data, let us know.

Data Validation and Error Messages

This database gives us the ability to validate data as it is entered, which means that you may see new and unfamiliar errors when trying to submit your data. This validation is the same as what interns and biologists have been using when we entered data into our previous database. If you believe that your datasheet is correct, but you are still seeing errors when you try to submit, let us know.

Here are some common errors that you may run into:

Summary Data Doesn't Match Nest Data

19	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	
20	<input type="checkbox"/>	▼	Active ▼	- ▼			<input type="checkbox"/>	

Summary data doesn't match nest data.

+ 10 rows

	Species code	Common name	Count all active nests within the colony	Count all individual adults within the adults within colony	Count all chicks of the year	For herons, egrets and cormorants use this column ONLY before April 1st
			Total Active Nest Count	Total Adult Count	Total Young Count	Total Possible Nest Count
HEP	BCNH	Black-crowned Night Heron	2	2	0	0
	DCCO	Double-crested Cormorant	0 ⓘ <small>Doesn't match active nests reported</small>	0 ⓘ <small>Doesn't match adults reported</small>	0	0
	GBHE	Great Blue Heron	0	0	0	0
	GREG	Great Egret	0	0	0	0
	GRHE	Green Heron	0	0	0	0
	SNEG	Snowy Egret	0	0	0	0

When you try to submit, the entry form compares your Page 1 and Page 2 counts to make sure that they are aligned. Things that it is checking for include:

- For HEP species, your total number of active nests, adults, chicks, and possible nests on Page 1 must be greater than or equal to the sum from your focal nests on Page 2.
 - For example, you cannot say that there is only 1 DCCO adult on Page 1, but then report a DCCO focal nest with 2 adults.
 - Because you may not be reporting every nest as a focal nest, Page 2 totals can be less than the Page 1 summary.
- For GUTE species, your total number of active nests, adults, and chicks on Page 1 must be equal to the sum from your subcolonies on Page 2.
 - Your collection of subcolonies should represent the entire colony.
 - If you get different numbers between overall and subcolony counts (e.g. because birds have left the area or your vantage point has changed), use the high count.

Inconsistencies within a Row

Gull, Tern, and Shorebird Nest Data: collect more detailed data on nesting stage, split by subcolony if necessary

Subcolony	Species Code	Total # Adults	Stage 0 (count # adults)	Stage 1 (count # nests)	Stage 2 (count # chicks)	Stage 3 (count # chicks)	Stage 4 (count # chicks)	Comments
Island 9	AMAV	4 ⓘ <small>Total adults can't be less than Stage 0</small>	10	0	0	0	0	

Heron, Egret, and Cormorant Nest Data: collect more detailed data on individual nests, especially to track over the season

Nest #	Focal Nest?	Species Code	Active?	Nest Stage	# Adults	# Chicks	Confident on # chicks?	Comments on nest activity (location notes, displays, copulation, nest building, feedings, AND nest failures , etc)
1	<input checked="" type="checkbox"/>	DCCO	Active	- ⓘ <small>Active Nests must have a stage</small>	2	0	<input checked="" type="checkbox"/>	

There is also validation for each row of the Page 2 data to check for common typos. Examples include:

- For HEP species, all Active focal nests must have a Nest Stage 0-5.
- For HEP species, Inactive focal nests should not have a Nest Stage.
- For GUTE species, the total number of adults in a subcolony must be greater than or equal to the Stage 0 adults in that subcolony.