

# BIRD LIFE HISTORY FORM MANUAL

01/07

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## INTRODUCTION

The Bird Life History Form is used for recording biological data on seabirds. These data will be used to determine the number, species, size and condition of birds involved in the fishery. Other data are recorded on the movements and preferred habitats of the various populations of seabirds. These data are critical to the development of conservation and recovery strategies for these seabirds.

## GENERAL INSTRUCTIONS

Complete a Bird Life History Form for every seabird brought aboard or released along side of the vessel. If you are unable to positively identify the species, try to take photographs and record it on the data sheet as “unknown”. Even if you think you know the species, take a photograph if you can in order that your identification can be validated. Also, try to photograph all hooked or entangled birds that are not brought aboard. Record tag data if tags are present. Also, you may be requested to take biological samples.

If the animal has gear attached, remove the gear immediately, as the severity of the interaction can increase with prolonged exposure to the gear.

We have tried to minimize the amount of writing required. If given a choice, circle the answer to a question or check the appropriate box. Some boxes require a written response.

## CAPTURE INFORMATION

**Trip Number:** Record the unique number assigned by the Observer Program Coordinator or projects principle investigator.

**Year, Month, Day:** Record the year, month, and day of the recovery of the animal.

**Set / Haul / Tow:** Record the set, haul, or tow number of the trip.

**Specimen Number by trip:** Record a three digit consecutive number. Your bird specimen numbers on this trip begin with BR001 and continue sequentially. Bird specimen numbers are kept separate from all other specimen numbers for other species groups.

**Gear Type:** Indicate which gear is being fished. If gear is something other than the listed types, write in gear type.

**Target:** Indicate target species for the set/haul/tow. If not one of the two listed, write in species (one or more common name).

**Time:** Record the time of day (24 hr clock) when the seabird was brought alongside the vessel.

**Water Temperature:** Record the water temperature at the location where the bird was brought alongside the vessel.

**Latitude:** Record the degrees and minutes of latitude at the time of the actual recovery of the bird. Circle N or S for north or south of the equator.

**Longitude:** Record the degrees and minutes of longitude at the time of the actual recovery of the animal. Circle E or W for east or west of the prime meridian.

**Was the set on which the bird was caught made in relation to an oceanographic feature feature?** Circle Y for Yes and N for No. If yes, record type of oceanographic feature. If not one listed, write in. Estimate distance to the feature in nautical miles. You probably will have to get this information from the captain.

**Was the set on which the bird was caught made in relation to a bathymetric feature feature?** Circle Y for Yes and N for No. If yes, record type of Bathymetric feature. If type isn't listed, write in. If a specific name is given, write in the name. Estimate the distance to the feature in nautical miles. You probably will have to get this information from the captain.

**Did seabird slide out/escape from gear?** Circle Y for Yes or N for No. If the seabird had to be cut loose from the gear, then the correct answer is No.

**Was seabird brought on board?** Circle Y for Yes or N for No.

## **Identification**

**Species:** Check the appropriate box that corresponds to the species of the captured bird. With experience, birds seen close up generally become easier to identify. See back of data sheet for identification criteria and Appendix A for more information.

**Number of Photos Taken?** Record the number of photos taken. Photograph every seabird! At least one picture must be taken illustrating the location of any attached gear. Take at least three photographs: (1) a full-size photograph that shows any color/markings patterns, ventral (front); (2) full-size, dorsal (back); and (3) a close up (i.e., from 4 ft.) of the head and bill profile. Place a centimeter scale near the bird (head area is best) where it will appear in the photograph to provide a sense of scale. These pictures will assist in understanding how the bird interacted with the gear, better categorize the interaction for post hooking mortality, and provide information for reducing the interactions in the future, as well as provide confirmation of species ID or allow identification by an expert. For the first picture of every bird on board, include the dive slate in the picture. Collection information should be written on the slate to identify the bird: trip #, specimen #.

Be mindful of the minimum distance required to take clear pictures (depth of field). Most disposable cameras need a distance of at least 4 ft from your subject; otherwise the picture will be out of focus.

**Condition of Bird**

Check the appropriate box that best corresponds to the condition of the bird when it was recovered. In the notes section, record specific notes about any injury to the bird.

**Previously Dead:** The bird was already dead when it was captured.

**Fresh Dead:** The bird does not smell and does not have rigor mortis. Likely it died as a result of the fishing operation.

**Alive, injured, describe:** The bird is alive but is injured (e.g., hook captures). All hooked birds are injured. Describe in detail how the bird is hooked on the back of the form. Any lesion constitutes an injury.

**Alive, uninjured:** The bird is alive and apparently is not injured (e.g., net captures or entangled in line) and there are no lesions.

**Alive, injury unknown:** The bird is alive but the observer cannot determine if it was injured. This may happen when an animal isn't boated and the observer did not get a good view of the animal, but did know that the animal was alive.

**Other (describe):** The condition does not fit any category described above. Explain on back of form.

**If gear is a form of hook and line, complete this section, as applicable:**

**Hook Type:** Circle or check "J" or Circle. If hook type is neither, select Other (describe).

**Manufacturer/Style No.** Write in the manufacturer and style number (e.g., Mustad #39968D).

**Hook Size:** Write in size of hook, (e.g., 9/0, 18/0).

**Degree Offset:** Write in the degree offset of hook (e.g., 0°, 5°, 10°).

**Bait:** Circle or check Squid, Mackerel, Sardine, Unknown or Other (describe).

**Size:** Write in the bait size. *If two baits involved, include both sizes. See examples below.* Using values recorded on the haul log for each bait kind, first calculate an individual bait weight (box weight/bait number) and round to nearest hundredth of a pound. Then, convert to grams (1 lb = 450 grams) multiplying by 450.

- Squid: 200lbs/400 baits = 0.50 lbs each       $0.50 \times 450 = 225$  grams, record as 225 grams
- Mackerel: 300 lbs/ 400 baits = 0.75 lbs each       $0.75 \times 450 = 337.5$  grams, record as 338 grams
- Sardines: 60 lbs/400 baits = 0.15 lbs each       $0.15 \times 450 = 67.5$  grams, record as 68 grams

**Was there a light stick on the hook?** Circle Y for Yes, N for No, or U for Unknown. If Yes, circle the color of light stick.

**Gangions to next light stick:** If answer above was no, record the number of gangions to the **next** light stick (not necessarily nearest) and circle the appropriate color.

**Number of gangions to next float:** If a bird is caught, record number of gangions to the **next** float (not necessarily nearest).

**Did gangion that caught bird have leaded swivel?** Circle Y for Yes, N for No, and U for Unknown.

### **Hook location**

If the bird has been hooked, **circle the specific location** (in the text and on the bird diagram) if it can be determined. If specific location cannot be determined, note the general location of the hook and check the appropriate code box. Describe hook and its location in the notes section. Note if there is more than one hook involved. All hooks, except those deep in the esophagus or stomach, should be removed. Only swallowed hooks should not be removed, but any visible portion of them should be cut off and removed. (See Appendix F, F-5 Boated Animals of the Turtle Manual for specific hook removing guidelines.) Indicate if the animal is **Not Hooked, Not Known if Hooked, or Hooked, but location is totally Unknown** and record details in the comments section. Otherwise follow the directions for **Internal** or **External** hooks, as follows.

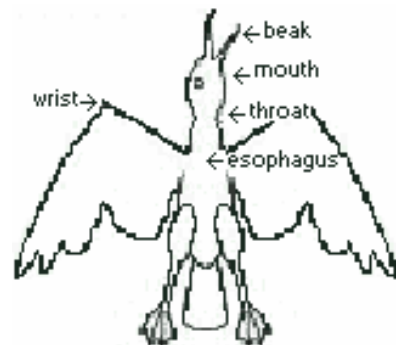
**Internal:** (circle the specific location, if known, and circle the general location if specifics not known)

**Unknown, internal:** The animal has been hooked internally, but the location cannot be determined. This may be the case when an animal cannot be boated.

**Beak/Mouth:** The bird was hooked in the upper/lower bill/ mouth corner, roof, or floor. Describe hook and location in the notes section. Most hooks should be removed. Be as specific as possible, use notes section if necessary

**Throat:** Indicate if the bird was hooked in the throat.

**Swallowed (esophagus):** The bird “swallowed” the hook. The barb of the hook is lodged in the esophagus (or lower in the digestive tract), and the barb is not visible. Part of the hook eye or shank may be visible in the open mouth and any visible portion of the hook should be removed. **Please circle the furthest extent to which the hook is visible. Circle visible to insertion point, partially visible or the hook is not visible.**



**External (circle the specific location, if known, and circle the general location if specifics not known).** All hooks should be removed.

**Unknown, external:** The animal has been hooked externally, but the location cannot be determined. This may be the case when an animal cannot be boated.

**Beak/Head/Neck:** The bird is hooked in the neck or head, including the external beak area. Describe location in notes section. All hooks should be removed.

**Wing:** The bird is hooked in the wing. Circle left or right wing on bird and area of wing on bird diagram. All hooks should be removed.

**Leg:** The bird is hooked in the left or right leg. Describe which side (right or left) in the notes section and circle area on bird diagram. All hooks should be removed.

**Body:** The bird has been hooked externally in the body region

**Was hook removed from this animal?** Circle Y for Yes, N for No, U for Unknown, or Not Applicable. If animal is 'Not Hooked' then choose Not Applicable. If animal is 'Not Known If Hooked', determine whether the hook was retrieved and answer Yes, No, or Unknown accordingly (even though it is not positive that the hook penetrated the animal).

**All gear types complete this section, as applicable.**

**Was animal entangled in gear at capture?** Circle Y for Yes, N for No, and U for Unknown.  
**At release?** Circle Y for Yes, N for No, and U for Unknown.

**How much gear (linear feet) was left on bird when released?** Estimate or measure the amount of gear line left on bird when released. For hook and line fisheries, this is the measurement of line from the eye of the hook, including crimp, left on the bird. For lengths less than one foot, record the decimal fraction remaining. Record a zero if all line is removed.

## **BIOLOGICAL INFORMATION**

**Pre-catch condition:** Does the bird appear to be emaciated or does it appear to have been well-fed? This can be determined by pushing your finger into the center of the bird's chest. If you can feel the breast bone, then the bird is emaciated. If you cannot feel the breast bone, then the bird is well fed. Check one or the other. This can only be determined with the bird on board and possibly only if the bird is dead or unconscious. Write an X in the margin by this topic if you cannot address the question or are unsure.

**BIRD DIMENSIONS (all straight-line)****If bird is not boarded:**

If the bird cannot be brought on board, you will have to estimate its wing span and total length in feet.

**Estimated Wing Span (ft):** Estimate the wing-tip to wing-tip distance in feet if the wings were fully spread.

**Estimated Total Length (ft):** Estimate total length of bird in feet if not brought on board vessel. Note that the above estimates are in feet if not brought on board while if boarded the dimensions are recorded in centimeters.

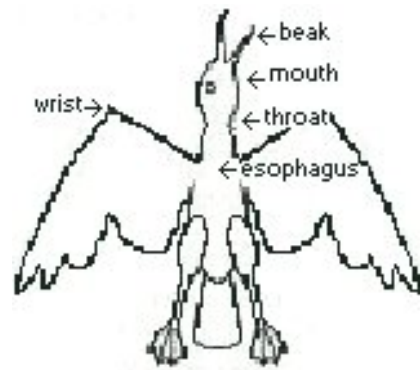
**If bird is boarded (cm):**

If you bring the bird on board, take the dimension measurements in centimeters, to the nearest 0.1 cm (straight), using a tape measure (total length, wing span) and calipers (wing chord, bill length).

**Wing Span (straight-line distance, fully spread):** Record the distance between wing tips of the bird's full wing extension (straight) in centimeters.

**Total length (straight-line distance from bill tip to mid tail tip):** Record the distance from the tip of the birds bill to the tip of mid tail. Be sure to record length (centimeters) in a straight line.

**Wing chord (the straight-line distance between the bend in the wing [wrist] and the tip of the longest primary feather).** This has also been described as the chord of the closed wing. This applies to the outer wing. The "wrist" of the bird is the outermost major bend in the wing. It is the most noticeable bend in the wing. Be sure to record the straight-line distance, not the curved distance. Measure in centimeters.



**Bill Length (upper mandible tip to feathered base, straight line):** Record the bird's total bill length from the upper mandible to the base of the forehead feathers in a straight line and in centimeters.

**Tagging Bands**

Look for existing bands. One or more metal or plastic band may be found on the bird's left or right leg. Record the type of band by circling metal or plastic and write in the band's color. In addition, record the band's number, contact name listed, and contact phone number. If unreadable or phone number or name missing, write unknown.

**Identifying Characteristics**

On sheet provided, please check the characteristic observed at each step (each letter of the alphabet) to determine the taxonomic group.

**Key for Identifying Seabirds in the Western North Atlantic**

- A. Feet Fully webbed (palmated).....B.
- A. Feet not fully webbed.....H.
- B.All four toes joined in webbing  
.....**Pelecaniformes (gannets, pelicans, cormorants)**.....
- B.Only three front toes joined in webbing.....C.
- C. Nostrils tubular (tubes on top of bill)  
.....**Procellariiformes (fulmars, petrels, shearwaters, storm petrels)**.....
- C. Nostrils not tubular.....D.
- D. Inside of bill has tooth-like ridges or serrations  
.....**Anseriformes (ducks, mergansers)**.....
- D. Inside of bill does not have tooth-like ridges or serrations.....E.
- E. Legs inserted far behind middle of body; tarsi compressed.....F.
- E. Legs not inserted far behind middle of body; tarsi rounded, no swollen mass (cere) and no nail-like hook, bill either plainly hooked or sharply pointed  
.....**Charadriiformes (gulls and terns)**.....
- F. Back toe (hallux) present

.....**Gaviiformes (loons)**.....

F. Back toe (hallux) absent.....G.

G. Swollen mass at base of upper mandible (cere) and upper mandible with sharp hook  
.....**Charadriiformes (skuas and jaegers)**.....

G. No swollen mass (cere) at upper mandible base, short tail, pointed bill (thick in some taxa)  
.....**Charadriiformes (auks, murrelets, puffins)**.....

H. Feet have four toes (3 front and 1 back).....I.

H. Feet have only three toes  
.....**Charadriiformes (plovers, sandpipers, sanderlings)**.....

I. Nails flattened and elongated  
.....**Podicipediformes (grebes)**.....

I. Nails not flattened and elongated, front 3 toes lobed, bill <3.8 cm long  
.....**Charadriiformes (phalaropes)**.....

**Notes**

Additional information regarding the seabird’s identification and life history may be recorded in the Notes section.

**Descriptive Features**

**Tail Shape:** Record the shape of the bird’s tail: forked, square, rounded or streamers. If unsure check unknown.

**Bill Shape:** Record the shape of the bill. Circle thick or thin, straight or hooked, or tip pointed or tip blunt.

**Bill Length relative to Body Length:** Observe the Bill length in reference to the overall body length of the bird. Circle short or long bill relative to the animal’s body length.

**Bill Color:** Observe color of bird’s bill: red, orange, yellow, pink, black and check off color. If color of beak unlisted, check empty box and write in color.

**Legs:** Record whether the bird’s legs extend beyond its tail tip. Circle Y for yes and N for no.



**Leg Color:** Record the leg color of the bird by checking the box for the color observed on the bird's legs. If color isn't listed, check empty box and write in color seen on bird's legs.

**Leg Attachment:** Record where bird's leg is attached in reference to the body. Circle if at center of body or near the posterior of the bird's body.

**Color Patterns**-(if distinct white, black, or other color patches are present)

Note: consider white and black as "colors" in below instructions. Read across to supply information for upper and lower body, wing tips, tail coverts.

### **Body**

**Upper:** Describe the location, shape, extent, and color (how much of the upper body does this area cover?) of any distinct color pattern on the bird's upper body.

**Lower:** Describe location and shape of any distinct coloration on the bird's underside. Also record how much of the lower body is covered by this distinct coloration.

### **Wing Tips**

**Upper:** Describe the location and shape of the distinct coloration on the bird's upper wing tip. Also record the extent, or how much of the wing tip is covered by this distinct coloration.

**Lower:** Describe colors and color patterns on lower wing tips

### **Coverts (base of tail)**

**Upper:** Describe the location and shape of the distinct coloration on the bird's tail base. Also record the extent, or how much of the upper tail base is covered by this distinct coloration.

**Under:** Describe any color pattern on the underside base of the tail.

**Is a Head cap present?:** Record whether a distinct head cap is present on the bird. Circle Y for yes and N for no. Check the color of the head cap. If the color isn't listed, check the empty box and write in the color observed.

**Check patch:** Does the bird have a distinctly colored cheek patch? Circle Y for yes and N for no. If a cheek patch is present, record the color of the cheek patch by checking the box in front of the color observed. If the cheek patch color is unlisted, check the empty box and write in the color seen.

**Other color patch information:** If additional color patches are present on the bird, they may be recorded in this area. In addition, if more space is needed for distinct colorations from the previous areas of the body, it may be recorded here. If additional space is needed, use the NOTES section above.