**GAP SURVEY CATCH TUTORIAL**

**EBS & AI Summer survey 2020**

The purpose of this tutorial is to walk you through an entire set-up and data collection for a standard GAP bottom trawl survey haul including catch, length, specimen & benthic bag. By following the list of items below you should experience a realistic scenario you may experience at sea during a GAP bottom trawl survey. In addition, you will gain experience in equipment set up, maintenance and trouble shooting. Please review and complete each item listed below in order of appearance. The bulk of this tutorial is either based on standard date entry and data checking protocols, or thoroughly documented in the manual you will find in the survey app.

**\*NOTE: The equipment you received as a “KIT” from Jerry is already set up with current catch, length, specimen apps, as well as the cruise data app, shake, and total commander app loaded on the tablets. The headset, speaker and wand are paired to the tablet. Therefore the tablets and equipment should be ready to begin entering data. Once you have completed this exercise and feel comfortable with the data entry and transfer you can unpair the equipment and practice re-pairing to the tablet as well as unloading the apps from the tablet and reloading. Please do not hesitate to contact me if you have questions or need assistance.**

**SET UP**

1. Check the charge of the tablets, speaker, wand, headset. Charge if necessary
2. Load the specimen, length, catch app onto each tablet from a thumbdrive
3. Pair the lengthing tablet to a barcode wand
4. Set the scan speed on a barcode wand
5. Pair the lengthing tablet to an ecoxgear speaker
6. Pair the specimen tablet to a kinivo headset
7. Adjust the volume of the kinivo headset and ecoxgear speaker in the tablets Bluetooth settings
8. Set the shake app for each tablet to open to a selected app when shaken (length, catch, specimen)
9. Insert the catch tablet into a large aryca box using a neoprene gasket
10. Insert the specimen tablet into a small aryca box using a neoprene gasket
11. Insert a length tablet into a pelican box
12. Set up a length tablet for an upcoming haul so ready to length when shaken
13. Use Bluetooth to pair each tablet to the catch computer

**Data Collection**

Enter catch data into the catch app tablet (split haul with mixture)

Enter Benthic Bag data into catch app tablet

Enter length data on lengthing app tablet

Enter specimen data into specimen app tablet

Send length data/files to the catch computer

Send specimen data/files to the catch computer

Send catch data/files to the catch computer

Import the length data from a file into the Access program

Import the catch data from a file into the Access program

Import the specimen data from a file into the Access program

**Data editing and corrections**

*Make these corrections on the Tablets and resend the data to the Catch computer*

You determine the hybrid crab is really a *C. bairdi*

You found a *Fusitrition oregonensis* in the benthic bag basket

Examine Catch, Length, and Specimen data for errors-correct as needed

**Corrections necessary from Length/Catch data**

1. Length codes are switched between *Hippoglossoides elassodon* and *H. robustus*
2. Northern Rock Sole were lengthed twice
3. Halibut are missing from the Catch data but present in the length data
4. Alaska skate measured at 5 cm is not a valid record since they are no smaller than 22 cm. most likely the species code was recorded as a length
5. The record of *Hippoglossoides elassodon* of 75 cm is an error too large-delete
6. 2 northern rock sole are found in the flathead lengthing basket before lengthed 1 M @ 36 cm 540 gm & 1 F 23 cm @ 135 gm

**Daily Equipment Maintenance Requirements**

1. Clean all tablet boxes with fresh water and enable to dry at the end of each day-remove rubber pad from pelican length tablets to dry each evening to avoid moisture buildup
2. Inspect Aryca tablet boxes and ensure silicone screen is secure in place and free of rips and tears.
3. Understand how to replace a silicone screen in a catch tablet Aryca box
4. Wipe clean each headset with provided sanitary wipes
5. Spray with freshwater the ecoxgear speaker and allow to dry at nite- covered charge port before cleaning
6. Examine wands for damage to wand tip and frayed or leaking on/off button or waterproofing tape
7. Place small rubber plug in charging ports of kinivo headsets before use on deck