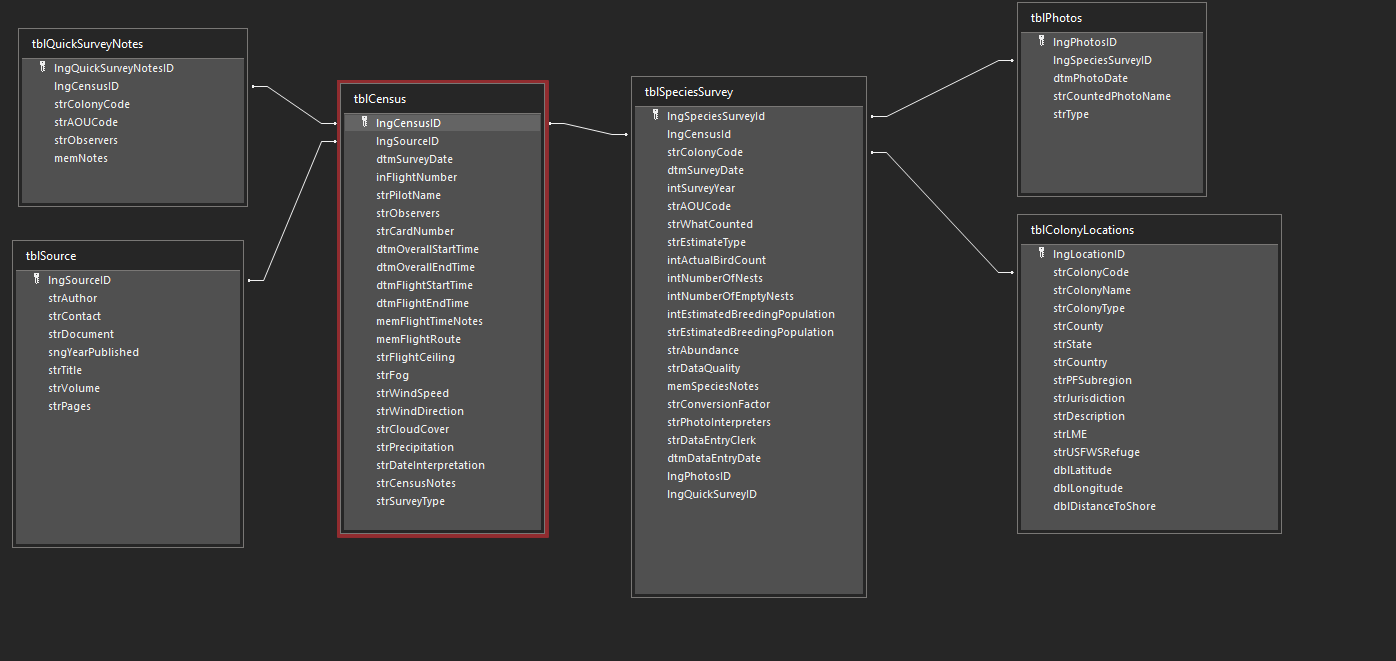
The Oregon Seabird Colony Catalog is currently OR\_Seabird\_Colony\_Catalog\_2021 and resides in the Oregon server at T:\.0 Reorganizing T Drive\Biology\Oregon Seabird Colony data  
There is also a back up copy at: <https://doimspp.sharepoint.com/:u:/r/sites/fws-FF01R00000-primr/Shared%20Documents/General/Pacific%20Seabird%20Program/Databases/Oregon/OR_Seabird_Colony_Catalog_2021.accdb?csf=1&web=1&e=P69p39>

WORK TO BE DONE: Forms need to be developed for easy data entry. Reports need to be developed for easy report writing.  
  


It has been broken into related tables with the relationships display above.

The first table is called ***tblQuickSurveyNotes*** and holds information collected on the day of the flight (or soon after). The fields are self-explanatory  
  
The next table is ***tblSource*** and holds information about the sources of the data. Documents, spreadsheets etc.  
  
The next table ***tblPhotos*** stores information about the photos used for counting seabird colonies. This table helps the user document where photos have been archived.

The table ***tblColonyLocations*** is static and only is updated as new colonies are discovered.   
  
The table ***tblCensus*** holds information about the census itself.   
  
The table ***tblSpeciesSurvey*** holds information about the individual species counts per census.

Attributes are listed below:

Table Name: ***tblQuickSurveyNotes*** – stores information recorded in the middle of or just after a flight.

Fields:  
lngQuickSurveyNotesID, autonumber-unique value auto-assigned   
lngCensusID, link to tblCensus  
strColonyCode - text - , Unique Colony ID  
strAOUCode - text - , AOU code – used if the notes are specific to a species  
strObservers - text – names of the observers recording the notes  
memNotes, -memo-notes

Table Name: ***tblSource*** – information about the source of the data   
Fields:  
lngSourceID, - autonumber-unique value auto-assigned   
strAuthor - text – if SSP use the name of the biologist that did the survey or contracted the survey  
strContact - text – if SSP – email address of Author  
strDocument - text -if SSP – Unpub. field notes - Colony Status Record   
sngYearPublished, number – if SSP, year of the survey  
strTitle - text -(ex. 2018 Oregon Seabird Colony Survey Notes)   
strVolume - text – if SSP - null  
strPages - text – if SSP - null

Table Name: ***tblPhotos*** stores information about photos used to count birds or nests  
Fields:  
lngPhotosID, -autonumber-unique value auto-assigned  
lngSpeciesSurveyID,-link to tblSpeciesSurvey   
dtmPhotoDate, -Date-date the photo was taken  
strCountedPhotoName - text – name of file  
strType - text – two types – “Stitched Images” and “Selected Image”

Table Name: ***tblColonyLocations*** stores information about the colony. Edits needed only when a new colony is discovered.  
Fields:

lngLocationID – autonumber - Unique Value auto-assigned  
strColonyCode - text - , Unique code composed of previously used Map Number, and Site Number (ex. 270-013)  
strColonyName - text - , recognized name of the colony, if it’s an unofficial name it is in quotation marks.  
strColonyType - text - , Colony, Colony Complex (archaic), DCCO Site  
strCounty - text - , county name  
strState - text - , state name  
strCountry - text - , country name  
strPFSubregion - text - , Subregion from the Protocol Framework for Common Murre and Brandt's Cormorant  
strJurisdiction - text - , Best guess for ownership of the colony (needs review)  
strDescription - text - , site description  
strLME - text - , Large Marine Ecosystem  
strUSFWSRefuge - text - , Refuge name if appropriate  
dblLatitude, 7 (Dbl), 8, latitude of colony in decimal degrees based on WGS84. For onshore colonies, latitude is given for the center point. For groups or complexes of offshore rocks or islands that constitute a single colony, latitude is given for the centroid.  
dblLongitude, 7 (Dbl), 8, longitude of colony in decimal degrees based on WGS84. For onshore colonies, longitude is given for the center point. For groups or complexes of offshore rocks or islands that constitute a single colony, longitude is given for the centroid.  
dblDistanceToShore, 7 (Dbl), 8, 0 for mainland colonies or those upriver from coast (in meters)

Table Name: ***tblCensus***  
Fields:

lngCensusID – autonumber - unique ID for each row  
lngSourceID – number – link to the Source of this census information  
dtmSurveyDate – date – date of the census  
inFlightNumber – number – indicates which flight it was during a specific year (1,2,3)  
strPilotName – text – name of the pilot  
strObservers - text – names of the observers onboard  
strCardNumber - text – the number of the card used, if more than one separate by a comma  
dtmOverallStartTime - date/time – start time of the survey (5:00)  
dtmOverallEndTime - date/time - end time of the survey (15:00)  
dtmFlightStartTime – date/time – start time of the flight (7:00)  
dtmFlightEndTime – date/time - end time of the flight (14:00)  
memFlightTimeNotes - text - notes about the flight  
memFlightRoute - text – general description of the flight route  
strFlightCeiling - text – ceiling during the flight  
strFog - text - density of fog (1-25%, 25-50%, 50-75%, >75%)  
strWindSpeed - text - Beaufort Scale (Calm, Light air, Light breeze, Gentle breeze, Moderate breeze, Fresh breeze, Strong breeze, High wind, Gale)  
strWindDirection - text - N, NE, E, SE, S, SW, W, NW  
strCloudCover - text - Clear, Mostly Clear, Partly Sunny, Partly Cloudy, Mostly Cloudy, Cloudy  
strPrecipitation - text - None, Trace, Light Rain, Steady Rain, Deluge  
strDateInterpretation - text - for SSP use code 7

1 Unknown census month and day (but year known)  
5 Unknown census day (but month and year known)  
7 Exact date where one census was used for the estimate  
8 Census took more than one day (i.e., Yaquina Head)  
9 Census involved between many (8 or more) and all days in one month. List the month and year.

strCensusNotes - text -general information for the census   
strSurveyType - text – use AP for the SSP

Table Name: ***tblSpeciesSurvey***  
Fields:  
lngSpeciesSurveyID – autonumber - unique ID for each row  
lngCensusId – number - refers to the unique lngCensusID from tblCensus  
strColonyCode – text - Unique ColonyCode from tblColonyLocations  
dtmSurveyDate – Date - date of survey  
intSurveyYear – Number - year of survey  
strAOUCode – text - AOU code from lutSpecies  
strWhatCounted – text - What was counted - see lutWhatCounted (for SSP choice of B (birds) or N (nests)  
strEstimateType – text - Type of Estimate - see lutEstimateType (for SSP almost always W (actual count)   
intActualBirdCount – number – number of individual birds that were counted (Common Murres)  
intNumberOfNests – number - number of nests counted (for cormorants and gulls)  
intNumberOfEmptyNests - number – number of Empty nests counted (when counted) – inconsistent used  
intEstimatedBreedingPopulation – number - Estimated breeding population, derived from # of nests or # of birds multiplied by correction factor  
strEstimatedBreedingPopulation – number - Estimated breeding population, derived from # of nests or # of birds multiplied by correction factor (text form), X=present   
strDataQuality – text – indicates the quality of the estimate

1 Data in “Number of Birds” are a precise estimate of the colony population.  
2 Data in “Number of Birds” are a good estimate of the colony population.  
3 The data in “Numbers of birds” are only a rough estimate of the colony population.  
4 The data in “Number of birds” are completely unreliable to indicate the colony population.  
U No data quality code can be assigned.

memSpeciesNotes – memo - Species-specific notes  
strConversionFactor - Conversion factor used to multiply # of nests or # of birds  
 2 for cormorants and gulls  
strPhotoInterpreters -text – names of the photointerpretors (Firstname Lastname)  
strDataEntryClerk – text - names for the person who entered the data  
dtmDataEntryDate – text - when the data was entered (for Legacy Project data, this date is when final data review was completed)  
lngQuickSurveyID – number – links to any of the quick survey notes taken and stored in tblQuickSurveyNotes

There are also look up tables for various fields  
  
***lutDateInterpreted***

strDateInterpretation, 10 (Txt), 1, 1,5,7,8,9

strDescription - text - , Written description of the code (used for historical data)

1 Unknown census month and day (but year known)

5 Unknown census day (but month and year known)

7 Exact date where one census was used for the estimate

8 Census took more than one day (i.e., Yaquina Head)

9 Census involved between many (8 or more) and all days in one month. List the month and year.

***lutEstimateType***

0 strEstimateType, 10 (Txt), 3

1 strDescription - text -

strEstimateType strDescription

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). Notes should describe method further."

P "Probable: Observer reported breeding birds probably or possibly present at colony, but no estimate of

numbers."

S "Known percent of colony: Exact count of birds, pairs, or nests in known fraction of colony area; count

extrapolated to total number. Notes should describe method further."

T "Count by groups: Count of birds, pairs, or nests by groups (e.g., 10’s or 1000’s). Notes should describe

method further."

U "Type of estimate unknown: Census method or accuracy of method unknown (observer did not describe

method well)."

V "Common or abundant: Observer reported breeding birds common or abundant at colony, but no

numerical estimate."

W An actual count: Exact count of each bird, pair, or nest in colony.

X "Present, no actual count: Observer reported breeding birds of this species at colony, but no estimate of

numbers."

Y "Estimate, not an actual count: Observer estimated birds, nests, or pairs by some other method.

Observer did not make an exact count of individuals or groups, but numbers were provided (e.g., “500

to 1000” or “thousands”). Not well described."

Z "Part estimated, part counted: Exact count on part of colony area; remainder of colony and total number

in colony estimated."

***lutQuality***

0 strDataQuality - text -

1 strShortDescription - text -

2 strLongDescription, 12 (Mem), 0

strDataQuality strShortDescription strLongDescription

1 Data in “Number of Birds” are a precise estimate of the colony population."Data in “Number of Birds” are a precise estimate of the colony population. Moderate changes among years could probably be detected. Examples: (a) exact counts of breeding pairs or nests (kittiwakes, gulls, terns, cormorants); (b) counts of individuals adjusted carefully for nest attendance."

2 Data in “Number of Birds” are a good estimate of the colony population."Data in “Number of Birds” are a good estimate of the colony population. Large changes in numbers could probably be detected. Examples: (a) exact counts of birds, where all are visible (e.g., murres, kittiwakes, gulls, terns); (b) counts of guillemots on an early morning high tide before nesting; (c) counts of occupied burrows in a precisely-measured area."

3 The data in “Numbers of birds” are only a rough estimate of the colony population. "The data in Numbers of birds” are only a rough estimate of the colony population. Only very large changes in populations can be detected. Examples: (a) many counts of part of a colony; (b) exact counts of birds that nest underground (e.g., puffins, guillemots), except special studies where all birds were visible; (c) most counts of birds by groups rather than individually. (Note: Data quality 3 is much lower than Data Quality 1 and 2)."

4 The data in “Number of birds” are completely unreliable to indicate the colony population."The data in “Number of birds” are completely unreliable to indicate the colony population. These data should not be used to infer any changes in population, however large. Examples: (a) estimates under poor conditions; (b) estimates that were mostly non-breeding birds; (c) all non-numeric estimates (“Present”, “Rare”, etc.)."

U No data quality code can be assigned. No data quality code can be assigned, because the observer did not describe methods adequately.

***lutSpecies***

0 strAOUCode, 10 (Txt), 4

1 strCommonName, 10 (Txt), 40

2 strTaxonID - text – used in FWSpecies and SERVCAT

3 strScientificName - text -

4 TypeOfNest - text -

strAOUCode strCommonName strTaxonID strScientificName TypeOfNest

BLOY Black Oystercatcher 77595 Haematopus bachmani Surface

BRAC Brandt's Cormorant 83427 Phalacrocorax penicillatus Surface

BRPE Brown Pelican 83383 Pelecanus occidentalis Surface

CAAU Cassin's Auklet 81945 Ptychoramphus aleuticus Burrow/Crevice

CATE Caspian Tern 669808 Hydroprogne caspia imperator Surface

COMU Common Murre 81900 Uria aalge Surface

DCCO Double-crested Cormorant 83419 Phalacrocorax auritus Surface

FTSP Fork-tailed Storm-Petrel 82514 Oceanodroma furcata Burrow/Crevice

GWGU Glaucous-winged Gull 80383 Larus glaucescens Surface

HOPU Horned Puffin 81962 Fratercula corniculata Burrow/Crevice

LHSP Leach's Storm-Petrel 82517 Oceanodroma leucorhoa Burrow/Crevice

PECO Pelagic Cormorant 83428 Phalacrocorax pelagicus Surface

PIGU Pigeon Guillemot 81919 Cepphus columba Burrow/Crevice

RBGU Ring-billed Gull 81071 Larus delawarensis Surface

RHAU Rhinoceros Auklet 81956 Cerorhinca monocerata Burrow/Crevice

TUPU Tufted Puffin 81966 Fratercula cirrhata Burrow/Crevice

UNCO Unidentified Cormorant 83416 Phalacrocorax Surface

UNSP Unidentified Storm-Petrel Oceanodroma Burrow/Crevice

WEGU Western Gull 81056 Larus occidentalis Surface

WGGU West./Glaucous-winged Gull Larus occidentalis/Larus glaucescens Surface

***lutSurveyType***

0 strSurveyType, 10 (Txt), 10

1 strDescription - text -

strSurveyType strDescription

A Aerial Survey from fixed-wing aircraft or helicopter

AP Aerial Photography

B Boat Survey

C Land-based survey in the colony or on the island

M Land-based survey from a disjunct mainland observation point

U Unknown

***lutWhatCount***

0 strWhatCounted, 10 (Txt), 3

1 strDescription, 10 (Txt), 200

strWhatCounted strDescription

B Individual birds: Count or estimate of individual breeding birds in colony.

MN Mist-netted

N Nests or burrow: Count or estimate of nests or burrows in colony.

O "No count or estimate: Observer provided no numeric estimate, only non-numeric data like ‘Present’ or ‘Rare’."

U Unknown: How the number was generated was unexplained