

SeaLog & QA/QSea 2.2 Data Format

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Introduction

[QA/QSea](#) is a Shiny app written in the R environment. This app was constructed to work in conjunction with [SeaLog](#), a data logging application developed by Department of Interior researchers in Alaska for the collection of at-sea survey data. QA/QSea can read comma delimited text files (csv) and Excel (xlsx) output from SeaLog, provide proofing tools, and generate exportable data files in multiple formats including that used in the [North Pacific Pelagic Seabird Database](#) (NPPSD). Note this app cannot read dLOG or any other csv data, as it requires JSON configuration files from SeaLog.

This document defines the data format exported by SeaLog and ingested by QA/QSea, version 2.2. If you have data from a different version or from different software, you may be able to reconfigure your CSV/Excel file so it can be processed by QA/QSea.

You will also need to set up a pair of JSON files defining the fields you were using during data collection (`optionalFields.json`) and a validation list of species (`speciesValidationList.json`). Links to the default versions of these files are at the bottom of this document. Details on these files can be found in the [SeaLog 2.2 Manual](#).

Field Definition

The CSV/Excel observation file must contain these fields, in the following order. The fields where Required is Yes, must contain data. All the others are optional. If you have data in any of the optional fields, they must be set to “true” in the `optionalFields.json` file or they will not be preserved in the outputs and backups.

Field	Short description	Data Type	Required
Vessel	Vessel name	Text	Yes
TxWidth	Transect width (m)	Integer	Yes
TripID	Trip ID	Text	Yes
Transect	Transect	Text	Yes
Record	Record number (autonumber)	Integer	Yes
PortObs	Port observer	Text	No
StarboardObs	Starboard observer	Text	No
PortCondition	Port condition	Integer	No
StarboardCondition	Starboard condition	Integer	No
Beaufort	Beaufort code	Integer	No
Weather	Weather	Text	No
CloudCover	Cloud cover	Integer	No
FogConc	Fog concentration	Integer	No
IceType	Ice type	Text	No
IceConc	Ice concentration	Integer	No
On/OffTx	On/Off transect (“ON” or “OFF”)	Text	Yes
Type	Data type (“USER” or “GPS”)	Text	Yes
ObsSideIO	Observer inshore/offshore	Text	No
ObsSidePS	Observer port/starboard	Text	No
Species	Species code (4 letters)	Text	Yes
Count	Species count	Integer	Yes
PrimaryBehavior	Primary behavior	Text	No
SecondaryBehavior	Secondary behavior	Text	No
Age	Age	Text	No
Sex	Sex	Text	No
Plumage	Plumage	Text	No
Distance	Distance from vessel (m)	Integer	No
Angle	Angle from vessel course (°)	Integer	No
Bin	Distance bin	Text	No
UserSelect1	Custom drop down field	Text	No
UserSelect2	Custom drop down field	Text	No
UserText	Custom text field	Text	No
UserNumeric	Custom numeric field	Float	No
Latitude	Latitude (WGS84)	Float	Yes
Longitude	Longitude (WGS84)	Float	Yes
Date	Date (local)	Text	Yes
Time	Time (local)	Text	Yes
GPSTime	GPS Timestamp (UTC or with timezone)	Text	Yes
Comments	Observation comments	Text	No