

The background of the slide is a vibrant blue gradient. In the lower half, there is a stylized globe showing the continents in a lighter blue. Overlaid on the globe are dynamic water splashes in various shades of blue, creating a sense of movement and freshness. The overall aesthetic is clean and scientific.

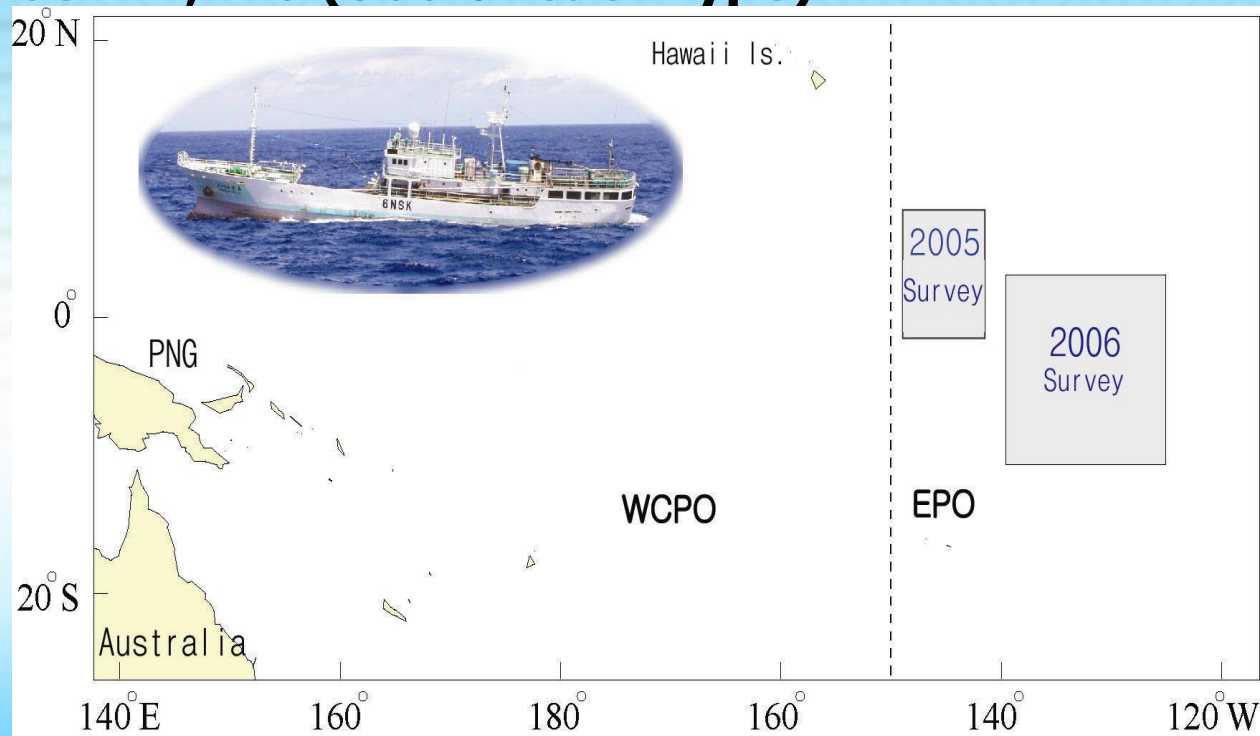
# **Estimation of ratio of fin weight to body weight of sharks in the eastern Pacific Ocean in 2006**

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# The survey area

- *9°13'S~1°36'N and 126°00'~138°21'W from September 20 to October 23, 2006*
- **Korean longliner : 416 GRT**
- **Monitoring : 28 set (one set per day)**
- **No. of hooks used : 62,464**
  - each set : 2,240 (560 of each type)



# Catch and species composition of shark species

Shark species		Number	(%)	Weight (kg)	(%)
Scientific name	English name				
<i>Alopias superciliosus</i>	Bigeye thresher shark	83	20.1	3,151	28.4
<i>Lamna ditropis</i>	Salmon shark	59	14.3	2,048	18.5
<i>Prionace glauca</i>	Blue shark	43	10.4	2,442	22.0
<i>Isurus oxyrinchus</i>	Mako shark	3	0.7	470	4.2
<i>Carcharhinus longimanus</i>	Oceanic white-tip shark	48	11.6	883	8.0
<i>Sphyrna zygaena</i>	Smooth hammerhead shark	7	1.7	494	4.5
<i>Sphyrna lewini</i>	Scalloped hammerhead shark	14	3.47	888	8.0
<i>Pseudocarcharias kamoharai</i>	Crocodile shark	142	34.4	669	6.0
<i>Scymnodon sqamulosis</i>	Smallmouth velvet dogfish shark	14	3.4	48	0.4
<b>Total</b>		<b>413</b>	<b>100</b>	<b>11,093</b>	<b>100</b>



# Shark species



Bigeye thresher shark



Salmon shark



Blue shark



Longfin mako shark



# Shark species



Oceanic white-tip shark



Smooth hammerhead shark



Scalloped hammerhead shark



Crocodile shark



Smallmouth velvet dogfish

# Catch per unit effort by bait

Species (number)	CPUE by bait (no./1,000 hooks)				
	Chub mackerel	Sardine	Squid	Jack mackerel	Milk fish
Large-sized sharks (257)	2.4	2.8	2.6	2.0	0.6
Small-sized sharks (156)	2.6	2.6	2.8	2.2	1.4
Total(413)	5.1	5.4	5.4	4.2	2.0

# Fish condition at landing

Species	Number of individuals measured	Fish condition at landing(%)		
		Alive	Dead	Predation
<b>Bigeye thresher shark</b>	<b>83</b>	<b>77.1</b>	<b>22.9</b>	<b>-</b>
<b>Salmon shark</b>	<b>17</b>	<b>70.6</b>	<b>29.4</b>	<b>-</b>
<b>Blue shark</b>	<b>29</b>	<b>72.4</b>	<b>27.6</b>	<b>-</b>
<b>Mako shark</b>	<b>3</b>	<b>66.6</b>	<b>33.4</b>	<b>-</b>
<b>Oceanic white-tip shark</b>	<b>11</b>	<b>63.6</b>	<b>36.4</b>	<b>-</b>
<b>Smooth hammerhead shark</b>	<b>2</b>	<b>50.0</b>	<b>50.0</b>	<b>-</b>
<b>Scalloped hammerhead shark</b>	<b>2</b>	<b>0.0</b>	<b>100.0</b>	<b>-</b>
<b>Crocodile shark</b>	<b>139</b>	<b>90.6</b>	<b>9.4</b>	<b>-</b>
<b>Smallmouth velvet dogfish shark</b>	<b>14</b>	<b>71.4</b>	<b>28.6</b>	<b>-</b>
<b>Total</b>	<b>413</b>	<b>77.5</b>	<b>22.5</b>	<b>-</b>



# Disposal of sharks trunk

Species	Number of individuals measured	Disposal rate (%)			
		Release alive	Discard	Retain trunk after finning	Discard trunk after finning
Bigeye thresher shark	83	0.0	10.8	0.0	89.2
Salmon shark	59	1.7	13.6	76.3	8.4
Blue shark	43	0.0	9.3	0.0	90.7
Mako shark	3				100.0
Oceanic white-tip shark	48	0.0	16.7	12.5	70.8
Smooth hammerhead shark	7	0.0	0.0	85.7	14.3
Scalloped hammerhead shark	14	0.0	21.4	64.3	14.3
Crocodile shark	142	0.7	97.9	1.4	0.0
Smallmouth velvet dogfish shark	14	14.3	85.7	0.0	0.0



# Disposal of sharks fin by fin type after fishing

○: Retain ×: Discard

Species	Fin type					Trunk	Comment
	Dorsal	Pectoral	Pelvic	Anal	Caudal		
Salmon shark	○	○	○	○	○	Retain	LS
Oceanic white-tip shark	○	○	○	○	○	"	"
Smooth hammerhead sharks	○	○	○	○	○	"	"
Mako shark	○	○	○	○	○	"	"
Blue shark	○	○	○	○	○	Discard	"
Bigeye thresher shark	○	○	○	○	×	"	"
Crocodile shark*	×	×	×	×	×	"	SS
Smallmouth velvet dogfish shark	×	×	×	×	×	"	"

\* 2 fishes larger than 1 meter were finned. LS: large-sized shark SS: small-sized shark

# Sharks finning



# Ratio of wetted fin weight to body round weight of shark

Species	Number of individuals measured	Round weight (kg)(A)	Wetted Fin weight (kg)(B)	Ratio of B/A (%)	Comments
Bigeye thresher shark	81	3,122	116.3	3.7	Excluded caudal fin
Salmon shark	48	1,826	94.2	5.2	Included caudal fin
Blue shark	45	2,593	114.3	4.4	"
Mako shark	3	470	19.4	4.1	"
Salmon shark	48	1,826	94.2	5.2	"
Ocenic white-tip shark	45	841	59.4	7.1	"
Smooth hammerhead shark	7	494	24.9	5.0	"
Scalloped hammerhead shark	13	839	45.0	5.4	"
Crocodile shark	2	52	4.2	8.1	"
Total	163	7,115	361.4	5.08	Excluded bigeye thresher shark



# Ratio of wetted fin weight to dried weight of shark

Order	St. no.	Number of individuals measured	Wetted fin weight (kg)	Dried fin weight (kg)	Ratio (Dried/Wetted)	Number by species
1	12	12	22.4	12.2	0.54	BS 2, BT 10
2	13	10	17.5	10.5	0.60	BT 7, OW 1, SH 2
3	14	23	24.8	11.5	0.46	BT 18, SS 3, OW 2
4	15	6	11.7	7.0	0.60	BT 2, BS 1, SS 1, OW 2
5	16	10	20.9	12.4	0.59	BT 1, BS 3, SH 1, OW 4, CS 1
6	17	7	14.8	10.3	0.70	BS 5, OW 1, SS 1
7	18	2	6.4	2.5	0.40	BS 1, MS 1
8	19	3	8.8	3.5	0.41	OW 1, SH 1, SS 1
9	20	4	8.7	3.3	0.38	BS 3, BT 1
10	21	6	11.3	6.7	0.59	BS 4, OW 1, SS 1
11	22	6	19.4	11.0	0.57	OW 1, BS 2, SH 3
12	23	12	28.4	13.0	0.49	BT 6, SH 1, SS 1, BS 3
13	24	2	5.5	2.5	0.45	BS 1, BT 1
<b>Total</b>		<b>102</b>	<b>200.6</b>	<b>106.4</b>	<b>0.53</b>	<b>BT 46, BS 25, SS 8, OW 13, SH 8, CS 1, MS 1</b>

# Sex ratio of shark

Species	Number of individuals measured	Sex ratio (%)		
		Female	Male	Unidentified
<b>Bigeye thresher shark</b>	<b>84</b>	<b>58.3</b>	<b>31.0</b>	<b>10.7</b>
<b>Salmon shark</b>	<b>58</b>	<b>65.5</b>	<b>32.8</b>	<b>1.7</b>
<b>Blue shark</b>	<b>47</b>	<b>42.6</b>	<b>51.1</b>	<b>6.4</b>
<b>Mako shark</b>	<b>3</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Ocenic white-tip shark</b>	<b>47</b>	<b>68.1</b>	<b>29.8</b>	<b>2.1</b>
<b>Smooth hammerhead shark</b>	<b>7</b>	<b>42.9</b>	<b>57.1</b>	<b>0.0</b>
<b>Scalloped hammerhead shark</b>	<b>14</b>	<b>64.3</b>	<b>35.7</b>	<b>0.0</b>
<b>Crocodile shark</b>	<b>142</b>	<b>47.9</b>	<b>40.8</b>	<b>11.3</b>
<b>Smallmouth velvet dogfish shark harkdsharkshark</b>	<b>14</b>	<b>78.6</b>	<b>14.3</b>	<b>7.1</b>

# Length distribution of sharks

Species	Number of individuals measured	mean length (cm)	Range (cm)
Bigeye thresher shark	84	138	99~196
Salmon shark	60	140	44~186
Blue shark	43	191	138~230
Mako shark	3	246.3	196~330
Oceanic white-tip shark	48	110	40~173
Smooth hammerhead shark	7	186.9	144~211
Scalloped hammerhead shark	14	182.3	140~212
Crocodile shark	142	82	53~175
Smallmouth velvet dogfish shark	14	74.4	64~83



# Results

- The catches of sharks taken on 62,464 hooks were 413 in number and 11,093kg in weight of 9 species
- The ratio of wetted fin weight to body round weight of sharks by species ranged from 4.1 to 8.1% and mean was 5.08%.
- The total ratio of wetted fin weight to dried fin weight of sharks and the ratio ranged 0.38 to 0.70 and mean value was 0.53.
- $BW = DFW / [(\text{Ratio of wetted fin weight to body round weight}) \times (\text{Ratio of wetted fin weight to dried fin weight})]$