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CPC OBSERVER ANNUAL REPORT FOR THE YEAR 2016 IN

THE IATTC CONVENTION AREA

CHINA

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1. Trip description

Longline is the only fishing gear for the Chinese tuna fishery in the EPO. For the year 2016, China conducted four longline observer trips in the IATTC convention area (east of 150°W). So far, all the observer trips have been completed. Nearly 400 fishing days were observed during these trips (**Table 1**). The Chinese observer trips were mostly carried out in the second half year. This is the period in which Chinese observers are suitable to be sent out due to the availability of such observers. Some of the Chinese observer trips for the EPO area are shared with those for the WCPFC area (west of 150°W), i.e., the same observer with the same longline vessel do observations across the boundary of longitude line 150°W. Therefore, a few sets of the observer trips were deployed in the WCPO areas, which were not removed.

The observed set stations for the completed trip are shown in **Figure 1**. These trips targeted albacore tuna using circle hook in the southern area.

Table 1 Information of four Chinese LL observer trips in the IATTC area in 2016

| Trips | Observed fishing days | Observed hooks | Observation period | Observation area |
|--------|-----------------------|----------------|--------------------------|-------------------|
| Trip 1 | 90 | 281,288 | Sep 11,2016- Jan 06,2017 | 10~22°S,112~169°W |

| | | | | |
|--------|----|---------|--------------------------|--------------------|
| Trip 2 | 99 | 290,525 | Sep 29,2016- Jan 23,2017 | 15~33°S,106~149°W |
| Trip 3 | 91 | 275,975 | Oct 01,2016- Jan 23,2017 | 18~32°S,122~147°W |
| Trip 4 | 93 | 288,765 | Nov 05,2016- Feb 16,2017 | 16~19°S,111~ 130°W |

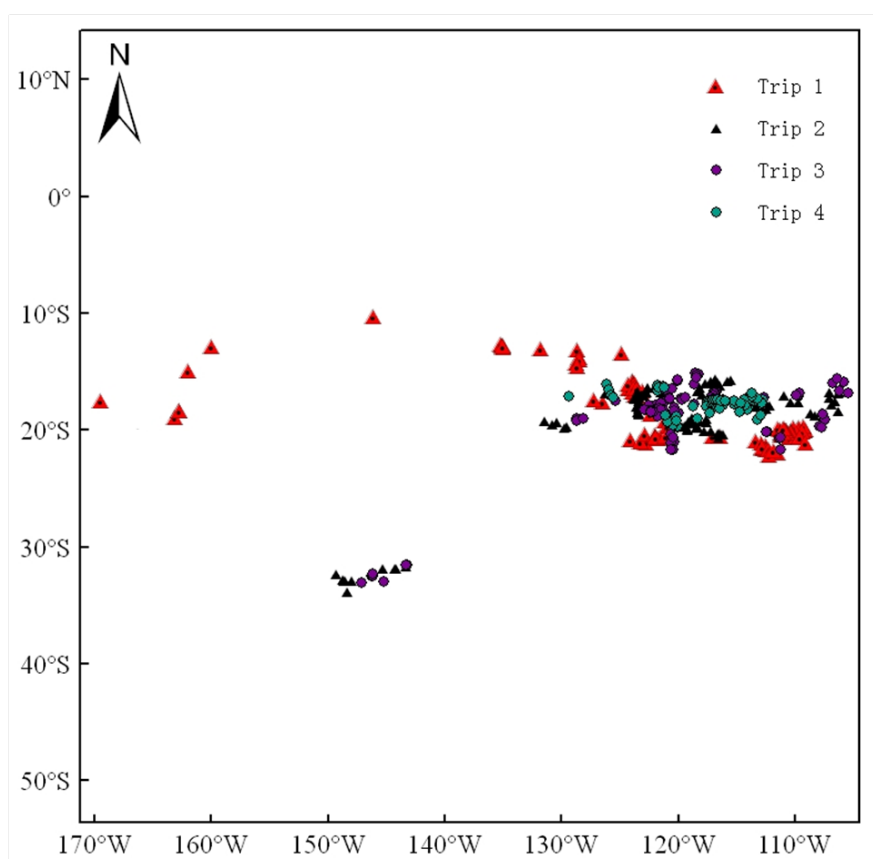


Fig. 1 Set stations of four Chinese longline observer trips in 2016

2. Observer coverage

Because the total fishing effort of China for the fishing year 2016 has not been estimated by now, the observer coverage with fishing days will not be calculated until the fishery data compilation for the year 2016 is completed. Furthermore, deployed hooks, instead of fishing days, are generally reported as fishing effort in longline fishery statistics; therefore it will take more time to estimate fishing days. For the coming years, it is suggested that the observer annual report be submitted by the same deadline with fishery data.

3. Total catch and catch composition

For each trip, the onboard observer recorded effort (hooks), catch by species, and size composition by species for all the target and bycatch species including sharks, sea turtles and birds. Gender and other biological information (e.g., maturity) were also examined for randomly sampled individuals. The proportion of baskets

observed for each set was about 80-90%, due to long hauling time.

The observed catches in number for each trip, including target and bycatch species, are listed in **Table 2-5**.

There were five individuals of seabird incidentally captured in trip 2 and trip 3. No sea turtles were captured during the four trips. Oceanic whitetip sharks were released or discarded as soon as possible when they are incidentally caught.

Table 2 Observed catch and composition during observer trip 1

| Scientific name | English name | Observed catch in number | Percentage (%) |
|-----------------------------------|-----------------------|-----------------------------|----------------|
| <i>Thunnus alalunga</i> | Albacore* | 3443 | 0.6621 |
| <i>Thunnus albacares</i> | Yellowfin tuna | 207 | 0.0398 |
| <i>Thunnus obesus</i> | Bigeye tuna | 317 | 0.061 |
| <i>Katsuwonus pelamis</i> | Skipjack tuna | 156 | 0.03 |
| <i>Xiphias gladius</i> | Swordfish | 30 | 0.0058 |
| <i>Makaira nigricans</i> | Blue marlin | 58 | 0.0116 |
| <i>Makaira indica</i> | Black marlin | 1 | 0.0002 |
| <i>Istiophorus platypterus</i> | Indo-Pacific sailfish | 4 | 0.0008 |
| <i>Alepisaurus ferox</i> lowe | Longnose lancetfish | 341 | 0.0656 |
| <i>Lampris guttatus</i> | Opah | 12 | 0.0023 |
| <i>Taractes rubescens</i> | Dagger pomfret | 1 | 0.0002 |
| <i>Lepidocybium flavobrunneum</i> | Escoler | 87 | 0.0167 |
| <i>Gempylus serpens</i> | Snake mackerel | 1 | 0.0002 |
| <i>Acanthocybium solandri</i> | Wahoo | 234 | 0.045 |
| <i>Coryphaena hippurus</i> | Dolphinfish | 76 | 0.0146 |
| <i>Eumegistus illustris</i> | lustrous pomfret | 6 | 0.0012 |
| <i>Lophotus capellei</i> | Unicornfish | 1 | 0.0002 |
| <i>Sphyrnaena barracuda</i> | Great barracuda | 2 | 0.0004 |
| <i>Dasyatis violacea</i> | Sting ray | 19 | 0.0037 |
| <i>Mola mola</i> | Ocean sunfish | 12 | 0.0023 |
| <i>Tetrapturus audax</i> | Striped marlin | 8 | 0.0015 |
| <i>Trachipterus fukuzakii</i> | Tapertail ribbonfish | 1 | 0.0002 |
| <i>Tetrapturus angustirostris</i> | Shortbill spearfish | 93 | 0.0179 |
| <i>Masturus lanceolatus</i> | Sharptail sunfish | 1 | 0.0002 |
| <i>Prionace glauca</i> | blue shark | 5 | 0.001 |
| <i>Remora osteochir</i> | Marlin sucker | 71 | 0.0137 |
| <i>Common remora</i> | Common remora | 13 | 0.0025 |
| Total | | 5200 | 1 |

Note: * indicate target species

Table 3 Observed catch and composition during observer trip 2

| Scientific name | English name | Observed catch in number | Percentage (%) |
|-----------------------------------|------------------------|-----------------------------|----------------|
| <i>Thunnus alalunga</i> | Albacore * | 4269 | 0.8200 |
| <i>Thunnus albacares</i> | Yellowfin tuna | 94 | 0.0181 |
| <i>Thunnus obesus</i> | Bigeye tuna | 163 | 0.0313 |
| <i>Katsuwonus pelamis</i> | Skipjack tuna | 120 | 0.0231 |
| <i>Xiphias gladius</i> | Swordfish | 30 | 0.0058 |
| <i>Makaira nigricans</i> | Blue marlin | 33 | 0.0063 |
| <i>Tetrapturus audax</i> | Striped marlin | 7 | 0.0013 |
| <i>Alepisaurus ferox</i> lowe | Longnose lancetfish | 86 | 0.0165 |
| <i>Lampris guttatus</i> | Opah | 57 | 0.0109 |
| <i>Tetrapturus angustirostris</i> | Shortbill spearfish | 67 | 0.0129 |
| <i>Lepidocybium flavobrunneum</i> | Escoler | 85 | 0.0163 |
| <i>Acanthocybium solandri</i> | Wahoo | 109 | 0.0209 |
| <i>Coryphaena hippurus</i> | Dolphinfish | 29 | 0.0056 |
| <i>Isurus oxyrinchus</i> | Shortfin mako | 5 | 0.0010 |
| <i>Prionace glauca</i> | Blue shark | 43 | 0.0083 |
| <i>Dasyatis violacea</i> | Sting ray | 5 | 0.0010 |
| <i>Mola mola</i> | Ocean sunfish | 1 | 0.0002 |
| <i>Diomedea bulleri</i> | Buller's Albatross | 1 | 0.0002 |
| <i>Diomedea cauta</i> | White-capped albatross | 1 | 0.0002 |
| <i>Thalassareche melanophrys</i> | Black-browed albatross | 1 | 0.0002 |
| Total | | 5206 | 1 |

Note: * indicate target species

Table 4 Observed catch and composition during observer trip 3

| Scientific name | English name | Observed catch in number | Percentage (%) |
|------------------------------------|----------------------|-----------------------------|-------------------|
| <i>Thunnus alalunga</i> | Albacore * | 3710 | 0.5981 |
| <i>Thunnus albacares</i> | Yellowfin tuna | 259 | 0.0418 |
| <i>Thunnus obesus</i> | Bigeye tuna | 144 | 0.0232 |
| <i>Katsuwonus pelamis</i> | Skipjack tuna | 215 | 0.0347 |
| <i>Xiphias gladius</i> | Swordfish | 40 | 0.0064 |
| <i>Makaira nigricans</i> | Blue marlin | 32 | 0.0052 |
| <i>Tetrapturus audax</i> | Striped marlin | 10 | 0.0016 |
| <i>Tetrapturus angustirostris</i> | Shortbill spearfish | 158 | 0.0255 |
| <i>Makaira indica</i> | Black marlin | 1 | 0.0002 |
| <i>Alepisaurus ferox</i> | Longnose lancetfish | 787 | 0.1269 |
| <i>Alepisaurus brevirostris</i> | Shortnose lancetfish | 1 | 0.0002 |
| <i>Lampris guttatus</i> | Opah | 62 | 0.0100 |
| <i>Taractes rubescens</i> | Dagger pomfret | 13 | 0.0021 |
| <i>Taractichthys steindachneri</i> | Sickle pomfret | 8 | 0.0013 |
| <i>Lepidocybium flavobrunneum</i> | Escoler | 127 | 0.0205 |

| | | | |
|-----------------------------------|-----------------|------|--------|
| <i>Gempylus serpens</i> | Snake mackerel | 7 | 0.0011 |
| <i>Sphyræna barracuda</i> | great barracuda | 2 | 0.0003 |
| <i>Acanthocybium solandri</i> | Wahoo | 188 | 0.0303 |
| <i>Coryphaena hippurus</i> | Dolphinfish | 27 | 0.0044 |
| <i>Alopias superciliosus</i> | Bigeye thresher | 1 | 0.0002 |
| <i>Isurus paucus</i> | Longfin mako | 3 | 0.0005 |
| <i>Isurus oxyrinchus</i> | Shortfin mako | 2 | 0.0003 |
| <i>Prionace glauca</i> | Blue shark | 127 | 0.0205 |
| <i>Pseudocarcharias kamoharai</i> | Crocodile shark | 3 | 0.0005 |
| <i>Dasyatis violacea</i> | Sting ray | 92 | 0.0148 |
| <i>Mola mola</i> | Ocean sunfish | 2 | 0.0003 |
| <i>Phoebastria fusca</i> | Sooty albatross | 2 | 0.0003 |
| Total | | 6203 | 1 |

Note: * indicate target species

Table 5 Observed catch and composition during observer trip 4

| Scientific name | English name | Observed catch in number | Percentage (%) |
|------------------------------------|-------------------------|--------------------------|----------------|
| <i>Thunnus obesus</i> | Bigeye | 118 | 0.0249 |
| <i>Thunnus Albacares</i> | Yellowfin | 97 | 0.0206 |
| <i>Thunnus alalunga</i> | Albacore* | 3619 | 0.7673 |
| <i>Katsuwonus pelamis</i> | Skipjack | 532 | 0.1128 |
| <i>Makaira mazara</i> | Blue Marlin | 5 | 0.001 |
| <i>Tetrapturus audax</i> | Striped Marlin | 13 | 0.0027 |
| <i>Xiphias gladius</i> | Swordfish | 27 | 0.0057 |
| <i>Makaira indica</i> | Black Marlin | 3 | 0.0006 |
| <i>Tetrapturus angustirostris</i> | Shortbill spearfish | 63 | 0.0133 |
| <i>Prionace glauca</i> | Blue shark | 24 | 0.005 |
| <i>Lsurus oxyrinchus</i> | Short finned Mako shark | 1 | 0.0002 |
| <i>Isurus paucus</i> | Long finned Mako shark | 1 | 0.0002 |
| <i>Alepisaurus ferox</i> | Longnose lancetfish | 13 | 0.0028 |
| <i>Taractichthys steindachneri</i> | Sicekle pomfret | 2 | 0.0004 |
| <i>Taractes rubescens</i> | Dagger pomfret | 6 | 0.0012 |
| <i>Coryphaena hippurus</i> | Mahi mahi | 9 | 0.0019 |
| <i>Acanthocybium solandri</i> | Wahoo | 128 | 0.0271 |
| <i>Lepidocybium flavobrunneum</i> | Escolar | 64 | 0.0136 |
| <i>Gempylus serpens</i> | Snake mackerel | 5 | 0.001 |
| <i>Lampris guttatus</i> | Opah | 31 | 0.0066 |
| Total | | 4761 | 1 |

Note: * indicate target species