

## **FY22 FKW-Fisheries Interactions Project List**

Acoustic monitoring of the longline fleet: Characterizing & mitigating the dinner bell to reduce depredation by FKWs. Includes deployment of recorders, analysis of collected acoustic data, and work directly with captains to reduce noise from their vessel.

Part 1: Long-term survival for MHI insular FKWs with evidence of mouth hooking or other fisheries related injuries. Use long-term photo-ID catalog to examine nature, extent, and timing of injury relative to animal sex, age and survival post-injury.

Part 2: Detailed assessment of body condition using aerial photogrammetry for whales with and without evidence of previous fisheries interactions. Includes collaboration with Cascadia Research Collective to assess long-term injury status and sighting history for whales photographed with the drone.

**Examine foraging behavior of MHI insular FKWs to inform depredation mitigation strategies**. Deployment and analysis of animal-borne multi-sensor CATS tags that will provide video, audio, and a variety of animal movement measurements.

**Examine interaction rates between pelagic FKWs and longline fisheries using telemetry data.** Primarily supports deployment of telemetry tags during responses to sightings reported by fishermen or other water users off the Kona coast, though tags will also be available for deployment during dedicated research efforts by Cascadia Research Collective and PIFSC. (Tags were purchased in FY20 with funds from Office Protected Resources and Office of Sustainable Fisheries) Encounter rates in nearshore waters are low so high level of effort required.

**Augment FKW abundance with towed array datasets**. Project completes development of a multi-target tracking framework required to assess objectively the number (and behavior) of FKW subgroups acoustically encountered during line-transect surveys, providing the basic encounter rate input to density analyses.

**FKWTRT 2022 Meeting and Facilitation**