

State of California - The Resources Agency
Department of Fish and Game
Marine Resources Region
Long Beach, California

CRUISE REPORT 72-KB-31
BIG GAME FISH INVESTIGATIONS

Prepared by James E. Phelan

- Vessel: R/V KELP BASS
- Dates: December 12-21, 1972
- Locality: The nearshore waters and islands off southern California and northern Baja California.
- Purposes:
1. To tag and release, Pacific bonito, *Sarda chiliensis*; California barracuda, *Sphyraena argentea*; and juvenile white seabass, *Cynoscion nobilis*.
 2. To gather samples of bonito, barracuda and white seabass for population analysis.
 3. To tag and release jack mackerel *Trachurus symmetricus* taken incidentally.

Results: A total of 191 bonito was tagged and released in Baja California waters between San Jose Pt. and Cape Colnett (Table 1, Figure 1). All were caught by trolling.

Some heads from representative size bonito were collected for otolith and vertebra examination.

No California barracuda or white seabass were encountered.

Small jack mackerel were observed under the night light at Santo Tomas. Two were tagged but both appeared to be in distress when returned to the water because of their small size relative to the size of the tag. For this reason no further jack mackerel were tagged.

Sea surface temperatures ranged from a low of 16.4°C (61.5°F) to a high of 18.1°C (64.6°F).

Incidental species seen or collected by angling or under lights included: jacksmelt, *Atherinopsio californiensis*; northern anchovy, *Engraulis mordax*; kelp bass, *Paralabrax clathratus*; soupfin shark, *Galeorhinus zyopterus*; ocean whitefish, *Canolatilus princeps*; yellowtail, *Seriola dorsalis*; and rockfishes, *Sebastes* spp.

Personnel: Marco Mazarovich, Vessel Captain
James E. Phelan, Biologist-in-charge
Brian D. Quelvog, Biologist
Jesus Camacho, Fishery Technician, I.N.P. MEXICO

TABLE I

Summary of Tagged Bonito Released
during Cruise 72-KB-31

<u>Date</u>	<u>Release area</u>	<u>Number</u>	<u>Size Range cm</u>
Dec. 14	1	50	37-44
Dec. 14	2	13	57-74
Dec. 15	3	14	36-61
Dec. 16	3	11	40-58
Dec. 17	2	2	70,74
Dec. 18	2	87	55-74
Dec. 19	2	14	55-59

Figure I
Tagged Bonito Release Areas
Cruise 72-KB-31

