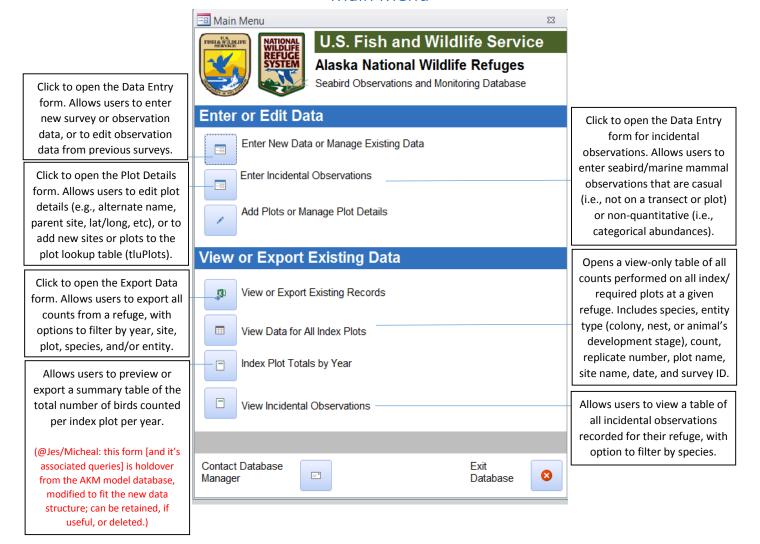
Main Menu

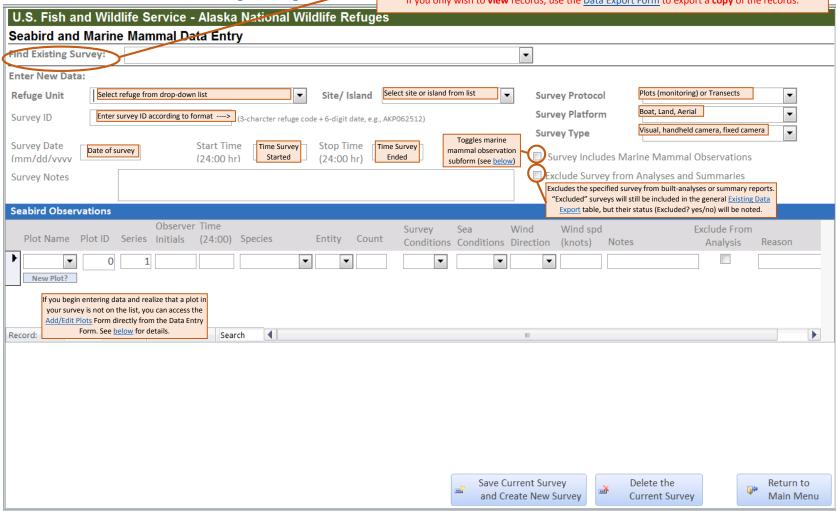


Survey/Observation Data Entry Form

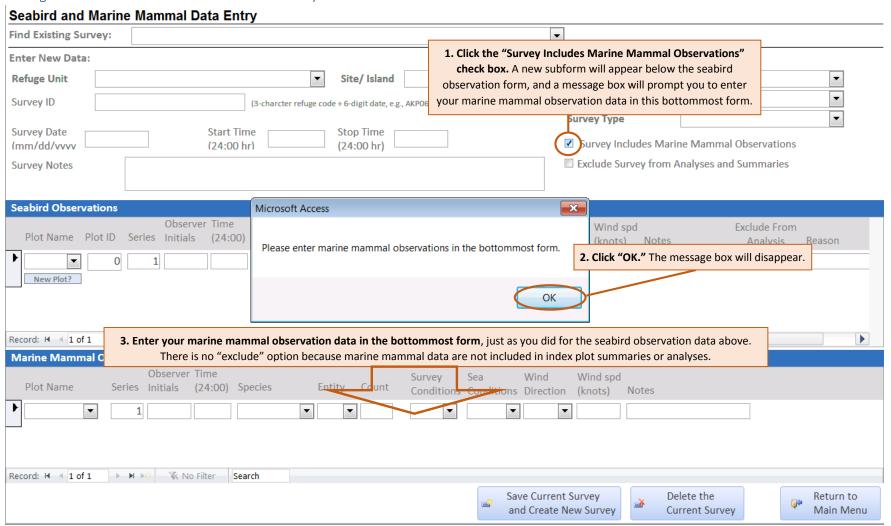
Main Menu > "Enter New Data or Manage Existing Data"

Allows user to select and edit survey and observation data from previous surveys. Surveys are sorted by refuge, then by date. Any changes made to these records WILL BE REFLECTED IN THE DATABASE.

If you only wish to view records, use the Data Export Form to export a copy of the records.

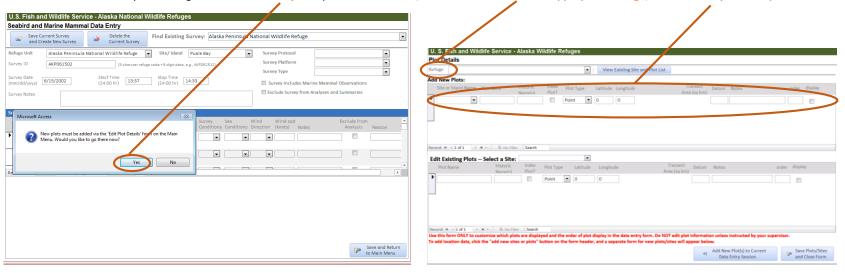


Adding Marine Mammal Observations to Your Survey

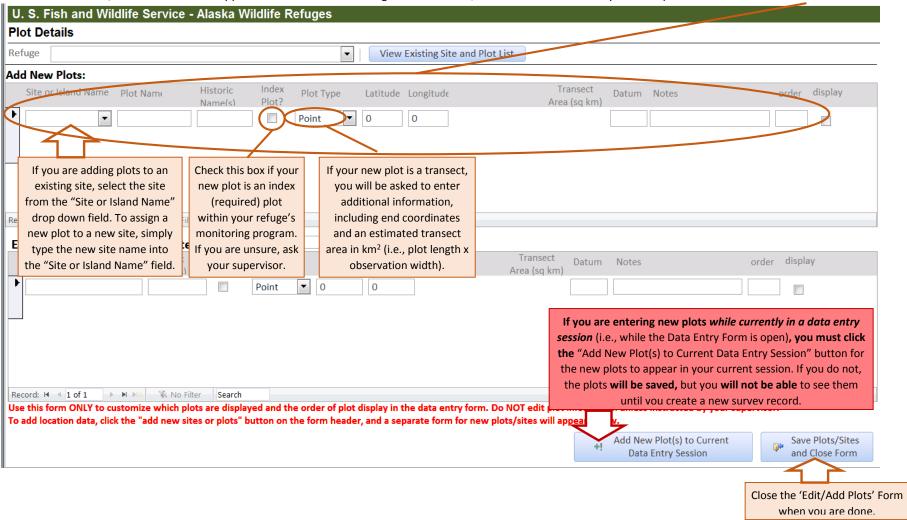


Adding Plots From in the Data Entry Form

If you begin entering data and realize that a plot in your survey is not on the list, you can access the Add/Edit Plots Form directly from the Data Entry Form. To do so, click the "New Plots?" button below the drop-down plot list in the observations subform. First, you will see the following message: "New plots must be added via the 'Add/Edit Plots form on the Main Menu. Would you like to go there now?" Click yes to proceed to the Add/Edit Plots form. Select the appropriate refuge, and then add your new plots or sites.



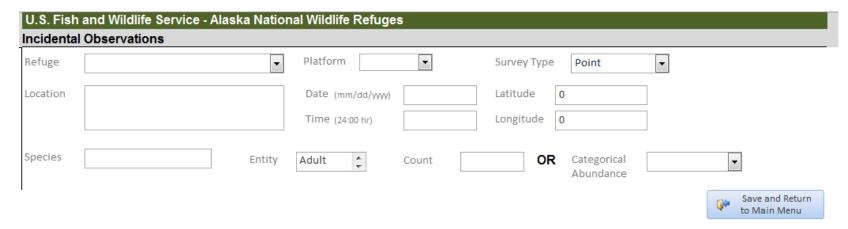
The "Add New Plots/Sites" subform will appear below the "Edit Existing Plots" subform, and the information for your new plot will be entered there:



Incidental Observation Data Entry Form

Main Menu > "Enter Incidental Observations"

The Incidental Observations form allows users to record observations of seabirds, marine mammals (or other birds or mammals) that did not occur as a part of a formal survey. For example, technicians may have observed a few seals between surveys, or counted 22 glaucous-winged gulls on a large cliff face near camp. Still other refuges collect a considerable amount of categorical abundance data—i.e., recording whether certain species we uncommon, common, or abundant in a given area. These secondary but useful data can be recorded in this database as "incidental" observations.



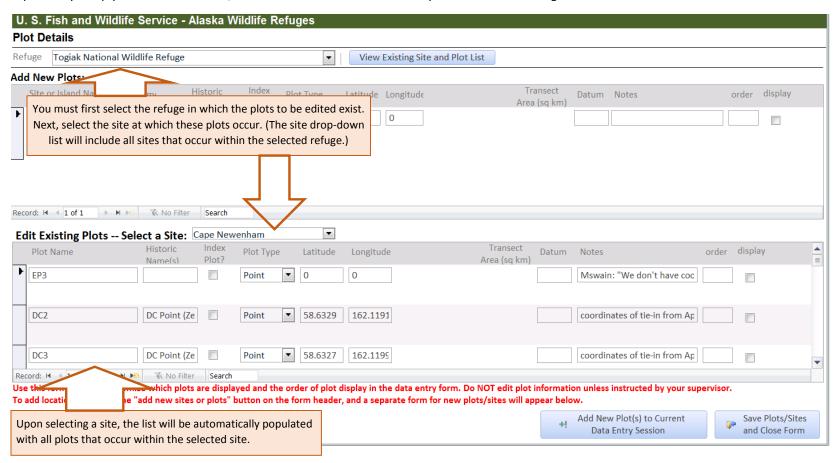
'Add/Edit Plots' Form

Main Menu > "Add Plots or Manage Plot Details"

The 'Add/Edit Plots' form can be accessed via the main menu, or from the Data Entry form, if you are entering data and realize that your plot is not yet listed in the plots lookup table. For details on the latter situation, see the "Adding Plots From within the Data Entry Form" section above. Below, we describe how to edit existing plots/sites or create new ones.

*** Make edits to plot details ONLY if instructed by your supervisor. ***

One may wish to edit plot details for a number of reasons: you may have recorded coordinates for a plot previously missing lat/long data, or you may change the name of a plot, or you may wish to add notes about a part of a rock face at the plot that has since fallen into the sea. The fields on this form are self-explanatory. Simply click the "Save Plots/Sites and Close Form" button when you are finished making edits.

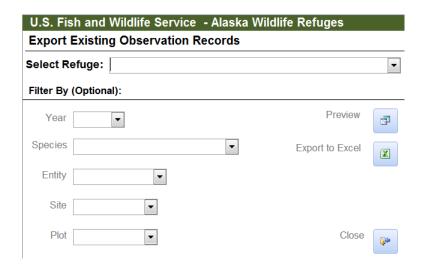


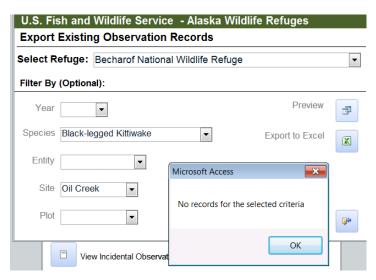
View or Export Existing Data

Data Export Form

Main Menu > "View or Export Existing Records"

This function allows users to export existing monitoring and/or transect data from their refuge. Exported records can further be filtered by observation year, species observed, site, and plot. The option to 'preview' results will open a read-only table in the MS Access window, while the 'export' function exports this table as an XLS to a directory of the user's choosing. If no records exist for the criteria the user selects, a pop up box will notify them of this.



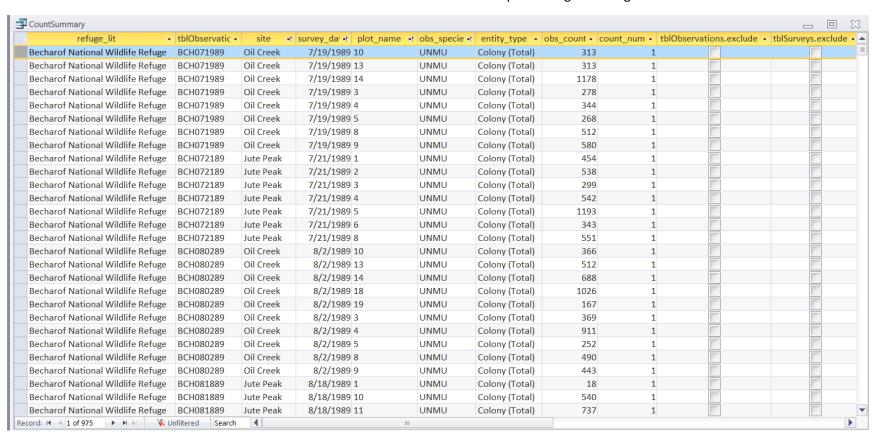


refuge_lit	- SurveyDate -	SurveyID	Site	 PlotName 	Species	→ Entity →	Count -	Replicate -	ExcludedSurv -
Becharof National Wildlife Refuge	7/19/1989 8	BCH071989	Oil Creek	1	UNMU	Colony (Total)	160	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	2	UNMU	Colony (Total)	423	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	3	UNMU	Colony (Total)	278	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	4	UNMU	Colony (Total)	344	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	5	UNMU	Colony (Total)	268	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	6	UNMU	Colony (Total)	174	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	7	UNMU	Colony (Total)	380	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	8	UNMU	Colony (Total)	512	1	
Becharof National Wildlife Refuge	7/19/1989	BCH071989	Oil Creek	9	UNMU	Colony (Total)	580	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	1	UNMU	Colony (Total)	204	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	2	UNMU	Colony (Total)	164	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	3	UNMU	Colony (Total)	369	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	4	UNMU	Colony (Total)	911	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	5	UNMU	Colony (Total)	252	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	6	UNMU	Colony (Total)	392	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	7	UNMU	Colony (Total)	438	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	8	UNMU	Colony (Total)	490	1	
Becharof National Wildlife Refuge	8/2/1989	BCH080289	Oil Creek	9	UNMU	Colony (Total)	443	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	1	UNMU	Colony (Total)	1915	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	2	UNMU	Colony (Total)	1087	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	3	UNMU	Colony (Total)	317	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	4	UNMU	Colony (Total)	914	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	5	UNMU	Colony (Total)	543	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	6	UNMU	Colony (Total)	620	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	7	UNMU	Colony (Total)	600	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	8	UNMU	Colony (Total)	740	1	
Becharof National Wildlife Refuge	8/20/1989	BCH082089	Oil Creek	9	UNMU	Colony (Total)	405	1	

Index Plot Data Table

Main Menu > "View Data for All Index Plots"

This feature allows the user to view all observations that have occurred on all index plots in a given refuge:

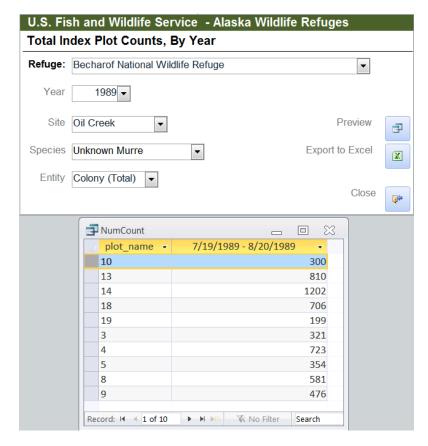


Index Plot Summary Form

Main Menu > "Index Plot Totals by Year"

This function allows users to export a table of the *total average count* of each species on each index plot at each site in a given refuge. Unlike the general 'Existing Data' export form, the year, site, species, and entity filters are mandatory. The result is a cross-tab query with the relevant index plots as rows and the range of survey dates listed in the column header. The total average count for each index plot is calculated as the average count of all average counts that occurred on the specified plot during the specified year. The option to 'preview' results will open a read-only table in the MS Access window, while the 'export' function exports this table as an XLS to a directory of the user's choosing.





Key to Database Fields

Field Name	Source Table	Data Type	Description		
obs_id	tblObservations	AutoNumber	Primary Key - Autonumber		
survey_id	tblObservations	ShortText	Primary Key; unique alphanumeric identifier consisting of 4-letter NWR code, and 6-digit MM/YYYY date		
plot_id	tblObservations	Number	Unique plot identifier; AutoNumber/Primary Key in the tluPlots table		
plot_name	tblObservations	ShortText	Designated plot name		
plot_area	tblObservations	Number	Plot area in sq km; most relevant for NPPSDb- compatible transect-based surveys		
area_desc	tblObservations	ShortText	description of the plot area		
count_num	tblObservations	Number	Index number for the number of counts that were performed for the selected plot		
obs_name	tblObservations	ShortText	Initials of the observer who performed the count		
obs_species	tblObservations	ShortText	Four-letter code representing the species surveyed		
entity_type	tblObservations	ShortText	The development stage of the species surveyed: Adult, Chick, Fledgling, Nest, Immature		
obs_time	tblObservations	Date/Time	Time the count was performed (24:00)		
obs_count	tblObservations	Number	The number of birds or nests (or other entity type) counted in the plot		
egg_count	tblObservations	ShortText	Egg count, or notes on egg presence, where relevant		
vis	tblObservations	ShortText	Generalized visibility condition (selection) during observation: Excellent, Good, Fair, Poor		
seacond	tblObservations	Number	Sea surface conditions at the time of the survey (selection): 1 = calm, 2 = light chop, 3 = moderate to heavy chop		
winddir	tblObservations	ShortText	Wind direction (selection_: N, S, E, W, NE, NW, SE, SW, VRB (variable)		
windspd	tblObservations	ShortText	Wind speed (knots)		
genweather	tblObservations	ShortText	General notes on weather not captured by sea conditions or wind speed/direction		
obs_notes	tblObservations	ShortText	General notes about the observation		
db_notes	tblObservations	Short Text	Notes field for the person aggregating data		
exclude	tblObservations	Yes/No	Exclude plot? (Appears in tblObservations as "exclude")		
exclude_r	tblObservations	ShortText	Reason for excluding plot (Appears in tblObservations as "exclude_r")		
refuge_unit	tblSurveys	ShortText	Refuge unit, where specified; otherwise, full refuge name		
site	tblSurveys	ShortText	Designated site or island surveyed		
survey_protocol	tblSurveys	ShortText	Protocol type (selection): Plot or Circumnavigation		
survey_platform	tblSurveys	ShortText	Platform from which observations were made (selection): Land, Boat, Aerial		
survey_type	tblSurveys	ShortText	Basis of record for the observations (selection): Visual, Handheld camera, Fixed camera		
survey_date	tblSurveys	Date/Time	Date of the survey		
start_time	tblSurveys	Date/Time	Time the survey started		
stop_time	tblSurveys	Date/Time	Time the survey ended		
replicate	tblSurveys	Number	Replicate number of the survey, where relevant		
survey_notes	tblSurveys	ShortText	General notes about the survey		
source	tblSurveys	ShortText	Name of the source from which the record is derived		
exclude	tblSurveys	Yes/No	Exclude plot? (Appears in tblSurveys as "exclude")		
exclude_r	tblSurveys	ShortText	Reason for excluding plot (Appears in tblSurveys as "exclude_r")		

Key to Database Fields

Field Name	Source Table	Data Type	Description		
plot_type	tluPlots	ShortText	Type of plot (selection): Point or Transect		
plot_group	tluPlots	ShortText	Plot grouping		
location_index	tluPlots	ShortText	Internal (office or refuge) reference code for given site or plot		
Latitude	tluPlots	Number	Latitude (DD) of point plot, or beginning of transect		
Longitude	tluPlots	Number	Longitude (DD) of point plot, or beginning of transect		
End_Lat	tluPlots	Number	Latitude (DD) of end of transect, when relevant		
End_Long	tluPlots	Number	Longitude (DD) of end of transect, when relevant		
transect_length	tluPlots	Number	Length (km) of transect		
historic_plot_name	tluPlots	ShortText	Prior name of plot (e.g., if split into multiple plots or rennamed)		
required/index	tluPlots	Yes/No	Required or index plot? (Currently only indicated in the Becharof NWR data)		
est_year	tluPlots	ShortText	Year the plot was established, if known		
COMMONNAME	tluSpp	ShortText	common species name, as described by NPPSD taxonomy		
SCINAME	tluSpp	ShortText	scientific species name, as described by NPPSD taxonomy		
TSN	tluSpp	Number	Integrated Taxonomic Information System (ITIS) (2013) Taxonomic Serial Number		
TaxCode	tluSpp	Number	National Oceanographic Data Center (NODC) (1996)		
Source	tluSpp	ShortText	source of species code, including AKM, BirdPop, and NPPSD		