

Supplementary Material

# The Effects of Capture and Time Out of Water on Sablefish (*Anoplopoma fimbria*) Reflexes, Mortality, and Health

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**Reflex:** First a **gag** reflex test was conducted by holding the head with one hand for stability and inserting a finger into the buccal cavity and touching the throat. A positive response was flaring of the operculum and opening of the mouth more widely. Second, an **operculum flare** reflex was tested by opening the mouth wide and releasing, with the expectation of a flare and then a return to an unflared, closed mouth. Third, the **vestibular-ocular** response was tested by holding the fish with two hands by the middle with minimal pressure and rotating it 90 degrees to the right and the left around the long body axis. A positive reflex was when the eyes tracked the tester. Fourth, a reflex to **sound** vibration was tested by tapping on the side of the holding tank and watching for a startled movement, sideways or forward. Fifth, when the fish was sitting calmly, the **tail was grabbed** and released and a positive response was when the fish swam forward. Sixth, the fish was turned upside-down and a positive reflex was recorded if it quickly **righted itself**.

**FishID:** sequential number assigned to each fish as an identifier.

**Yes\_lab:** reflex was positive in the laboratory

**Treatment:** Sablefish were either tested on the boat only, or exposed to air for 11minutes,

6minutes, 3 minutes, or 0minutes and then tested. Shortspine thornyhead were tested at different date intervals after capture, coded as SST1 (10–11 days), SST2 (17–19 days), SST3 (28 days), SST4 (42 days), or On boat only.

**Spp:** species is either sablefish or thortspine thornyhead.

**Deck\_yes:** 1 = the reflex was positive on-deck just after capture.

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