



# Fish Instructions & Metadata

**Some rules for data entry**

1. Please use the same **Site & Strata** names you have in previous uploads
2. Please use the same **Latitude/Longitude** if you've sampled the site-strata before
3. If >1 of the same strata type in a site, describe in **Notes**: e.g. "armored-north"
4. Please leave cell blank if measurement was missed (*do not put a "0"*)

## 1. The 1st 9 columns describe

WHERE (site characteristics) & WHEN (time, date) you sampled:

	Site	Latitude	Longitude	Strata	Date	Time	Weather	Transect	Observation
<b>format</b>	<i>text</i>	<i>number: decimal degrees</i>		<i>text: e.g., natural, armored, pre-restoration, post-restoration</i>	<i>mm/dd/yyyy</i>	<i>hh:mm</i>	<i>text</i>	<i>number: count</i>	<i>number</i>
<b>description</b>	use the same site name for multiple strata in the same place	use the same coordinates used previously if resampling the same strata at the same site		<b>natural:</b> never been armored & used as reference; <b>armored:</b> armored shoreline with no plans for removal; <b>pre-restoration:</b> armored shoreline with plans for restoration; <b>post-restoration:</b> restored treatment (e.g. armor removed); or other designation	sample date in number format	sample start time in 24-hr	weather conditions: sun, rain, cloudy	transect replicate	fish observation replicate
<b>required?</b>	required			recommended	required		recommended		

## 2. The next 7 columns describe physical features of the water & tide:

	Tide_MLLW	Tide_description	Transect_Length_m	Distance_from_shore_m	Horiz_secchi_m	Water_depth_m	Depth_description
<b>format</b>	<i>number: feet</i>	<i>text</i>	<i>number: meters</i>	<i>number: meters</i>	<i>number: meters</i>	<i>number: meters</i>	<i>text</i>
<b>description</b>	Tidal elevation in feet relative to MLLW datum	description of tide level: high, low	length of transect	transect distance from water edge	underwater horizontal visibility	water depth	description of water depth: shallow, deep
<b>required?</b>	recommended						

## 3. The next 9 columns describe aspects of the fish

	Fish_species	Fish_group	Count	Density	Length_min_cm	Length_max_cm	Water_column_position	Behavior	Notes
<b>format</b>	<i>text</i>	<i>text</i>	<i>number</i>	<i>number</i>	<i>number: centimeters</i>	<i>number: centimeters</i>	<i>text</i>	<i>text</i>	<i>text</i>
<b>description</b>	name at lowest taxonomic classification identified	broader taxonomic grouping	number of fish (no symbols)	Calculated as <b>Count</b> divided by <b>Horiz_secchi_m</b> x <b>Transect_length_m</b>	minimum range of fish length bin	maximum range of fish length bin	description of position in water column: surface, middle, bottom	description of behavior: feeding	notes on data
<b>required?</b>	required	recommended	required		recommended				