Report of Chinese Observer Program in the Tropical Eastern Pacific Ocean in 2006

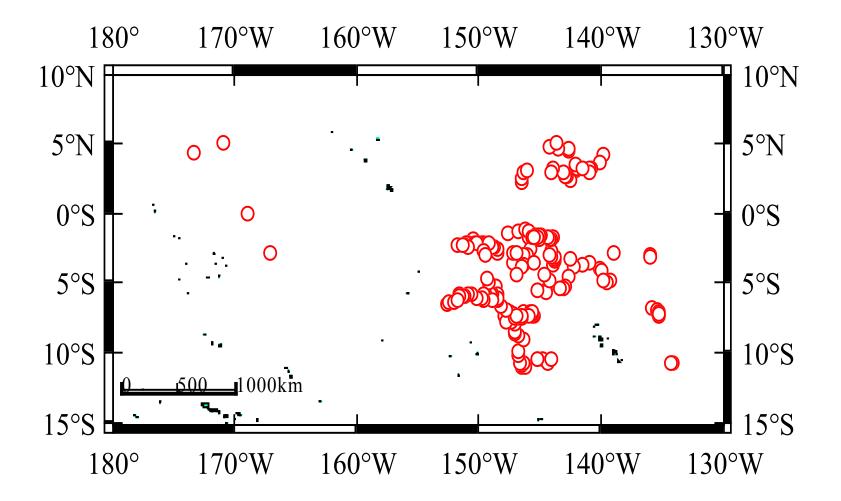
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Introduction

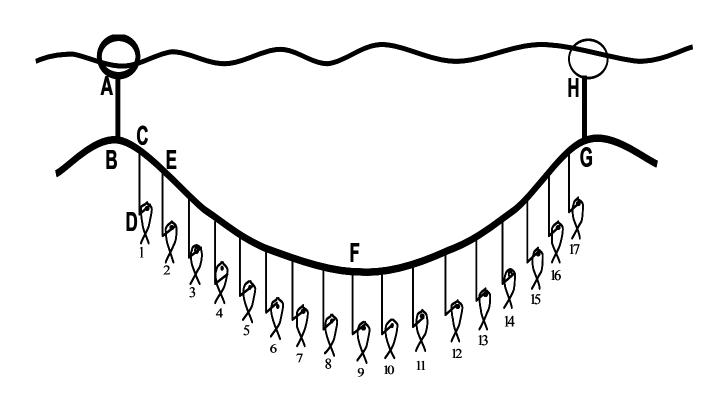
Longline fishing gear is the only fishing method that
 China used operating in the Eastern Pacific Ocean(EPO).
 China longline fishery targeted on bigeye tuna in the high
 seas of tropical EPO. Although limited bigeye tuna are
 caught by Chinese tuna fleet, detailed fishery information
 and biological information from the catch should be
 investigated. The information will facilitate the pelagic
 fish stock assessment in the EPO. Based on the idea,
 China conducted observer program in the 2006.

Survey Date and Areas

- Feb 11, 2006 ~ December 12, 2006.
- total <u>223 sets(fishing days)</u> in the Eastern Pacific Ocean(EPO) and total hooks amounted to 588250. Average hook per set(day) is <u>2638</u>.
- EPO (N05~S07°, W 134°~W173°)
 (Fig. 1).



Fishing gear



 Main line is consisted of nylon monofilaments. Branch lines per basket is between <u>17-18</u>. The length of float line is between <u>40m to 50m</u>. The length of branch line is <u>46m</u> and interval length between branch line is <u>45m</u>

Catch sppecies

- There are 36 species of fish in the observer survey(Tab.2). These species can be classified three types of catch:
- first type of catch is <u>high economic value species</u> such bigeye tuna, yellowfin tuna, swordfish and striped marlin, which are sold to Japan market for sashimi.
- Second type of catch is <u>low economic value speces</u> such as albacore, wahoo, blue marlin, black marlin, sailfish, shortbill spearfish shortfin mako etc., which are sold Fiji etc. for canned products.
- The third type of catch is <u>discards species</u> such as most of sharks, rays, mantas, snake mackerels, sunfish etc.

 The survey total catch of is 1968591kg, which included bigeye tuna 104015kg(No. of fish 2748), yellowfin tuna 36020kg(No. of fish 1223), swordfish 10266kg (No. of fish 277), other species 46558kg. The average weight of bigeye tuna(GG weight) is 37.85, which is slightly higher than that of 2003 observer survey(37.14 kg); and the average weight of <u>yellowfin tuna(GG weight)</u> is 29.45, which is slightly higher than that of 2003 observer survey (28.02 kg), and the average weight of swordfish(Dressed weight) is37.06kg, Nominal CPUE for bigeye tuna and yellowfin tuna are 4.671 per thousand hooks 2.079 per thousand hooks respectively.

Catch of pelagic species in the 2006 unit: kilogram

•	BET	YFT	SWO	OTH	Sharks	Total
W	104015	36020	10266	46558	1	196859
No	. 2748	1223	277	1	841	

Billfish Catch

 There are four billfish species including blue marlin, striped marlin, shortbill spearfish and sailfish.

•	Blue	Striped	Shortbill	Sailfish(Kg)
•	9700	2800	800	100

Shark Catch

Retained Shark

Shortfin Oceanic Silky Hammerhead Total

• 343 3752 2515 643 7253

Discard Shark

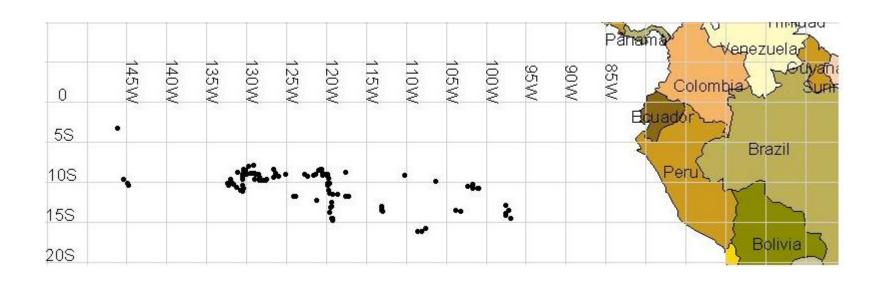
Blue Crocodile Bigeye Velvet dogfish

• 6700 / /

Sea Turtles:

 There are four species sea turtle in the survey, <u>observing 22 sea turtles</u> appeared in the catch. The number of alive(slightly damaged), damaged(still alive) and dead turtles are 11, 7and 4 respectively. All the sea turtles are returned to sea no matter dead or alive.

No sea turtle was caught in 2003



Marine Mammals

 A male pilot dolphin was caught at position of S03° 41,W141° 36, with the size 217cm in length, weight200 kg. The dolphin was hooked in the dorsal fin and entanglement caused its death.