Jean-François Pulvenis, Acting Executive Director  
Inter-American Tropical Tuna Commission (IATTC)  
8901 La Jolla Shores Drive  
La Jolla, California 92037-1509  

Subject: Data Submissions under IATTC Resolutions Related to Elasmobranchs  

Dear Mr. Pulvenis:  

The United States is submitting this letter and enclosed report on information for calendar year 2021, pursuant to the following IATTC resolutions:  

- Resolution C-05-03: Resolution on the Conservation of Sharks Caught in Association with Fisheries in the Eastern Pacific Ocean  
- Resolution C-11-10: Resolution on the Conservation of Oceanic Whitetip Sharks Caught in Association with Fisheries in the Antigua Convention Area  
- Resolution C-15-04: Resolution on the Conservation of Mobulid Rays Caught in Association with Fisheries in the IATTC Convention Area  
- Resolution C-16-05: Resolution on the Management of Shark Species  
- Resolution C-21-06: Conservation Measures for Shark Species, with Special Emphasis on the Silky Shark, for the Years 2022 and 2023  

Please contact William Stahnke at (562) 980-4088 or william.stahnke@noaa.gov with any questions.  

Sincerely,  

Lyle Enriquez  
Highly Migratory Species Branch Chief  

cc: David Hogan, Department of State  
William Fox, Jr., U.S. Commissioner to the IATTC  
Ryan J. Wulff, Alternate U.S. Commissioner to the IATTC  
Mike Thompson, Alternate U.S. Commissioner to the IATTC  
John Zuanich, Alternate U.S. Commissioner to the IATTC  
Administrative File: 150413SWR2013SF00273:WJS  

Enclosure
This report contains information for U.S. deep-set and shallow-set longline fisheries relevant to the respective Inter-American Tropical Tuna Commission (IATTC) elasmobranch resolutions (C-05-03, C-11-10, C-15-04, C-16-05, C-21-06). The IATTC maintains all observer information for U.S. purse seine vessels and as such already has access to reports of observed interactions with mobulids, oceanic white tip sharks (*Carcharhinus longimanus*), silky sharks (*Carcharhinus falciformis*), and hammerhead sharks (*Sphryna spp.*) caught in that fishery.

**C-11-10**
In 2021, National Marine Fisheries Service (NMFS) observers recorded thirteen oceanic whitetip sharks caught by U.S. deep-set longline vessels fishing in the eastern Pacific Ocean (EPO). One was returned dead and twelve were returned alive.

**C-15-04**
In 2021, NMFS observers recorded four mobulid rays caught by U.S. deep-set longline vessels in the EPO. All were returned alive.

**C-16-05**
In 2021, NMFS observers recorded twelve silky sharks caught by U.S. deep-set longline vessels in the EPO. Eleven were returned alive, and one was returned dead. During the same period, one silky shark was observed caught by a U.S. shallow-set longline vessel. This shark was returned dead.

In 2021, NMFS observers recorded one smooth hammerhead shark (*Sphyrna zygaena*) caught by U.S. deep-set longline vessels in the EPO. This shark was returned alive.

**C-21-06**
The U.S. observer program does not collect weight data and only opportunistically collects lengths of individual fish. As such, we cannot report on the percent by weight of silky sharks caught during trips with total lengths <100 cm. However, below are the percentages of silky sharks observed caught (regardless of size) by number of individual fish caught by trip.

As mentioned above under C-16-05, in 2021, thirteen silky sharks were observed caught in one shallow set and seven deep-set longline trips (Table 1).

**Table 1.** Total numbers of silky shark caught on each trip in 2021, expressed as a percentage of total catch by number of individuals.

<table>
<thead>
<tr>
<th>Trip Number in 2021</th>
<th>Total EPO fish caught on trip</th>
<th>Total EPO silky sharks caught on trip</th>
<th>Percentage of silky shark catch for trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (shallow set)</td>
<td>588</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>2 (deep set)</td>
<td>307</td>
<td>5</td>
<td>1.6%</td>
</tr>
<tr>
<td>3 (deep set)</td>
<td>1103</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td>4 (deep set)</td>
<td>1077</td>
<td>1</td>
<td>0.1%</td>
</tr>
<tr>
<td>5 (deep set)</td>
<td>370</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>6 (deep set)</td>
<td>1122</td>
<td>1</td>
<td>0.1%</td>
</tr>
<tr>
<td>7 (deep set)</td>
<td>479</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>8 (deep set)</td>
<td>200</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
April 1, 2021

Jean-François Pulvenis, Acting Executive Director
Inter-American Tropical Tuna Commission (IATTC)
8901 La Jolla Shores Drive
La Jolla, California 92037-1508

Subject: Data Submissions under Resolutions Related to Elasmobranchs

Dear Mr. Pulvenis:

The United States is submitting this letter and enclosed report on calendar year 2020 information pursuant to the following IATTC resolutions:

- Resolution C-05-03: Resolution on the Conservation of Sharks Caught in Association with Fisheries in the Eastern Pacific Ocean
- Resolution C-11-10: Resolution on the Conservation of Oceanic Whitetip Sharks Caught in Association with Fisheries in the Antigua Convention Area
- Resolution C-15-04: Resolution on the Conservation of Mobulid Rays Caught in Association with Fisheries in the IATTC Convention Area
- Resolution C-16-05: Resolution on the Management of Shark Species
- Resolution C-16-06: Conservation Measures for Shark Species, with Special Emphasis on the Silky Shark, for the Years 2017, 2018, and 2019

Please contact William Stahnke at (562) 980-4088 or william.stahnke@noaa.gov with any questions.

Sincerely,

Lyle Enriquez
Highly Migratory Species Branch Chief

cc: David Hogan, Department of State
    William Fox, Jr., U.S. Commissioner to the IATTC
    Ryan J. Wulff, Alternate U.S. Commissioner to the IATTC
    Mike Thompson, Alternate U.S. Commissioner to the IATTC
    John Zuanich, Alternate U.S. Commissioner to the IATTC
    Administrative File: 150413SWR2013SF00273:WJS

Enclosure
Below is relevant information for U.S. deep-set and shallow-set longline fisheries under the respective elasmobranch resolutions. The IATTC maintains all observer information for U.S. purse seine vessels and as such already has access to reports of observed interactions with mobulids, oceanic white tip sharks, silky sharks, and hammerhead sharks caught in that fishery.

**C-11-10**
In 2020, NMFS observers recorded five oceanic whitetip sharks caught by U.S. deep-set longline vessels fishing in the eastern Pacific Ocean (EPO). One was returned dead and four were returned alive.

**C-15-04**
In 2020, NMFS observers recorded no catches of mobulid rays in the U.S. deep-set longline fishery in the EPO.

**C-16-05**
In 2020, NMFS observers recorded nine silky sharks caught by U.S. deep-set longline vessels fishing in the EPO. Two were returned alive, one returned alive in good condition, and six were returned dead.

In 2020, NMFS observers recorded two hammerhead (smooth hammerhead) sharks caught by U.S. deep-set longline vessels fishing in the EPO. One was returned alive and one was returned dead.

**C-16-06**
The U.S. observer program does not collect weights and only opportunistically collects lengths of individual fish, and as such cannot report on the percent by weight of silky sharks caught during trips with total lengths <100 cm. However, below are the percentages of silky sharks observed caught (regardless of size) by number of individual fish caught by trip.

As mentioned under C-16-05, in 2020, nine silky sharks were observed caught in three deep-set longline trips (Table 1).

**Table 1.** Total numbers of silky shark caught on each trip, expressed as a percentage of total catch by number of individuals.

<table>
<thead>
<tr>
<th>Trip Number in 2020</th>
<th>Total number of fish caught on trip</th>
<th>Total number of silky sharks caught on trip</th>
<th>Percentage of silky shark catch for trip, by number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1046</td>
<td>7</td>
<td>0.67%</td>
</tr>
<tr>
<td>2</td>
<td>881</td>
<td>1</td>
<td>0.11%</td>
</tr>
<tr>
<td>3</td>
<td>1218</td>
<td>1</td>
<td>0.08%</td>
</tr>
</tbody>
</table>
Below is relevant information for U.S. deep-set and shallow-set longline fisheries under the respective elasmobranch resolutions. The IATTC maintains all observer information for U.S. purse seine vessels and as such already has access to reports of observed interactions with mobulids, oceanic white tip sharks, silky sharks, and hammerhead sharks caught in that fishery.

[...]

C-16-05
In 2019, NMFS observers recorded eight silky sharks caught by U.S. deep-set longline vessels fishing in the EPO. Six were returned alive and two were returned dead.

In 2019, NMFS observers recorded four hammerhead (smooth hammerhead) sharks caught by U.S. deep-set longline vessels fishing in the EPO. Three were returned alive and one was returned dead.

C-16-06
The U.S. observer program does not collect weights and only opportunistically collects lengths and of individual fish, and as such cannot report on the percent by weight of silky sharks caught during trips with total lengths <100 cm. However, below are the percentages of silky sharks observed caught (regardless of size) by number of individual fish caught by trip.

As mentioned under C-16-05, in 2019, eight silky sharks were observed caught in six deep-set longline trips (Table 1).

Table 1. Total numbers of silky shark caught on each trip, expressed as a percentage of total catch by number of individuals.

<table>
<thead>
<tr>
<th>Trip Number in 2019</th>
<th>Total number of fish caught on trip</th>
<th>Total number of silky sharks caught on trip</th>
<th>Percentage of silky shark catch for trip, by number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,684</td>
<td>2</td>
<td>0.12%</td>
</tr>
<tr>
<td>2</td>
<td>1,081</td>
<td>1</td>
<td>0.09%</td>
</tr>
<tr>
<td>3</td>
<td>1,236</td>
<td>1</td>
<td>0.08%</td>
</tr>
<tr>
<td>4</td>
<td>817</td>
<td>1</td>
<td>0.12%</td>
</tr>
<tr>
<td>5</td>
<td>1,138</td>
<td>1</td>
<td>0.09%</td>
</tr>
<tr>
<td>6</td>
<td>812</td>
<td>2</td>
<td>0.25%</td>
</tr>
</tbody>
</table>
Dr. Guillermo Compeán, Director  
Inter-American Tropical Tuna Commission (IATTC)  
8901 La Jolla Shores Drive  
La Jolla, California 92037-1508

Re: Submissions under Resolutions Related to Elasmobranchs

Dear Dr. Compeán:

This letter and enclosed report are submitted pursuant to several resolutions, all of which pertain to data on elasmobranchs:

- Resolution C-05-03: Resolution on the Conservation of Sharks aught in Association with Fisheries in the Eastern Pacific Ocean  
  2017 and 2018 information (2018 research updates will be sent separately)
- Resolution C-11-10: Resolution on the Conservation of Oceanic Whitetip Sharks Caught in Association with Fisheries in the Antigua Convention Area  
  2018 information
- Resolution C-15-04: Resolution on the Conservation of Mobulid Rays Caught in Association with Fisheries in the IATTC Convention Area  
  2018 information
- Resolution C-16-05: Resolution on the Management of Shark Species  
  2018 information
- Resolution C-16-06: Conservation Measures for Shark Species, with Special Emphasis on the Silky Shark, for the Years 2017, 2018, and 2019  
  2017 and 2018 information

Please contact Taylor Debevec at 562-980-4066 or Taylor.Debevec@noaa.gov if there are any questions regarding the United States’ reporting under these resolutions.

Sincerely,

Rachael Wadsworth  
Acting Highly Migratory Species Branch Chief

cc:  Drew Lawler, Alternate U.S. Commissioner  
David Hogan, Department of State  
William Fox, Jr., U.S. Commissioner to the IATTC  
Mike Thompson, Alternate U.S. Commissioner to the IATTC  
John Zuanich, Alternate U.S. Commissioner to the IATTC  
Ryan J. Wulff, NMFS WCR  
150413SWR2013SF00273:TD
Below is relevant information for U.S. longline fisheries under the respective elasmobranch resolutions. The IATTC maintains all observer information for U.S. purse seine vessels and as such already has access to observed interactions with oceanic white tips, mobulids, silky sharks, and hammerhead sharks caught in that fishery.

**C-11-10**  
In 2018, there were two observed oceanic whitetip sharks caught by U.S. longline vessels fishing in the eastern Pacific Ocean (EPO) recorded by NMFS observers; one with shallow-set longline gear (returned dead) and one with deep-set longline gear (returned alive).

**C-15-04**  
In 2018, there were no observed mobulid caught by U.S. longline vessels fishing in the EPO recorded by NMFS observers.

**C-16-05**  
In 2018, there were two silky sharks caught by U.S. longline vessels fishing in the EPO recorded by NMFS observers; both with deep-set longline gear (one returned alive, one returned dead).

In 2018, there was one hammerhead (smooth hammerhead) caught by U.S. longline vessels fishing in the EPO recorded by NMFS observers; it was caught with deep-set longline gear and returned dead.

**C-16-06**  
The United States observer program does not collect individual lengths or weights of fish and as such cannot report on the percent of silky sharks caught <100 cm total length by weight during trips. However, we can report here the percent of silky sharks observed caught (regardless of size) by number of individual fish caught by trip.

In 2017, twenty silky sharks were observed caught in nine deep-set longline trips:

<table>
<thead>
<tr>
<th>Trip Number in 2017</th>
<th>Total number of fish caught on trip</th>
<th>Total number of silky sharks caught on trip</th>
<th>Percent of silky shark catch for trip, by number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>768</td>
<td>1</td>
<td>0.13%</td>
</tr>
<tr>
<td>2</td>
<td>1,092</td>
<td>3</td>
<td>0.27%</td>
</tr>
<tr>
<td>3</td>
<td>1,037</td>
<td>1</td>
<td>0.10%</td>
</tr>
<tr>
<td>4</td>
<td>1,251</td>
<td>1</td>
<td>0.08%</td>
</tr>
<tr>
<td>5</td>
<td>663</td>
<td>1</td>
<td>0.15%</td>
</tr>
<tr>
<td>6</td>
<td>1,325</td>
<td>1</td>
<td>0.08%</td>
</tr>
<tr>
<td>7</td>
<td>943</td>
<td>5</td>
<td>0.53%</td>
</tr>
<tr>
<td>8</td>
<td>906</td>
<td>4</td>
<td>0.44%</td>
</tr>
<tr>
<td>9</td>
<td>1,066</td>
<td>3</td>
<td>0.28%</td>
</tr>
</tbody>
</table>

As mentioned under C-16-05, in 2018, two silky sharks were observed caught. They were caught on two different deep-set longline trips:

<table>
<thead>
<tr>
<th>Trip Number in 2018</th>
<th>Total number of fish caught on trip</th>
<th>Total number of silky sharks caught on trip</th>
<th>Percent of silky shark catch for trip, by number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>827</td>
<td>1</td>
<td>0.12%</td>
</tr>
<tr>
<td>2</td>
<td>908</td>
<td>1</td>
<td>0.11%</td>
</tr>
</tbody>
</table>