

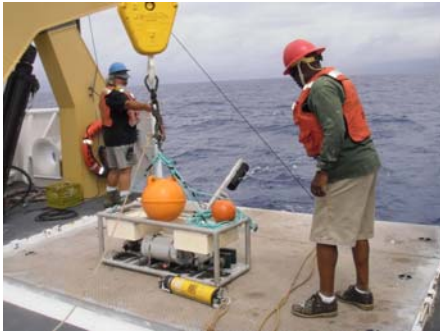
SE-11-02 March 6, 2011 progress report

The *Oscar Elton Sette* conducted nighttime targeted fishing operations over acoustic targets last night and then resumed acoustic surveys of the grid, performed a crew re-swap with the *Hukipono* today (returning Dr. Cordelia Moore to the *Hukipono* and Dr. Ben Richards to the *Sette*), deployed a 6-hour BotCam unit and conducted daytime acoustic surveys over it. The *Hukipono* completed 15 BotCam drops over the day, successfully using the repaired unit, and prepared for their last 5 drops tomorrow prior to heading back to Oahu. Charter fishing operations completed 17 nighttime fishing stations (by 3 vessels) last night and completed 14 daytime fishing stations today (by 2 vessels), from the fishing vessels *Naomi*

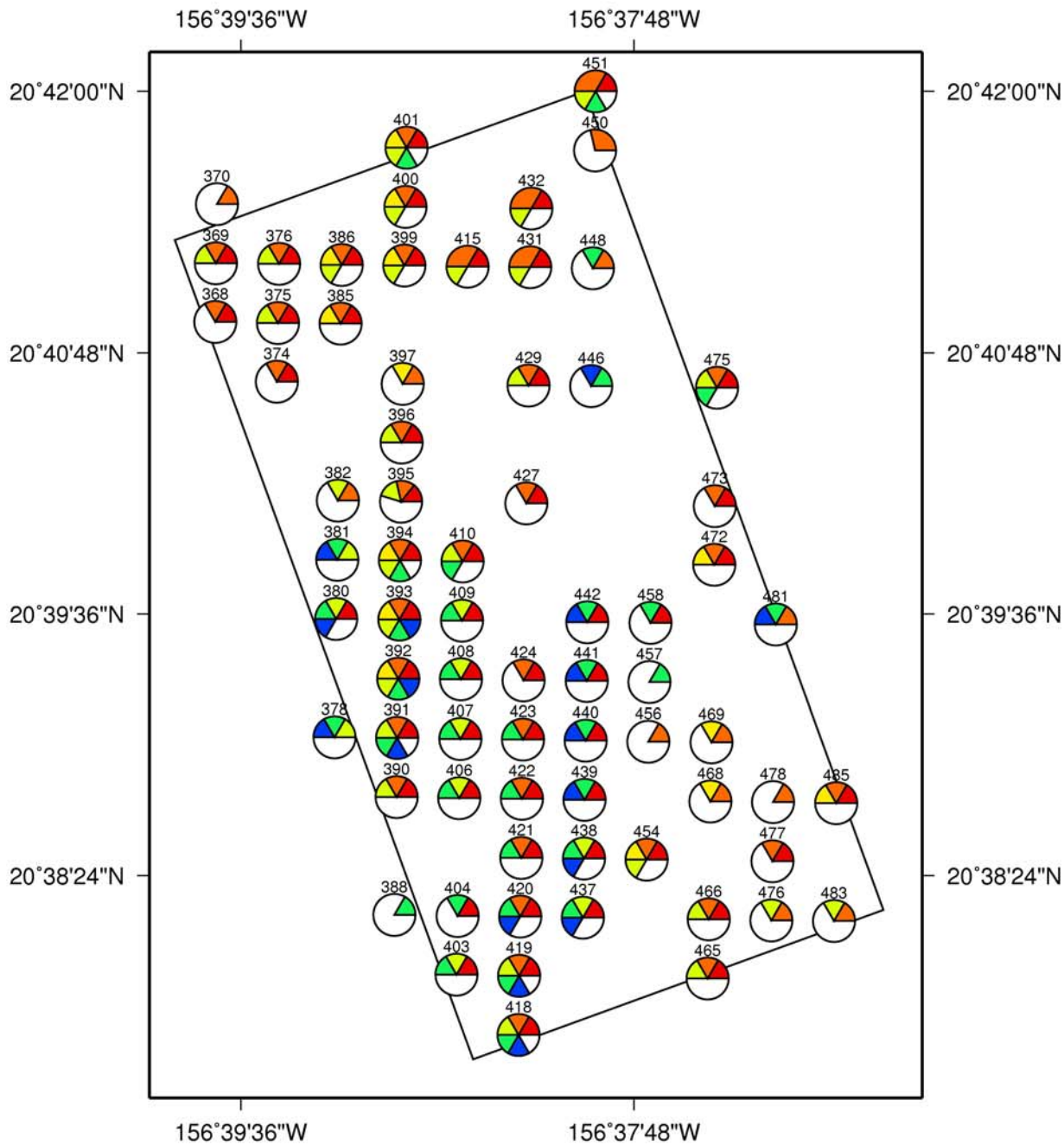
K, *Okalani*, and *Imua*. Fishing activity is mostly postponed tonight due to increasing waves and winds except for possibly the *Imua* which stayed out. The *Sette* served as an excellent fishing platform in the low-wind conditions last night, with the targeted fishing operations successful for a number of opakapaka and small sharks, helping confirm some of the acoustic signatures seen on the Simrad EK-60 screens. There remains some question on the type or magnitude of acoustic signatures from the small sharks which, according to fishermen, are quite abundant. This group of fishes lack gas bladders which are normally what is reflected in acoustic surveys of fishes, suggesting some investigation is warranted of the reflective properties of other organs such as oil-filled livers used by sharks as buoyancy control. Prior to the BotCam deployment

a large pod of inquisitive humpback whales shadowed the vessel causing a delay in operations (whale photo courtesy of Ben Richards). The 6-hour BotCam unit was successfully deployed at a high-relief, hard-

bottom station in the northwest portion of the survey grid. Despite the very steep slope, the BotCam unit stabilized at ~160m based on a SeaBird TDR instrument attached to it and successfully recorded large numbers of fish, primarily ehu (as seen at right).



Sampling Effort Box D



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|--|--------------------------|--|--------------------------|
| | BotCam time 1 | | BotCam time 2 |
| | Daytime Fishing time 1 | | Daytime Fishing time 2 |
| | Nighttime Fishing time 1 | | Nighttime Fishing time 2 |