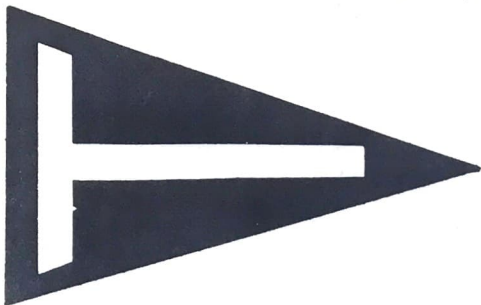


UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL MARINE FISHERIES SERVICE
SOUTHWEST FISHERIES CENTER
P.O. Box 271
La Jolla, California 92037



COOPERATIVE MARINE GAME FISH
TAGGING PROGRAM -- Pacific Area

NOAA, National Marine Fisheries Service
Woods Hole Oceanographic Institution
International Game Fish Association

MARCH 1974

TO ALL TAGGING PARTICIPANTS

The number of fish tagged in 1973 dropped to 835 fish, from a near all-time high of 2,090 fish tagged in 1972.

The tagging of billfish accounted for 747 of the 835 total; 446 were striped marlin, 194 Pacific sailfish, 79 black marlin, and 28 were blue marlin. The total number of fish tagged in 1973 is based on tag cards received at the Southwest Fisheries Center as of January 1, 1974. It has been reported that a possible 150 or more tag cards will be received from Australia, principally for tagging efforts in the productive 1973 black marlin fishery off the Cairns, North Queensland area. For record-keeping purposes, these totals will be reflected in the 1974 totals.

The remaining fish tagged consisted of dolphin fish (39), yellowtail (26), roosterfish (6), wahoo (1), yellowfin tuna (4), black seabass (5), barracuda (1), striped bass (1), white sturgeon (5), and two records of whale shark taggings.

The 1973 tagging for striped marlin was down about 2/3 from the 1972 total due principally to a very poor fishing season for this species about the tip of Baja California, Mexico. Sailfish tagging was also down to 194 from 306 in 1972. Fishing for this species about the Mazatlán area and about the tip of Baja California was reported not to be as productive as in previous years. Another factor influencing the amount of tagging is the commercial use of sport-caught billfish, particularly in the Mazatlan area. The charterboat crews are reported to be reluctant to tag billfish and discourage the sport angler from tagging and releasing the fish since they sell the catch.

In 1973 one outstanding billfishing location in the Pacific was the Cairns, Australia area which reported an excellent 1973 season. Though only about 73 black marlin tag cards have been received from Australia as of January 1, 1974 an additional number (150 plus) were reported to have been tagged, in spite of a lack of tagging equipment during the first part of the season.

Although tagging was down in 1973, the number of tag returns totaled 35, exceeding all numbers returned in any one year since the start of the tagging program. Of particular importance were seven returns for black marlin tagged off Cairns, Australia, the greatest number of returns since the start of tagging in that area. The longest time out recorded was 400 days for a black recaptured near the point of tagging. A near half-year recovery (141 days) from the time of tagging was made north of Wewak, North New Guinea. Other returns for billfish were three striped marlin and one sailfish returned from tagging efforts at the tip of Baja California. All billfish returns were from Japanese longline vessels.

The returns that boosted the tag return record for 1973 was those returns for yellowtail (Seriola dorsalis) which totaled 20. In 1972 a number of yellowtail were tagged about Alijos Rocks, a small spot about 180 miles west of Magdalena Bay, Baja California, Mexico, and a favorite fishing location for the long-range sportfishing boats operating from San Diego. The principal cooperator in this tagging was Captain Bruce Barnes of the Qualifier 105. Results to date show near an 18% recovery rate, all recoveries, except one, being made near the point of tagging, and up to more than 400 days after tagging. Only one was recaptured away from this offshore area; this yellowtail migrated 600 miles north and was caught at the Coronado Islands, near the U.S.-Mexico border.

Other tag returns were received for yellowfin tuna (1), a 350-pound black seabass, harpoon-tagged by a scuba diver and recaptured in the same area 358 days later, roosterfish (1) and of all things, a triggerfish (1).

Information on tag returns for 1973 may be found in Table 1.

Last year I advised you that the "Proceedings of the International Billfish Symposium" held in Kona, Hawaii in August 1972 would be published in the near future. The future is getting nearer, as the Proceedings are now reported to be in press. As mentioned in the 1972 report, if you are interested in obtaining a copy of the publication make a note of your interest on the enclosed Angler Survey Card and I will send you further details. A number of you indicated interest on the 1972 Angler Survey Card and you will be sent information on obtaining a copy of the Proceedings.

You are receiving this report because you completed the Angler Catch Record card for 1972, or you tagged and released a fish during the past year. We will revise our mailing list again this year based on return of the angler catch record postcard. If you wish to receive the Annual Tagging Report, complete the postcard (a catch of billfish is not necessary) and return it to us.

Again, we are making the annual Billfish Angler Survey and have enclosed a postcard for your use. From your 1972 records we have computed the catch per day for striped, black marlin, and sailfish for the major fishing areas. Your catch records for 1972 reveal the following facts:

- Striped marlin - Baja California - a decline in catch rate in 1972 from about 0.81 fish/day (1971) to 0.65 fish/day. The days fishing per fish in 1972 equalled 1.56.
- Mazatlán area - slight increase in catch rate for 1972 from 0.36 fish/day (1971) to 0.42 fish per day. The days fishing per fish equalled 2.40 in 1972.
 - Off southern California and Acapulco, areas which are on the edges of the geographical distribution of striped marlin, the days fishing per fish declined, and the number of days fishing for each striped marlin caught equalled 18.60 off southern California and 21.3 off Acapulco.
- Sailfish
- Acapulco, Mexico - a sharp decline in catch rate occurred in 1972, from about 1.0 fish/day (1971) to 0.64 fish/day. The 1972 figure equals about 1.56 days of fishing per fish. This is the most severe decline reported for the Acapulco area since the angler survey started in 1969. Up to this point the lowest catch level was 0.81 fish/day, recorded in 1970.
 - Mazatlán, Mexico - the catch rate in this area rose from 0.55 fish per day in 1969 to between 0.7 and 0.8 in 1970-71. However, it dropped sharply in 1972 to 0.43 fish/day, equalling 2.36 days per fish.

- Baja California - a slight decline in catch rate was recorded from 0.1 fish/day (1971) to 0.07 in 1972, equalling 14.0 days/fish.
- Black marlin - N. Queensland, Australia - a high catch level of 1.5 fish/day was recorded in 1971, declining to a level of 0.82 fish/day in 1972 and equalling 1.19 days/fish. The decline in 1972 was to a level that was well above the 1969 and 1970 level of about 0.30 fish per day.

The Billfish Symposium Proceedings has a paper describing the Angler Survey program for the Pacific area giving catch and effort data for 1969 through 1971.

* * * * *

Another year has passed and I once again would like you to complete the enclosed Billfish Angler Survey Card. Regarding the card:

ONE - We wish honest, accurate information on your 1972 billfishing activities. Enclosed you will find a postcard requesting information on the number of days you went billfishing and the results of your fishing effort. If you fished and caught fish, fine; if you fished and didn't, we also need the information on zero catch. From your response we calculate the trend in the catch per days fishing for the major billfishing areas in the Pacific.

The commercial longline fisheries catching billfish keep excellent catch and effort records and can document for international negotiation the facts on their fishery; the sport fishery must do likewise. This information is important in the future management of billfish resources since we need to determine and document the catch and effort trends in the sport billfishery.

TWO - If you wish to remain on the mailing list for these annual reports return of the card is necessary, even though you didn't fish for billfish in 1972. Government regulations require that the list be revised each year. Also, those of you wishing information on the Billfish Symposium Proceedings please indicate your interest on the card.

Thank you for your cooperation in completion of the card.

GENERAL INFORMATION - If you tag a billfish or other species such as yellowtail, please return the tag card as soon as possible. For example, I now have three tag returns from Japan for black marlin tagged last year, and I am awaiting the tag cards. To be totally effective it takes "two to tango," not one—the tagger who places the tag and sends in the tag card, and the recoverer of the tagged fish. Additional efforts are being given to the second part by increasing our contacts in Japan to inform the fishermen where to send the tags and of the \$5.00 (U.S.) reward we pay to the long-liners returning a tag.

I am very pleased with the results of your tagging program during the past year. Even though the program has been going for a number of years, interest is growing, and only through your active cooperation and support can some of the critical problems facing the billfish resource be solved.

Thank you again for each and every fisherman and captains cooperation in 1973, and good fishing to you in 1974.

James L. Squire
Fishery Biologist (Res.)
Southwest Fisheries Center
La Jolla, California U.S.A.

Enclosure

Table 1. Recovery Data
Recovery Information Received During 1973

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
<u>BLACK MARLIN</u>						
(134) Hope Reef, Off Cairns, Australia	Herbert Henze Philadelphia, PA U.S.A. Captain/P. Bristow	8-31-72	Lat. 15°42'S Long. 146°06'E	<u>Tsurug Maru</u> 30 miles east of Cairns Reef - east of Cruiser Pass	50	61
(135) Linden Bank, off Cairns, Australia	Virgil Price New York, N.Y. U.S.A. Captain/T. Curran	10-10-72	Lat. 16°00'S Long. 146°00'E	Torataro Kimura <u>No. 28 Kompira Maru</u> About 10 miles east of Agincourt Reefs	17	31
(136) Off Cairns, Australia	P.V. Gay E. Brisbane, Australia Captain/D. Wallace	10-13-70	Lat. 15°30'S Long. 146°15'E	Torataro Kimura <u>No. 28 Kompira Maru</u> About 40 miles east of Egret Reef	83	400
(140) Off Cairns, Australia	D. Lyall Karuah, N.S.W. Australia Captain/K. Lyall	10-10-72	Lat. 18°32'S Long. 148°36'E	Yoshiteru Imagawa <u>Genyō Maru</u>	145	31

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
(141) Ribbon Reefs, off Cairns, Australia	C.J. Sims Port Arthur, Texas U.S.A. Captain/P. Bristow	9-11-72	Lat. 14°45'S Long. 145°55'E	Takashi Hika No. 58 <u>Seiho Maru</u>	135	37
(142) Opal Reef, off Cairns, Australia	R.M. Schubot Fort Lauderdale, Florida, U.S.A. Captain/D. Wallace	9-25-72	Lat. 16°00'S Long. 146°12'E	Masayoshi Tanaka <u>Seiwa Maru</u>	22	47
(144) Agincourt Reef, off Cairns, Australia	G.K. Bos West Palm Beach, Florida, U.S.A. Captain/P. Wright	10-19-72	Lat. 03°00'S Long. 144°00'E	Tokup Inano <u>Fukumaru No. 11</u> North of Wewak, NE New Guinea	1,080	141
<u>STRIPED MARLIN</u>						
(138) Off Rancho Buena Vista Baja California, Sur Mexico	Dr. A. Shelby Rialto, California U.S.A. Captain/J. Cole	5-19-72	Lat. 22°23'N	Noriyuki Okumura No. 32Fukuju Maru	95	52

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
(139) Off Rancho Buena Vista Baja California	Dr. T.D. Huls San Bernardino, California, U.S.A. Captain/	6-2-72	Lat. 23°50'N Long. 111°45'W	Noriyuki Okumura No. 32 <u>Fukuju Maru</u>	240	103
(147) Cabo San Lucas Baja California, Sur Mexico	Joanne Birtcher San Juan Capistrano California, U.S.A. Captain/G. Grimes	1-20-73	Lat. 24°10'N Long. 109°05'W	Hisaya Miki <u>Kyowa Maru</u> No. 12	10	64
<u>SAILFISH</u>						
(137) Cabo San Lucas Baja California, Sur Mexico	R.A. Gleason San Luis Rey Downs California, U.S.A. Captain/R. Stocker	1-12-73	Near Cabo San Lucas, Baja California, Sur, Mexico	George Frick Point Pleasant Beach, New Jersey, U.S.A. <u>Catherine</u>	Same area	270
<u>YELLOWTAIL</u>						
(145) Alijos Rocks, off Baja California, Sur Mexico	Wilma Johnson Arcadia, California U.S.A. Captain/B. Barnes	7-3-72	Lat. 27°54'N Long. 115°45'W	Mike Ameigh Riverside, California, U.S.A. Chubasco	Same area	270

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
(146) Alijos Rocks, off Baja California, Sur Mexico	Unknown/reported by Captain/Bruce Barnes <u>Qualifier 105</u>	9-5-72	Lat. 27°54'N Long. 115°45'W	Mel Bailey Cypress, California, U.S.A. <u>Qualifier 105</u>	Same area	210
(149) Alijos Rocks, off Baja California, Sur Mexico	H.S. Sparks San Gabriel, California Captain/B. Barnes	7-3-72	Lat. 27°54'N Long. 115°45'W	Ted Hansen Yuba City, California U.S.A. <u>H&M 85</u>	Same area	337
(150) Alijos Rocks, off Baja California, Sur Mexico	C.W. Newell Glendale, California U.S.A. Captain/B. Barnes	7-2-72	Lat. 27°54'N Long. 115°45'W	Nixon L. Lange Huntington Beach, California, U.S.A. <u>H&M 85</u>	Same area	338
(151) Alijos Rocks, off Baja California, Sur Mexico	Unknown/Reported by Captain Bruce Barnes <u>Qualifier 105</u>	9-5-72	Lat. 27°54'N Long. 115°45'W	Glenn C. Baldwin Baldwin Park, California U.S.A. <u>H&M 85</u>	Same area	271
(152) 7 miles SE Coronado Islands, Mexico	Catherine Andersen Newport Beach, California, U.S.A. Captain/D. Anderson	4-29-73	Coronado Islands, Mexico	Jess Jeffries Lakewood, California U.S.A. <u>Holiday</u>	7 miles NW	38

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
(153) Alijos Rocks, off Baja California, Sur Mexico	Chuck Garrison Orange, California, U.S.A. Captain/B. Barnes	7-3-72	Lat. 27°54'N Long. 115°45'W	E.M. Fillet Whittier, California, U.S.A. <u>Red Rooster</u>	Same area	352
(154) Alijos Rocks, off Baja California, Sur Mexico	Unknown/Reported by Captain Bruce Barnes <u>Qualifier 105</u>	9-5-72	Lat. 27°54'N Long. 115°45'W	Richard Shields Glendale, California, U.S.A. <u>Red Rooster</u>	Same area	271
(155) Alijos Rocks, off Baja California, Sur Mexico	Unknown/Reported by Captain Bruce Barnes <u>Qualifier 105</u>	9-5-72	Lat. 27°54'N Long. 115°45'W	Albert Binder Los Angeles, California U.S.A. <u>Red Rooster</u>	Same area	271
(156) Alijos Rocks, off Baja California, Sur Mexico	Unknown/Reported by Captain Bruce Barnes <u>Qualifier 105</u>	9-5-72	Lat. 27°54'N Long. 115°45'W	Charles Summers Covina, California <u>Red Rooster</u>	Same area	270
(157) Alijos Rocks, off Baja California, Sur Mexico	John Newell La Cresta, California Captain/B. Barnes	7-3-72	Coronado Islands	Reported by Antonina Asaro (Westgate) San Diego, California, U.S.A. Boat is unknown	600 nautical miles N	344

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
(158) Coronado Islands, Mexico	Don Anderson Newport Beach California, U.S.A. Captain/same	6-9-73	Coronado Islands, Mexico	Franz Hermann Azusa, California, U.S.A. Boat unknown	Same area	5
(159) Coronado Islands, Mexico	Same as above	6-9-73	S. Coronado Island, Mexico	Don Sheldrake Santa Fe Springs, California, U.S.A. Boat unknown	Same area	5
(163) Alijos Rocks, off Baja California, Sur Mexico	Carl W. Newell Glendale, California U.S.A. Captain/B. Barnes	7-2-72	Lat. 27°54'N Long. 115°45'W	Jim Carey Malibu, California, <u>Red Rooster</u>	Same area	353
(164) Alijos Rocks, off Baja California, Sur Mexico	Carl W. Newell Glendale, California USA Captain/B. Barnes	7-2-72	Lat. 27°54'N Long. 115°45'W	Don Brewer Playa Del Rey, California, U.S.A. <u>Red Rooster</u>	Same area	353
(165) Alijos Rocks, off Baja California, Sur Mexico	O.L. Wylie Glendale, California Captain/B. Barnes	7-2-72	Lat. 27°54'N	Tom Schlauch Fullerton, California	Same area	353

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
(166) Alijos Rocks, off Baja California, Sur Mexico	John Newell La Crescenta, California, U.S.A. Captain/B. Barnes	7-2-72	Lat. 27°54'N Long. 115°45'W	Unknown/Reported by Pt. Loma Seafoods <u>Chubasco</u>	Same area	345
(169) Alijos Rocks, off Baja California, Sur Mexico	Earl Brabardt North Hollywood, California, U.S.A. Captain/B. Barnes	7-3-72	Lat. 27°54'N Long. 115°45'W	George Cargo San Diego, California, U.S.A. <u>Cape Polaris</u>	Same area	457
(171) Alijos Rocks, off Baja California, Sur Mexico	Betty Williamson Pasadena, California, U.S.A. Captain/B. Barnes	7-2-72	Lat. 27°54'N Long. 115°45'W	George F. Meiss San Diego, California, U.S.A. <u>Holiday</u>	Same area	410
<u>YELLOWFIN TUNA</u> (170) 20 NM south of Mazatlan, Mexico	Gene DeFalco San Diego, California, U.S.A. Captain/ M. Crawford	5-9-73	Lat. 22°23'N Long. 107°48'W	Vaughn M. Silva San Diego, California, U.S.A. <u>Kitty Hawk</u>	80 NM S.	85

Table 1. (Continued)

Tagged			Recovered			
Species/location of tagging	Tagged by	Date (Month Day/Year)	Location	Recovered by	Distance recovered from point of tagging	Days at large
<u>BLACK SEABASS</u> (168) Anacapa Island, California, U.S.A. (quarter acre)	Locky Brown Ventura, California U.S.A. Captain/unknown	10-4-72	Anacapa Island (near lighthouse)	Richard E. Erwin Oxnard, California, U.S.A. Boat name unknown	3 NM	358
<u>ROOSTERFISH</u> (148) Punta Arena, Baja California, Sur Mexico	Dr. D.A. Burke La Mesa, California U.S.A. Captain/unknown	6-30-72	La Paz (Pt. Balladra) Baja California, Mexico	Mark Shortell Pacific Palisades, California, U.S.A. Boat unknown	Approx. same area	299
<u>TRIGGERFISH</u> (143) Los Frailes Reef Baja California Sur Mexico	Dr. Bernard Casselman Marina del Rey, California, U.S.A. Captain/unknown	11-18-71	Los Frailes Reef Baja California	R.H. Weinberg La Mesa, California, U.S.A. Boat unknown	Approx. same area	347