

JIMAR ANNUAL REPORT FOR FY 2000

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Project Title: **Hawaii Regional Tuna Tagging Project**

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The project year 1999 - 2000 saw the end of the active tagging phase of the Hawaii Tuna Tagging Project. From this point forward, the project will focus on facilitating the acquisition of long-term recoveries and on analysis of the recapture data.

As of the end of the tagging phase, a total of 9,409 bigeye and 8,156 yellowfin tuna had been tagged and released over a spatial area ranging from east and south of the Big Island of Hawaii to Midway Atoll at the northwestern end of the Hawaiian archipelago. During the past year, additional tuna were tagged and released at Midway for an overall total of 1,619 releases from this location and adjacent seamounts. Initial recaptures suggest that the Midway releases might be especially informative in terms of elucidating the dispersal of tuna away from the Hawaiian Islands. For instance, a 'Midway' yellowfin in spawning condition was recently recaptured very close to the coast of Okinawa. By contrast, fish released from around the main Hawaiian islands appear to be predominantly recaptured in the same general vicinity.

Also, there appears to be an upturn in the number of fish being recaptured by long-line vessels. This may be because fish tagged during the earlier phases of the project are becoming large enough to be recruited into the longline fishery which tends to take larger tunas than other fishing methods such as jigging/handlining.

During this reporting period, one paper was published (Holland K., P. Kleiber and S. Kajiura, 1999. Different residence times of yellowfin tuna, *Thunnus albacares*, and bigeye tuna, *Thunnus obesus*, found in mixed aggregations over a seamount. *Fishery Bulletin*, 97:392-395.). Two other papers are in press (Sibert et al., Itano et al.)