

KEY TO DATA TABLES AND CODES USED IN THE MAPS OF *THE ATLAS OF BREEDING COLONIAL WATERBIRDS IN THE INTERIOR WESTERN UNITED STATES*

Area Map Number, Map Name, and unique Site Number

Colony Number = Area Map Number – Site Number

Colony Name and UTM (Datum)

Area Map: 35106A1 (Albuquerque)
Site Number: 001
BCR 16

Colony Number: 35106a1-001
Box Elder County, UT

Freezout Lake
12N 397116 4583440
(NAD83)

Species	# of Nests	Est. # of Breeding Birds	Actual Bird Count	W	Cnv	Date	ST	T	Observers
Black-crowned Night-Heron	10	20		N	2	6/12/2010	B	W	Joyce
Franklin's Gull	150	300		N	2	6/12/2010	C	W	Johnson/Wright
Franklin's Gull		30	30	B	L	6/2/2009	O	W	Austin
Forster's Tern	128	256		N	2	6/9/2010	C	W	Wright et al.
Black-crowned Night-Heron	5	12	5	N	2	5/27/1999	U	U	Twain
Franklin's Gull	7	14		N	2	5/7/2007	U	U	Twain
Franklin's Gull	5	10	6	N	2	1999	U	U	Murphy

Counts/estimates of nests or birds

What was counted (W) to generate the estimated # of breeding birds
N = Nests
NP = Nests or pairs
P = Pairs
B = Individuals
O = No quantitative estimate
U = Unknown

Boxed data at the top of the table indicates the most recent, accurate, or representative data for this colony. Historical data are listed below.

Conversion Factor (Cnv)
Counts of birds or nests were multiplied by this value to generate the estimated # of breeding birds
L = No conversion
2 = Nests x 2
A = Midpoint of range
J = Adjusted by manager
S = Extrapolation from sample plots

Survey Type (ST)
A = Aerial
AP = Aerial Photography
B = Boat
C = Ground Survey in colony
O = Overview vantage point
U = Unknown

Estimate Type (T)
W = Direct Count
S = Sample (e.g. density sampled in plots)
Z = Partial count, rest estimated
T = Count by groups (e.g. 100s or 1000s)
K = Count adjusted by observer
Y = Estimate, not a direct count
X = Confirmed breeding, no count
P = Probable breeding, no count
V = Breeding birds common or abundant
U = Unknown

Figure 2a. Key to data tables and codes used in the maps in the *Atlas of Breeding Colonial Waterbirds in the Interior Western United States*.

Data Codes. Codes used within the site tables are defined below.

Universal Transverse Mercator.--The geographic coordinates for each colony are presented as Universal Transverse Mercator (UTM). The format for each location is presented in zone number, letter, easting and northing.

What Counted (W).--What was counted, birds or nests.

<u>Code</u>	<u>Description</u>
B	Birds: count or estimate of individual birds in colony.
N	Nests: count or estimate of nests in colony.
NP	Nests or Pairs: count or estimate of nests or breeding pairs.
P	Pairs: count or estimate of breeding pairs in colony.
O	No count or estimate: observer provided no quantitative estimate of colony size, only non-numeric data like "Present" or "Rare".
U	Unknown: unexplained how the number was generated.

Conversion (Cnv).--This code describes how the count or survey data were adjusted to generate estimates of breeding birds. Counts of nests were multiplied by 2 and counts of birds were often adjusted by a conversion factor to account for non-breeding birds at the colony and breeding birds away from the colony.

<u>Code</u>	<u>Description</u>
L	Literal count or estimate reported by observers; no adjustment.
2	Counts of nests were multiplied by 2 to estimate the number of breeding birds.
A	Midpoint of range (e.g., 500-1000 entered as 750).
J	Manager adjusted observer's data another way.
S	Extrapolation of data from sampling (e.g., nest densities in sample quadrats).

Survey Type (ST).--Survey method used to census or survey the colony. Codes were sometimes combined to indicate that more than one method was used.

<u>Code</u>	<u>Description</u>
A	Aerial survey from fixed-wing airplane or helicopter
AP	Aerial photography
B	Boat
C	Colony, ground survey in the colony or on the island
O	Overview, ground survey from a vantage point
U	Unknown

Estimate Type (T).--Type of estimate or count made by the observer. Codes may be qualitative or quantitative.

<u>Code</u>	<u>Description</u>
W	Direct Count
S	Known percent of colony. Exact count of birds, pairs, or nests in known fraction of colony area; count extrapolated to total number.
Z	Part estimated, part counted: exact count on part of colony area; remainder of colony and total number in colony estimated.
T	Count by groups: count of birds, pairs, or nests by groups (e.g., 10s or 1000s).
K	Count adjusted by observer: observer adjusted count of individuals, nests, pairs to give better estimate of total population (e.g., using study of attendance at nests).
Y	Estimate, not actual count: observer estimated birds, nests, or pairs by some other method.
X	Present, no count. Observer reported breeding birds of this species at colony, but no estimate of numbers.
P	Probable: observer reported breeding birds probably or possibly present at colony, but no numerical value.
V	Common or abundant: observer reported breeding birds common or abundant at colony, but no numerical estimate.
U	Type of estimate unknown: census method or accuracy of method unknown.

Figure 2b. Key to data tables and codes used in the maps in the *Atlas of Breeding Colonial Waterbirds in the Interior Western United States*.

