

Issues of a technical nature

The Trouble with Tablets

- * Original Electronic Data Acquisition System (EDAS) surveys were trawl
- * Expansion into other surveys such as longline and sablefish
- * Smaller boats and working on deck
- * More mobility is good, right?



Yumas?



- * First attempt at on deck mobility
- * Small screen and not ideal aspect ratio
- * Port corrosion issue
- * Issues with wireless (Bluetooth, networking)
- * More issues than solutions



Tablets?



- * Second attempt at on deck mobility
- * Look great!
- * Capacitive touchscreen vs. resistive
- * Issues with wireless (Bluetooth, networking)
- * Worse performance than Yuma



Back to the toughbooks ...

- * They are rugged enough with proper enclosure
- * We still have interference issues when Bluetooth and Wifi simultaneously
- * Testing industrial router and different router frequency



Data proofing

How to ensure data integrity

- * At time of data capture (audio feedback)
- * Post event review (video review, error reports)
- * Objective of reviewing every data point collected
- * Started with simple trawl reports, more complex data in Sablefish and longline surveys= more complex reports
- * Daily review and proactive approach
- * Errors will happen, easier to catch them as close to the time it happens
- * Less time spent post survey figuring out what went wrong.

Cameras

- * Webcams on haul card station



- * IP camera rather than webcams?
- * Electronic monitoring of fishing for sablefish and longline surveys
- * Started full video review with sablefish trap survey, moved to longline survey

Electronic Monitoring

- * Video review of trap by trap or hook by hook data



Error reports

Sablefish Post-Hole Quality Assurance Report

For each set problems and potential problems are listed. Ensure that you understand why any fields are highlighted and every single comment. The highlighting colour indicates the level of the problem

information

requires review and may need correcting

error that requires correcting

Set Number: 1 **Date: October 12, 2015**

Reason: Sablefish Random Stratified Survey

Begin Deployment: October 12, 2015 8:05 End Deployment: October 12, 2015 8:19 Haul Length:

Begin Retrieval: 13/10/2015 6:06:41 AM End Retrieval: 13/10/2015 6:49:23 AM 43

Soak Hours: 22.02 Traps set: 25 Traps Hauled: 25 Traps Fished: 24 Traps Lost: 0

Set Comments: ;trap 12 open;

Second buoy time missing-try to get it from the EM video

Trap 12 comment is: open

Set Number: 2 **Date: October 12, 2015**

Reason: Sablefish Random Stratified Survey

Begin Deployment: October 12, 2015 10:27 End Deployment: October 12, 2015 10:39 Haul Length:

Begin Retrieval: 13/10/2015 9:09:58 AM End Retrieval: 13/10/2015 9:32:49 AM 23

Soak Hours: 22.7 Traps set: 25 Traps Hauled: 25 Traps Fished: 25 Traps Lost: 0

Set Comments: ;;

Second buoy number missing-try to get it from the EM video;

Set Number: 3 **Date: October 12, 2015**

Reason: Sablefish Random Stratified Survey

Begin Deployment: October 12, 2015 12:20 End Deployment: October 12, 2015 12:33 Haul Length:

Begin Retrieval: 13/10/2015 11:19:41 AM End Retrieval: 13/10/2015 11:45:06 AM 26

Soak Hours: 22.98 Traps set: 26 Traps Hauled: 26 Traps Fished: 25 Traps Lost: 0

Set Comments: ;;

Set Number: 4 **Date: October 12, 2015**

More video data...

- * Nuytco Research Sablefish trap cameras



New recorder this year

- * Accelerometers for the Sablefish trap survey (Actigraph GT3X), actually a health/ activity monitor

