

EXISTING(FISHED) AND NEW(UNFISHED) AREAS IN THE NORTH PACIFIC

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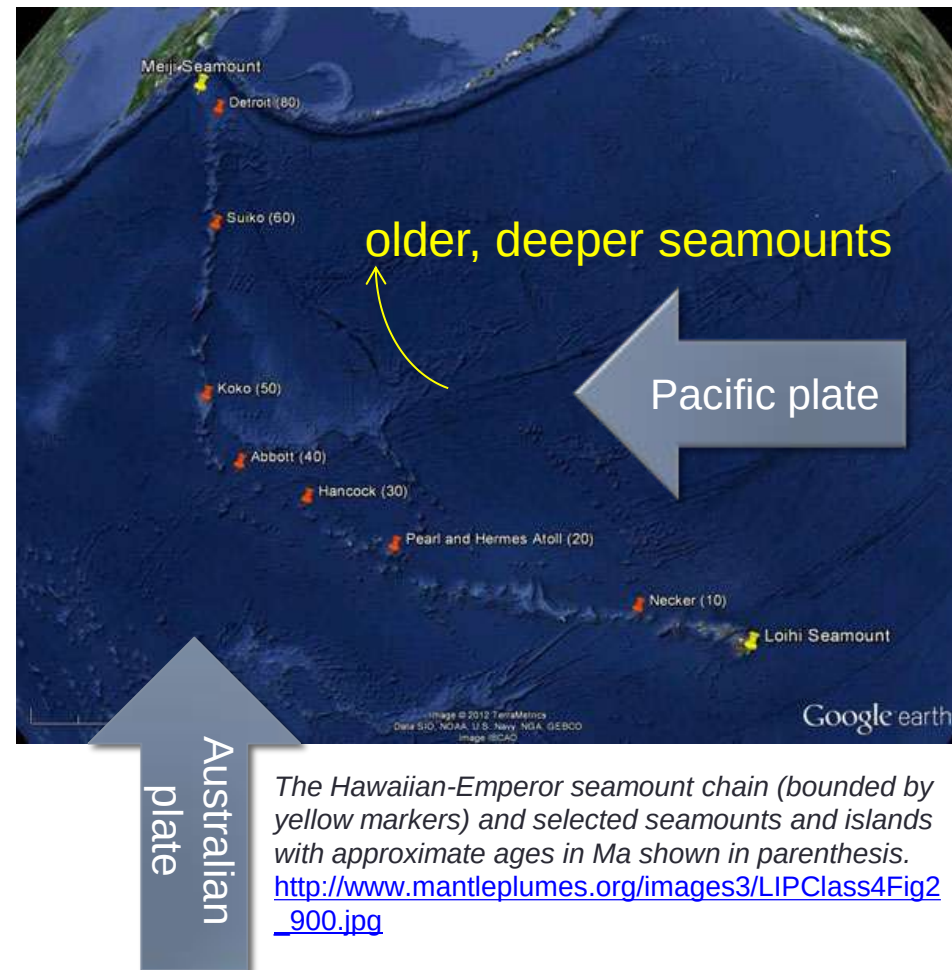


Contents

- Basic information used to identify fished and unfished areas in the North Pacific Ocean
 - Assessment reports of relevant members
 - Footprints
- Interim and voluntary measures applied to the fished/unfished areas in the NPFC

Emperor Seamount Chain

- The Emperor Seamounts and Northern Hawaiian Ridge were formed as volcanic hot spot tracks as the Pacific tectonic plate moved over a mantle magma source.
- The seamounts get progressively older from south to north (30-85 million years old). Most of seamounts in this region are classified as guyots, characterized by flat plateau, upper slope and flanking slope near the base.



Assessment reports of relevant members

- Russia

- A. Bottom trawl fishery

Since 2001 Russia trawlers has been commercially fishing on Youmei, Nintoku, Jingu, Ojin, Koko (probably include northern bank), Milwaukee, Colahan and C-H. The information is specified in Appendix D.

- B. Bottom gillnet fishery

No credible data. In 2001 Russian gillnets vessels have been commercially fishing only on Jingu.

- C. Bottom longline fishery

Since 2000 Russian longline vessels have been commercially fishing on Suiko, Showa, Youmei, Nintoku, Jingu, Ojin, Koko, Milwaukee and C-H.

- D. Pot fishery

In 2002-2003 three Russian vessels were engaged in bottom pot fishery on Showa, Nintoku and Koko.

Long line

Crab Plot[illegible]

• Japan

Trawl

A. Identification of fished seamounts in the ES-NHR area

In recent years, fished seamounts by Japanese trawlers are: [Youmei](#), [Nintoku](#), [Jingu](#), [Ojin](#), [Northern Koko](#), [Koko](#), [Kinmei](#), Milwaukee Seamounts group ([Yuryaku](#) and [Kammu](#)), [Colahan](#) and [C-H](#). The bathymetries of each seamount are shown in Appendix G. Trawl operations are confined only to certain areas of summits or slopes of these seamounts [shallower than 1,500m](#).

Year	Youmei	Nintoku	Jingu	Ojin	Koko	Kimmei	Milwaukee	Colahan	C-H
2002		*	*	*	*	*	*	*	*
2003		*	*	*	*	*	*	*	
2004				*	*	*	*	*	*
2005		*	*	*	*	*	*	*	*
2006		*	*	*	*	*	*	*	*
2007	*	*	*	*	*	*	*	*	*

Gillnet

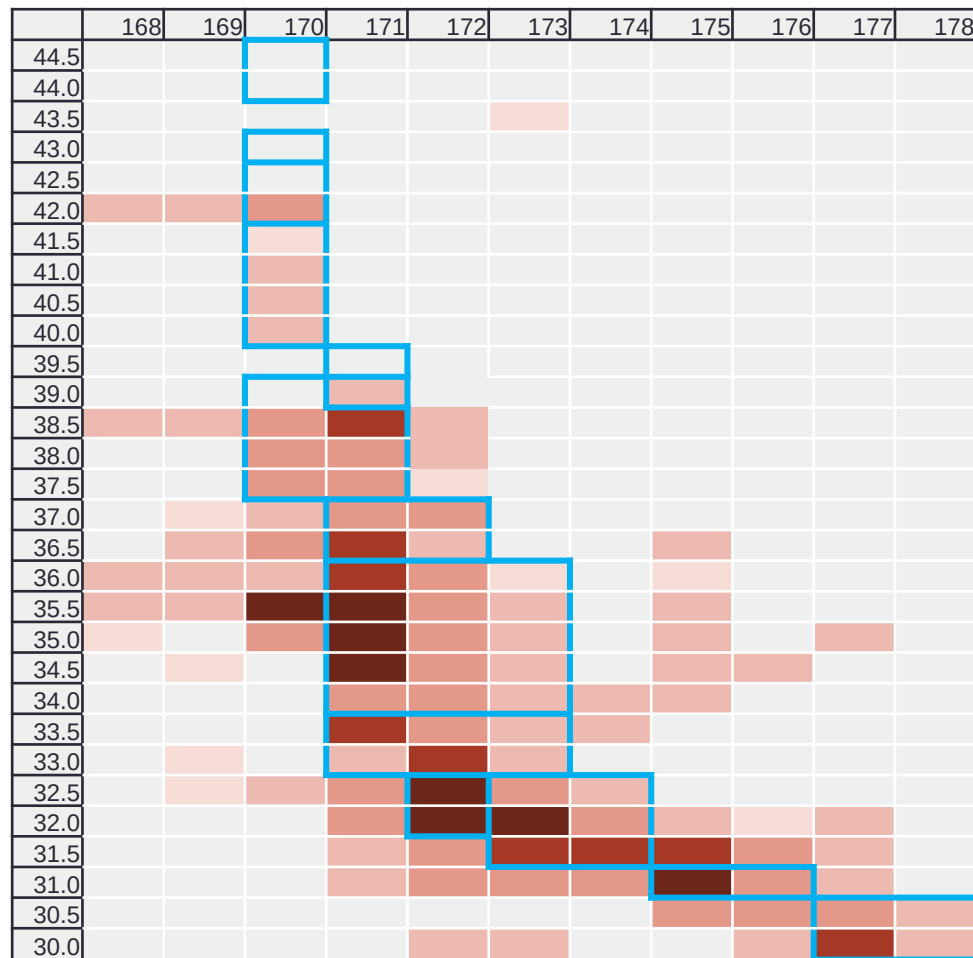
A. Identification of fished seamounts in the ES-NHR area

In recent years, fished seamounts by the Japanese bottom gillnetter are: [Suiko](#), [Koko](#), [Kinmei](#), [Yuryaku](#) and [Kammu](#), [Colahan](#) and [C-H](#). The bathymetries of each seamount are shown in Appendix G. Bottom gillnet operations are confined only to certain areas of summits or slopes of these seamounts [shallower than 1,500 m](#).

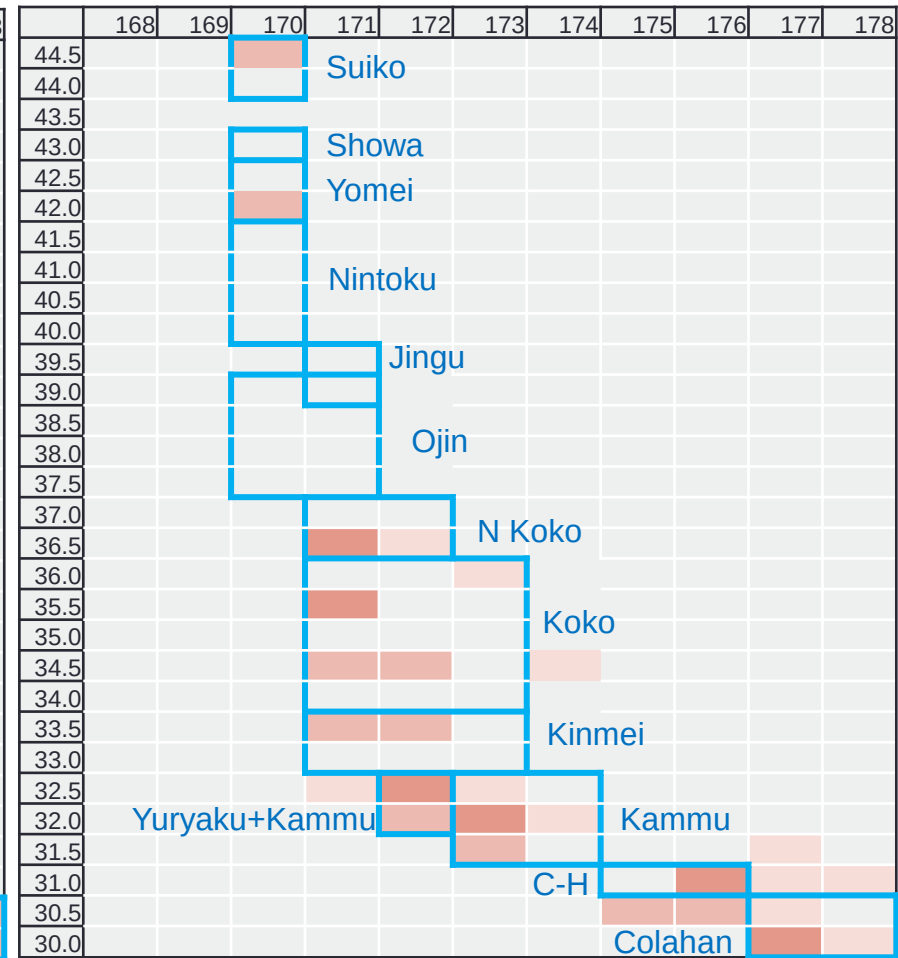
Year	Suiko	Koko	Kinmei	Yuryaku+	Kammu+	Colahan	C-H
2002	*	*	*		*	*	*
2003		*				*	
2004		*			*	*	*
2005		*			*	*	*
2006		*		*	*	*	*
2007		*		*	*	*	*

Confirmation using the Japanese commercial fishery data

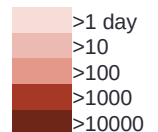
Trawl vessel, noon position (1989-2008)



Gillnet vessel, noon position (2001-2008)



Japanese logbook data demonstrated that commercial fishing operations were conducted in those seamounts located in-between Suiko and Colahan, although noon position might not reflect the the exact location of fishing operations.



• Korea

Korea deep-sea fisheries have been operated on the limited fishing ground which was already developed because bottom trawlers try to avoid the hang-up and/or net-loss, that is, Korean fishing activities have been carried out carefully to avoid VMEs

Footprints

Trawl

Year	C-H (B)	Colahan (C)	Milwaukee group (D)	Kinmei (E)	Koko (F)	Northern Koko (G)	Ojin (H)	Jingu (I)	Nintoku (J)
2004	*	*	*		*	*	*	*	
2005		*	*	*	*				
2006		*	*	*	*				
2007		*	*	*	*				

Longline

Year	C-H (B)	Colahan (C)	Milwaukee group (D)	Kinmei (E)	Koko (F)	Northern Koko (G)	Ojin (H)	Jingu (I)	Nintoku (J)
2004	*	*	*		*		*		*

• USA

No fishery in the high-sea Southern Emperor Northern Hawaiian Ridge area.
General description on international fisheries.

- Canada

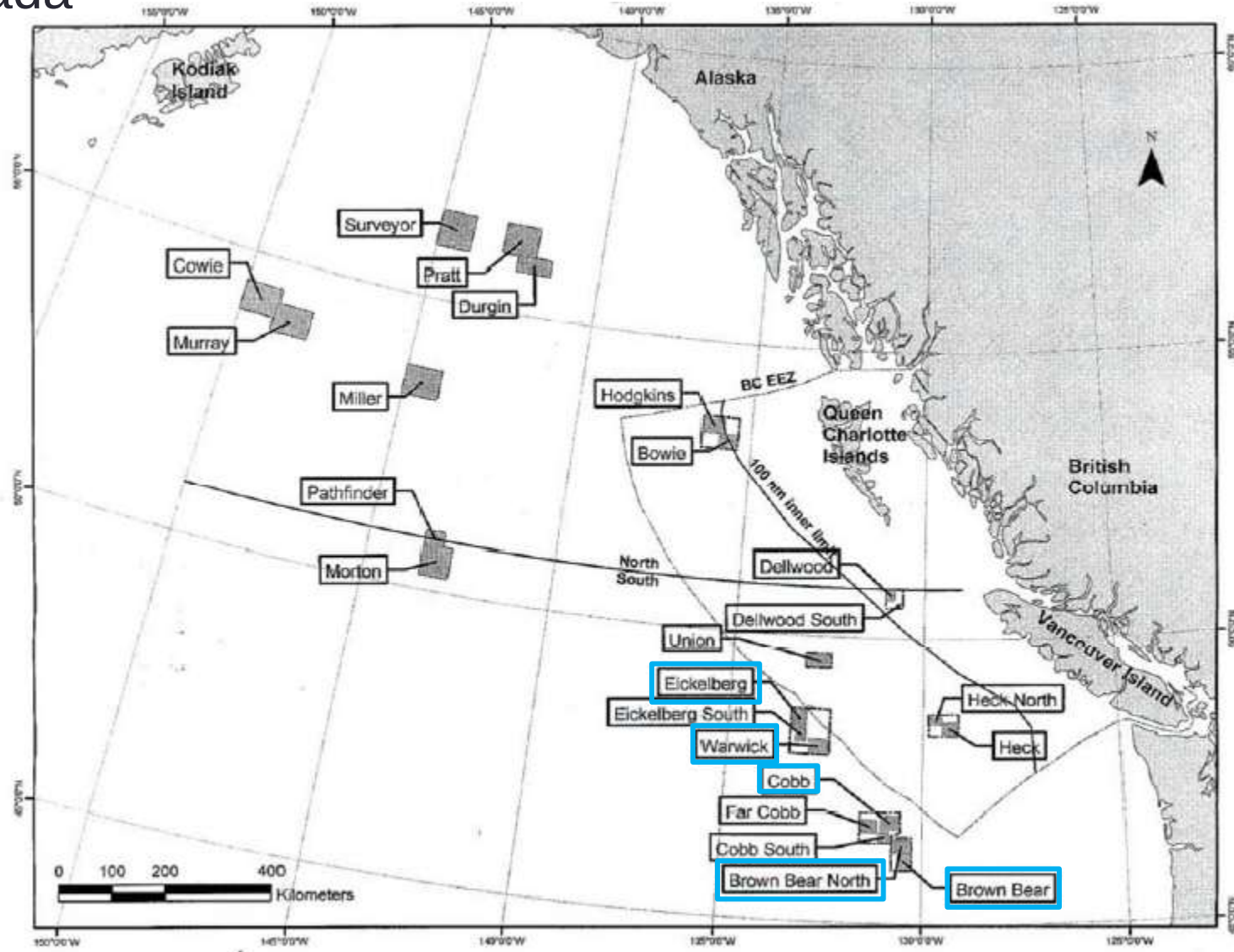


Figure 1: Location of Northeastern Pacific Seamounts. Those located outside of the Canadian EEZ and which are utilized by the Canadian seamount sablefish fishery are the Eickelberg, Warwick, Cobb, and Brown Bear seamount aggregations.

The main area of focus for the fishery on Cobb Seamount is between 600-900 m.

Year	North bank of Suiko (Seamount A)	South bank of Suiko	Showa (Seamount B)	Yumei	Nintoku (J)	Jingu (I)	Ojin (H)	Koko (F) @	Kinmei (E)	Milwaukee (D)	Colahan (C)	C-H (B)
2002				X	*	*	*	*X	*	*	*	*
2003					*	*	*	*X	*	*	*	
2004						+	*+	*+	*	*+	*+	*+
2005					*	*	*	*X+*	*X+*	*X+*	*X+*	*X
2006				X	X*	*	*	*+	*+	X*+	*+	*
2007				*	*	*	*	*+	*+	*+	*+	*
2008						*		X*+	*	*+	*+	*
2009					*		*	*+	*	*+	*+	

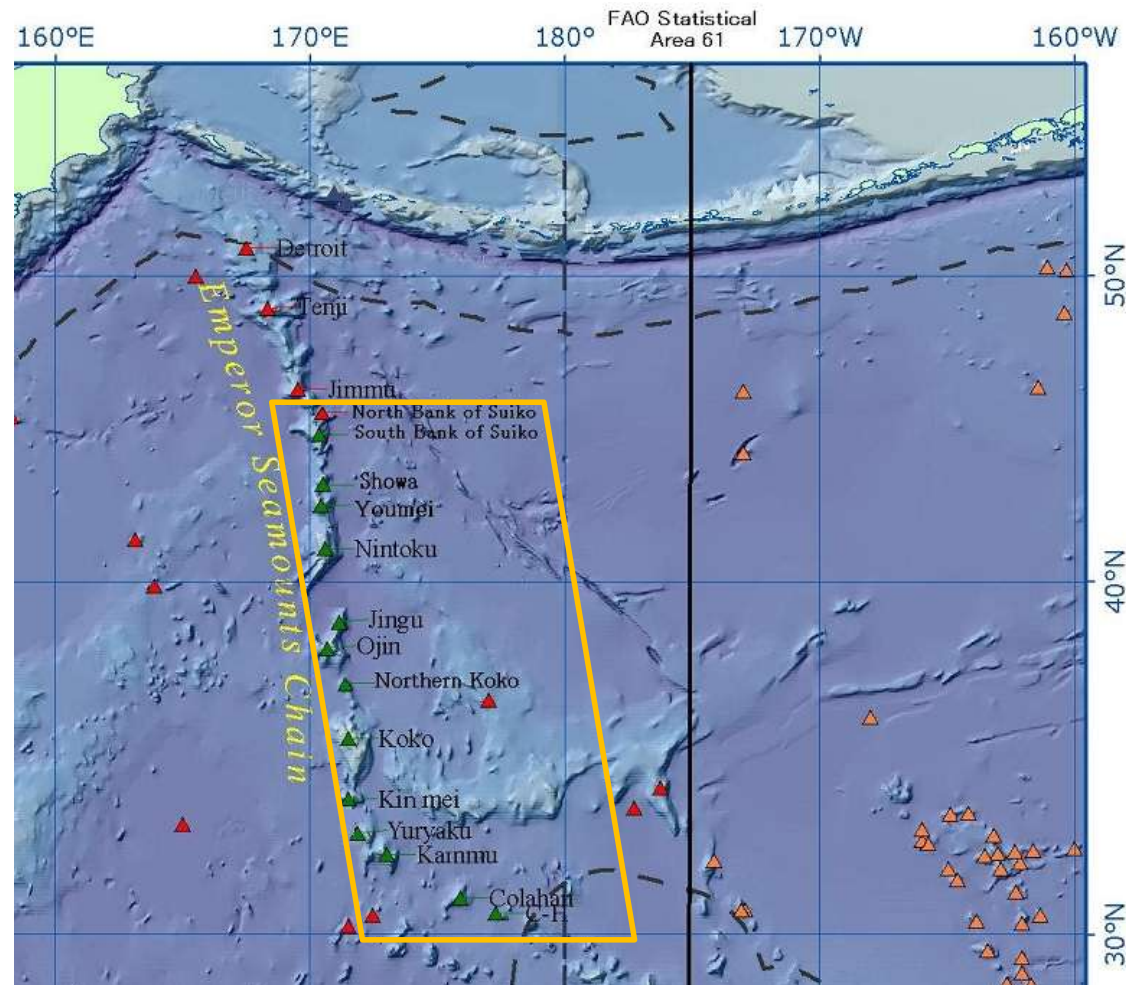
Year	North bank of Suiko (Seamount A)	South bank of Suiko	Showa (Seamount B)	Youmei	Nintoku (J)	Jingu (I)	Ojin (H)	Koko (F) @	Kinmei (E)	Milwaukee (D)	Colahan (C)	C-H (B)
2002								x				
2003								x				
2004					+		x +	+		+	+	+
2005												
2006	x	x				x	x	x				
2007												
2008					x	x	x	x				
2009					x	x	x	x				

Year	North bank of Suiko (Seamount A)	South bank of Suiko Showa (Seamount B)	Youmei	Suiko	Koko @	Kinmei	Yuryaku+	Kammu+	Colahan	C-H
2002				*	*	*		*	*	*
2003					*				*	
2004					*			*	*	*
2005					*			*	*	*
2006					*		*	*	*	*
2007					*		*	*	*	*
2008					*		*	*	*	*
2009		*	*	*	*		*	*		

[illegible]

Summary (for Emperor Seamounts area)

- Fished area
 - Suiko
 - Showa
 - Nintoku
 - Jingu
 - Ojin
 - Koko
 - Kinmei
 - Yuryaku, Kammu (MW)
 - Colahan
 - C-H
- Unfished area
 - Other northern seamounts(>45°N)
 - Deeper zone (> 1500m) of fished seamounts



Interim and voluntary measures in the western North Pacific

- Fished area
 - No increase in vessel number (IM)
 - No increase in fishing effort (IM)
 - 20% reduction (VM, Japan)
 - 25% reduction (VM, Korea)
 - Time closure
 - Nov-Dec (VM, Japan, Russia)
 - Nov-Feb (VM, Korea)
 - Area closure
 - Closure of C-H Seamount (IM)
 - Closure of southeastern part of Koko Seamount (IM)
 - Output control
 - 15,000 MT annual catch limit of North Pacific armorhead (VM, Japan)
 - VMS monitoring by flag states (IM)
 - 100% Scientific observer coverage (IM)
 - 5 nm move on rule (IM), 50 kg threshold (VM, Korea, Japan)
- Unfished area
 - No fishing at deeper zone > 1500 m (IM)
 - Temporary closure of all northern seamounts $> 45^{\circ}$ N (IM)
 - Exploratory fishery protocol (IM)