

Hawai'i Longline Observer Program & False Killer Whales

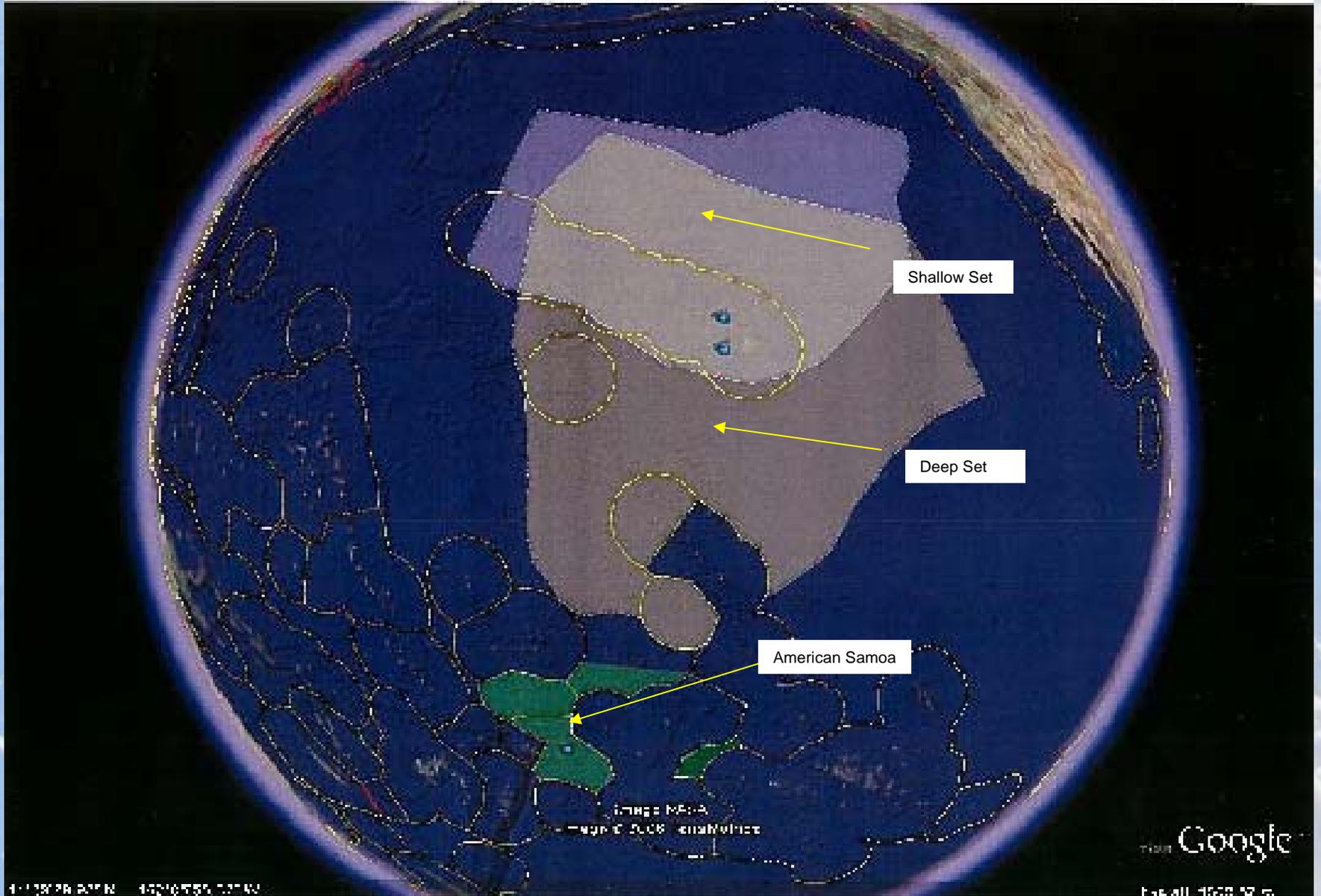


Pacific Islands Regional Office Observer Program

The Pacific Islands Regional Office provides observer coverage for two Hawaii based and one American Samoa based longline fishery. Presently NMFS requires observers on 20% of all vessel departures in the Tuna (deep set) fishery and 100% of the vessel departures in the swordfish (shallow set) fishery. The Samoa fishery is currently at a 7% coverage level.

1994	First mandatory observers deployed
2000	Increase in observer coverage to 20%
2002	Swordfish fishery closure
2004	Swordfish fishery reopens with turtle bycatch limits and 100% observer coverage
2006	Coverage in American Samoa fishery begins

Areas of Fishing Operations

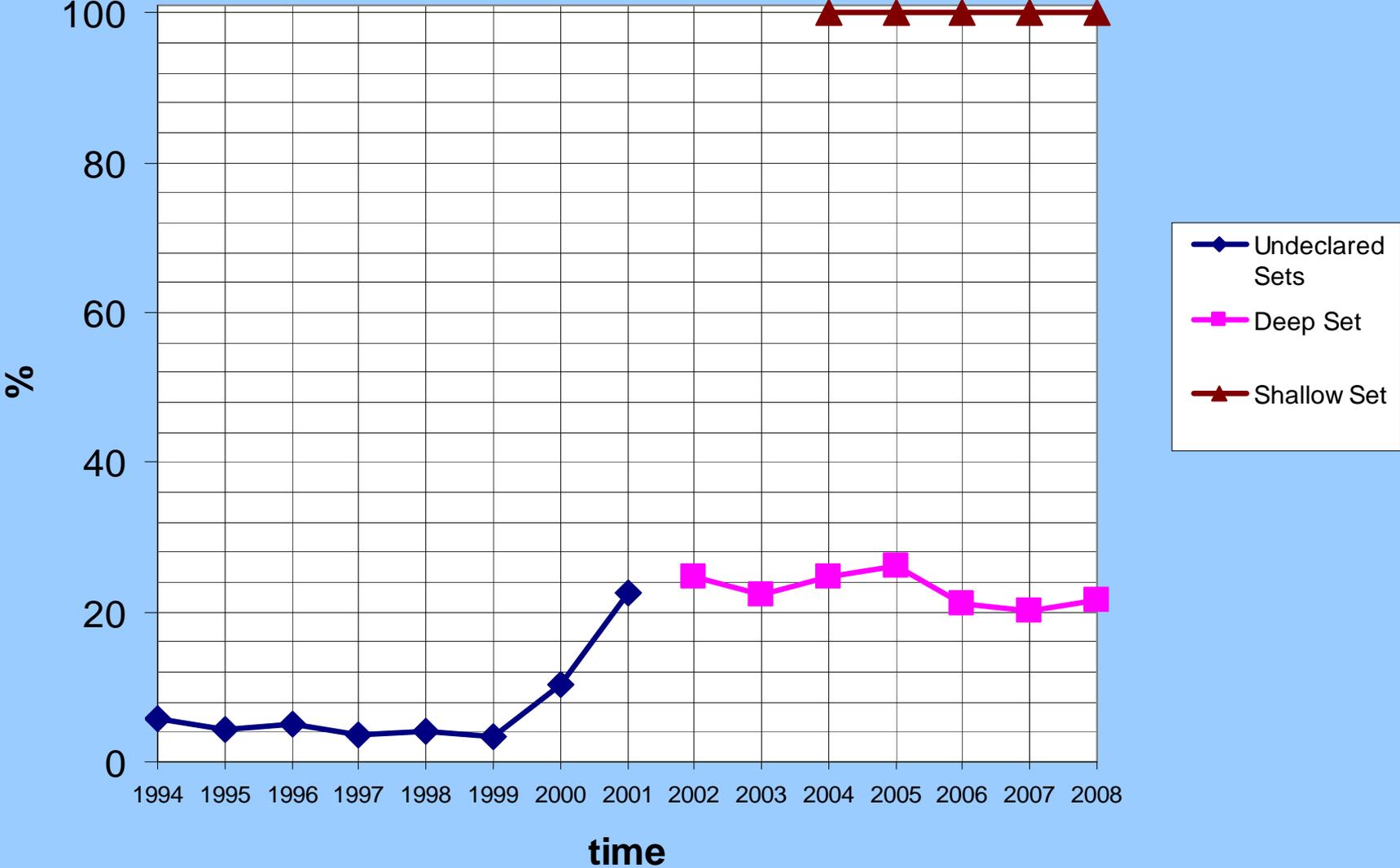


Comparison of Observer Coverage (2006-2008)

	Hawai'i Longline Deep Set Fishery	Hawai'i Longline Shallow Set Fishery	American Samoa Longline Fishery
Target Species	Bigeye Tuna	Swordfish	Albacore Tuna
Number of active vessels	125	45	35
Percent coverage	20 %*	100 %	7 %*
Annual number of trips observed	281	75	10
Average trip length	21 days	33 days	43 days
Annual # of sea days observed (approximate)	5900	2475	430

* - observers are randomly assigned to vessels in the Deep Set and American Samoa fisheries

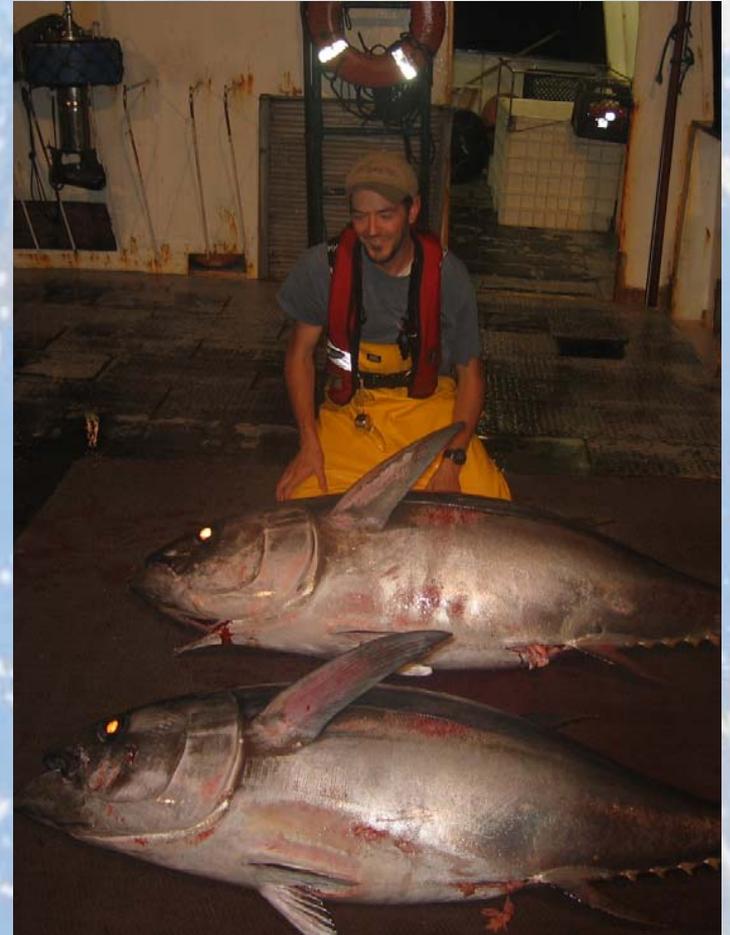
Percent Coverage



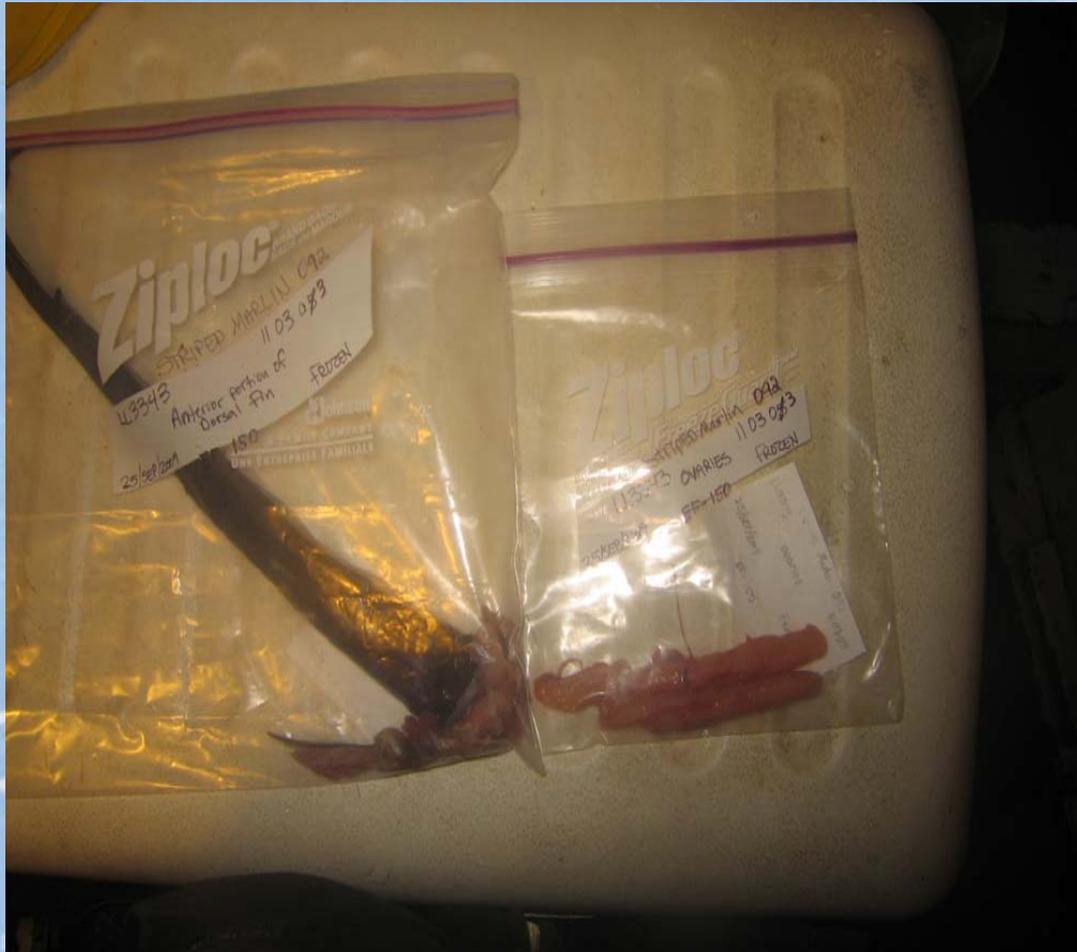
The observer program is responsible for fielding longline observers to obtain data on incidental take of protected species and to collect fishing effort data.



The observers record species composition of the catch, tally fish that are kept and discarded, collect information about vessel fishing gear characteristics and operations, and process selected specimens for life history information.



The Pacific Islands Fisheries Science Center receives biological samples for analysis from the observer program. Observers obtain samples based on the current research activities being conducted by PIFSC staff.



Observers document all protected species interactions with longline gear. Protected species that interact with the fishery are sampled whenever possible.



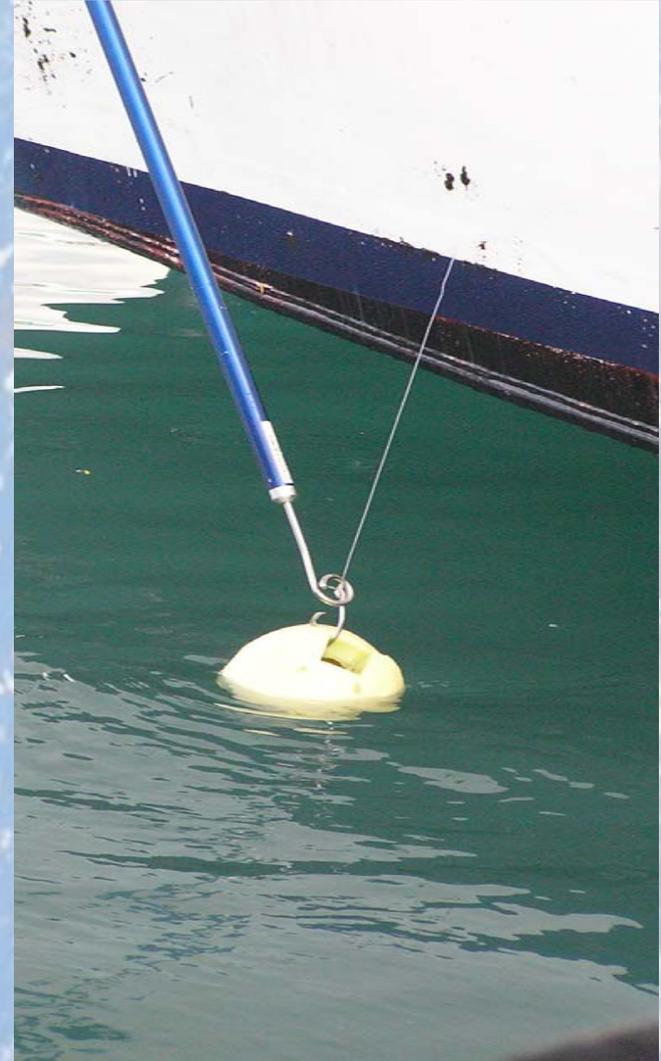
Observers are trained to collect biological data by the Marine Turtle Research Program and the PIRO training staff.



Sightings of protected seabirds, marine mammals, and turtles that do not interact with fishing operations are also recorded.



Observers are trained in dehooking and are provided a hands on opportunity during their training course to practice using this equipment. This training has helped observers successfully dehook marine mammals and turtles while at sea.



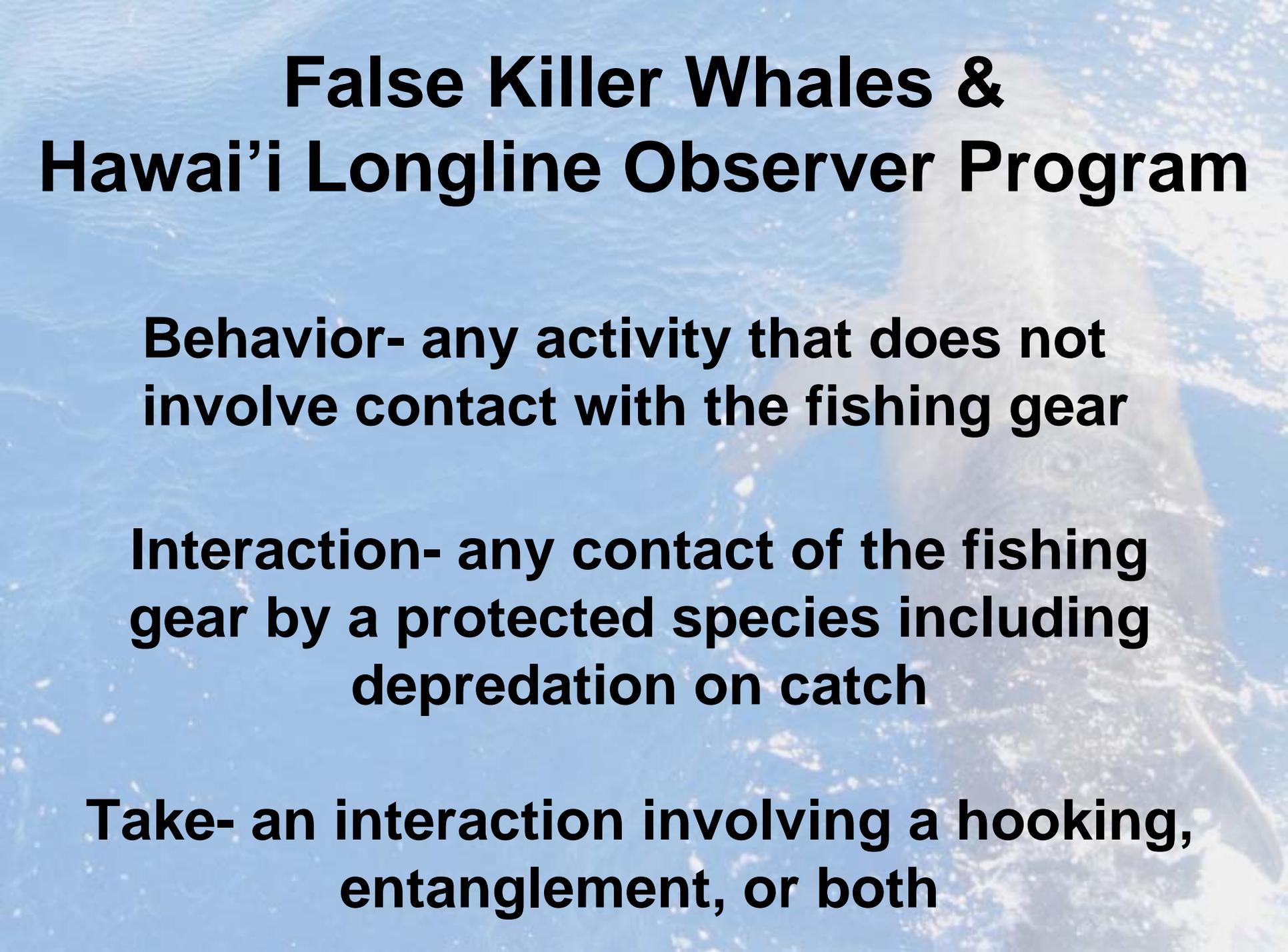
The Pacific Islands Region uses observer data to calculate official estimates (e.g. protected species interactions) and produce technical reports. Quarterly reports summarizing percent observer coverage, protected species interactions, and fishing effort are produced and available online.



Observed False Killer Whale takes in the Hawaii longline fisheries

	Undeclared Sets	Deep Set	Shallow Set
1997	1		
1998	1		
1999	0		
2000	0 (1)		
2001	3 (1)		
2002		5	closed
2003		2 (1)	closed
2004		6	0
2005		2 (1)	0
2006		4 (2)	0
2007		4	0
2008		3 (3)	1(1)
2009		9	1

The number in parentheses represents the number of 'Blackfish' incidentally taken and are **not** included in the total. 'Blackfish' is used to describe an animal that was either a False Killer Whale or a Shortfin Pilot Whale.



False Killer Whales & Hawai'i Longline Observer Program

Behavior- any activity that does not involve contact with the fishing gear

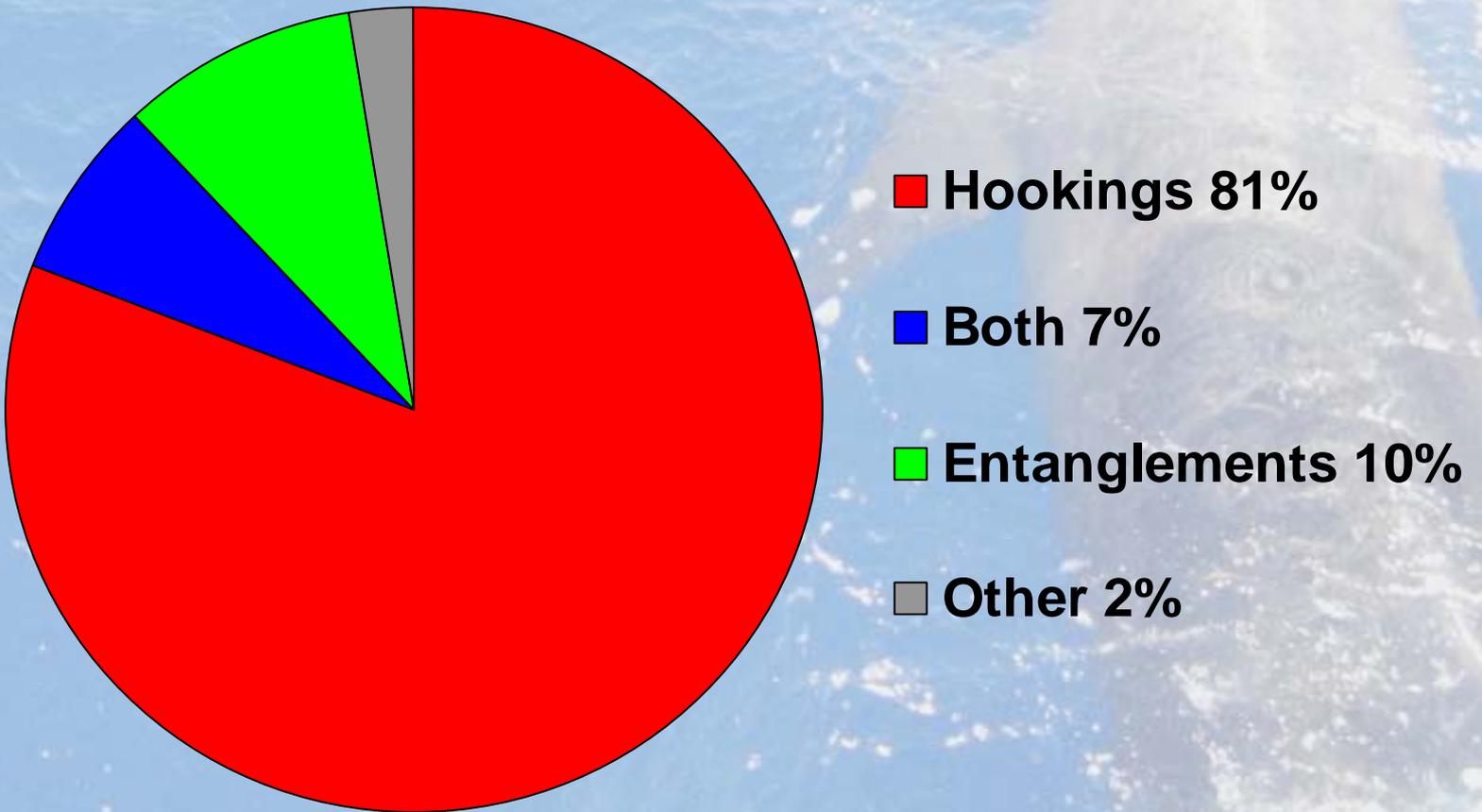
Interaction- any contact of the fishing gear by a protected species including depredation on catch

Take- an interaction involving a hooking, entanglement, or both



Entanglement- Restraint of an animal that involves line wrapped around one or more body parts

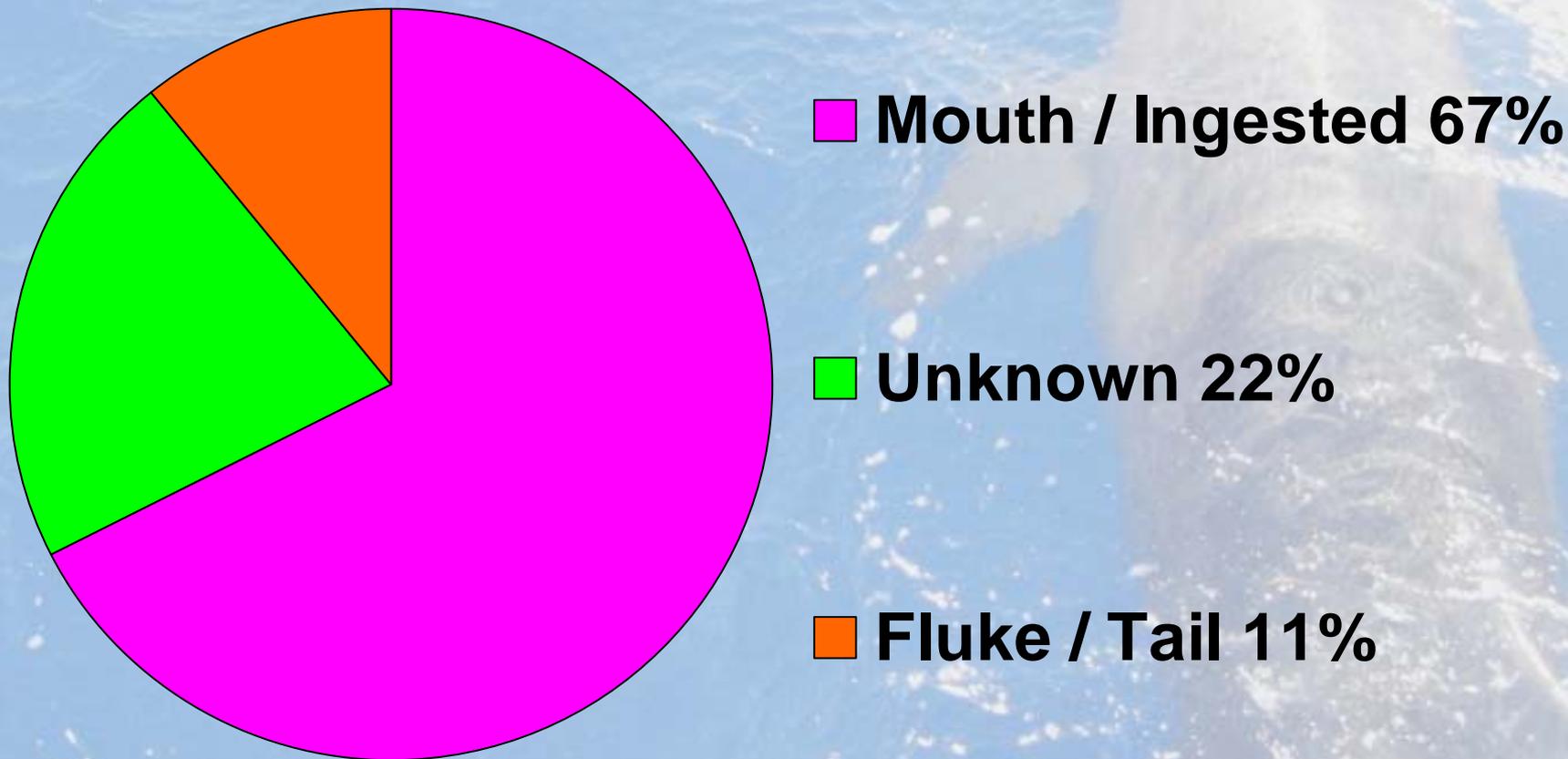
42 FALSE KILLER WHALE TAKES 1997 - 2009



Hooking- restraint of an animal that involves the piercing of tissue with a fishing hook or ingestion of a hook



37 FALSE KILLER WHALE HOOKINGS 1997 - 2009



Observers are trained to identify and record observed damage to catch

Catch Event Log												
Log comments for specific Catch Log records on the back of this form.												
Page No.	Line No.	Species Common Name	Species Code	Fleet No.	Hook No.	Caught Condition Code (A, D, I, U)	Keep/Return Code (K/A, D, F, I, U)	Damaged Code	Gender Code (M, F, U)	Length 1		
										Code	Measurement	
1	1	ALBACORE TUNA	005	2	17	D	K	ND	F	FL	90	
1	2	LONGNOSE LANCETFISH	909	3	21	A	A	ND				
1	3	BLUE MARLIN	093	3	32	D	D	ND	M	OEF	137	
1	4	ALBACORE TUNA	005	4	9	D	K	ND	F	FL	98	
1	5	ALBACORE TUNA	005	5	7	D	K	ND				
1	6	ALBACORE TUNA	005	7	10	D	D	MM				
1	7	ALBACORE TUNA	005	9	14	D	D	MM				
1	8	LONGNOSE LANCETFISH	909	10	18	D	D	ND				
1	9	LONG NOSE LANCETFISH	909	11	14	D	D	ND				
1	10	SKIPJACK TUNA	002	13	14	D	D	MM				
1	11	SKIPJACK TUNA	002	13	15	D	D	MM				
1	12	SKIPJACK TUNA	002	13	16	D	D	MM				
1	13	LONGNOSE LANCETFISH	909	13	24	A	A	ND		FL	65	
1	14	ALBACORE TUNA	005	15	17	D	D	MM				
1	15	ALBACORE TUNA	005	15	18	D	D	MM				



Squid Damage



Shark Damage

Code	Common Name	Code	Common Name	Code	Damage	Measure fish logged on lines (1, 4, 7, 10, and 13). For other fish is measured, provide measurement codes with indicating out of protocol.	
001	Yellowfin Tuna	dNG	Black-Footed Albatross	BD	Bird Damage	AL	Approximate Fork Length
002	Skipjack Tuna	dIM	Laysan Albatross	CC	Cookie Cutter damage	FL	Fork Length (cm)
005	Albacore Tuna	aVE	Bird, Unidentified	CO	Other Damage, see comments	EF	Eye to Fork (cm)
916	Bigeye Tuna			MM	Marine mammal damage	CI	Clasper Inset Length
091	Swordfish	CC	Loggerhead Sea Turtle	SB	Shark damage to body	PC	Pre-Caudal Measurement Protocols
092	Striped Marlin	LV	Olive Ridley Sea Turtle	SH	Shark damage - Head on hook	Tunas, Opahs, Pomfrets	
094	Shortbill Spearfish	DC	Leatherback Sea Turtle	ST	Shark damage to tail	Sharks: FL, PC, CI	
147	Bigeye Thresher Shark	CM	Green Sea Turtle	SQ	Squid damage	Bilfish: EF	
167	Blue Shark	UH	Unid. Hard Shell Sea Turtle	UN	Undetermined source of damage		
013	Smith's Escolar			UO	Unobserved		
057	Wahoo	PC	False Killer Whale	ND	Observation shows No Damage		
295	Snake Mackerel	GG	Risso's Dolphin				
457	Opah	CM	Shortfinned Pilot Whale				
908	Sickle Pomfret	UV	Unid. Cetacean				
909	Lancetfish	TT	Bottlenose Dolphin				
914	Dolphinfish	MN	Humpback Whale				

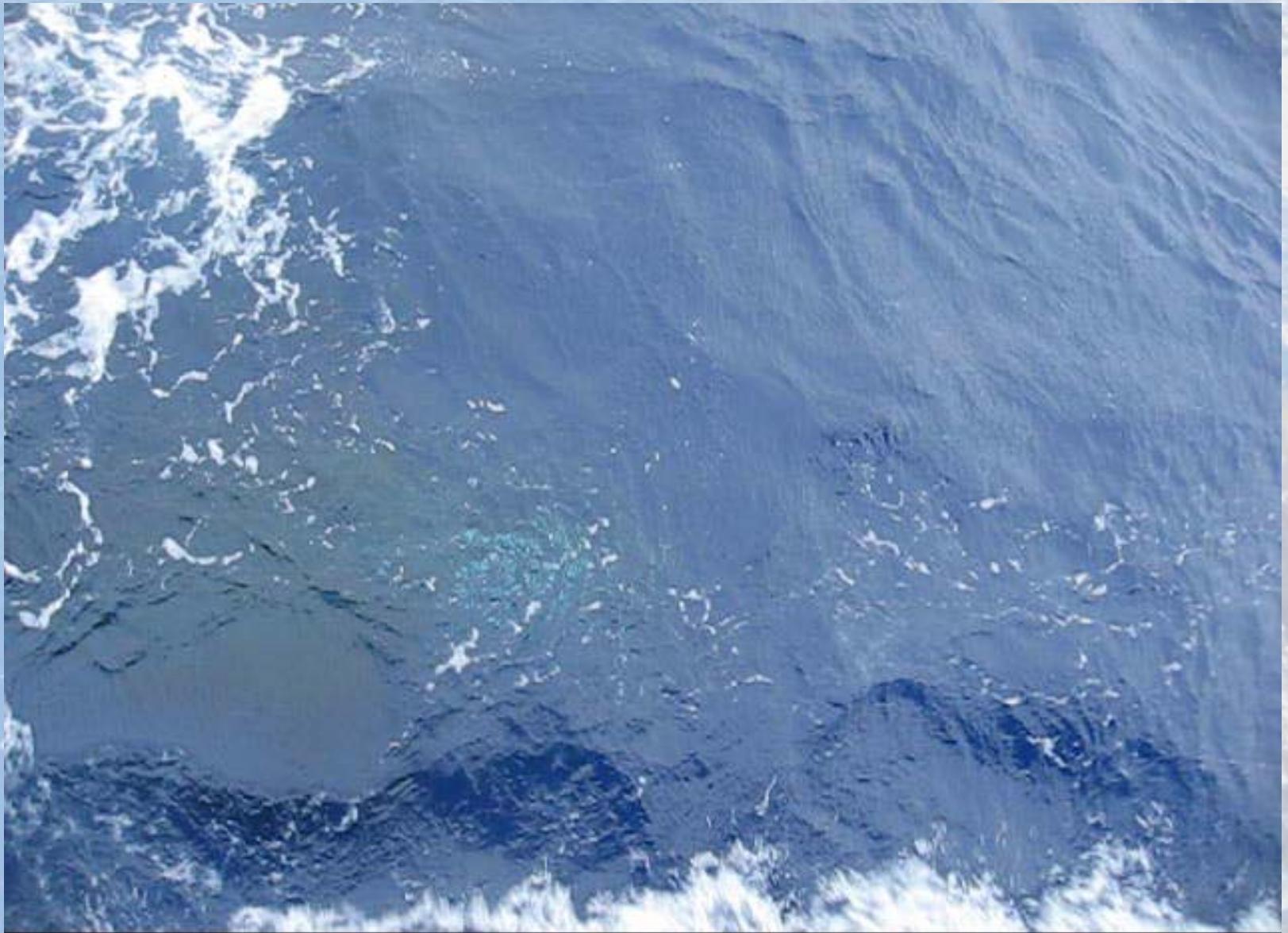
Note: Code CO must have comments but others may need comments also.

Depredation of Catch

False killer whale prey includes target species, e.g. Tunas (Ahi, Aku, & Tombo), Billfish, Dolphinfish (Mahi mahi), Wahoo (Ono), Pomfret (Monchong), and Opah

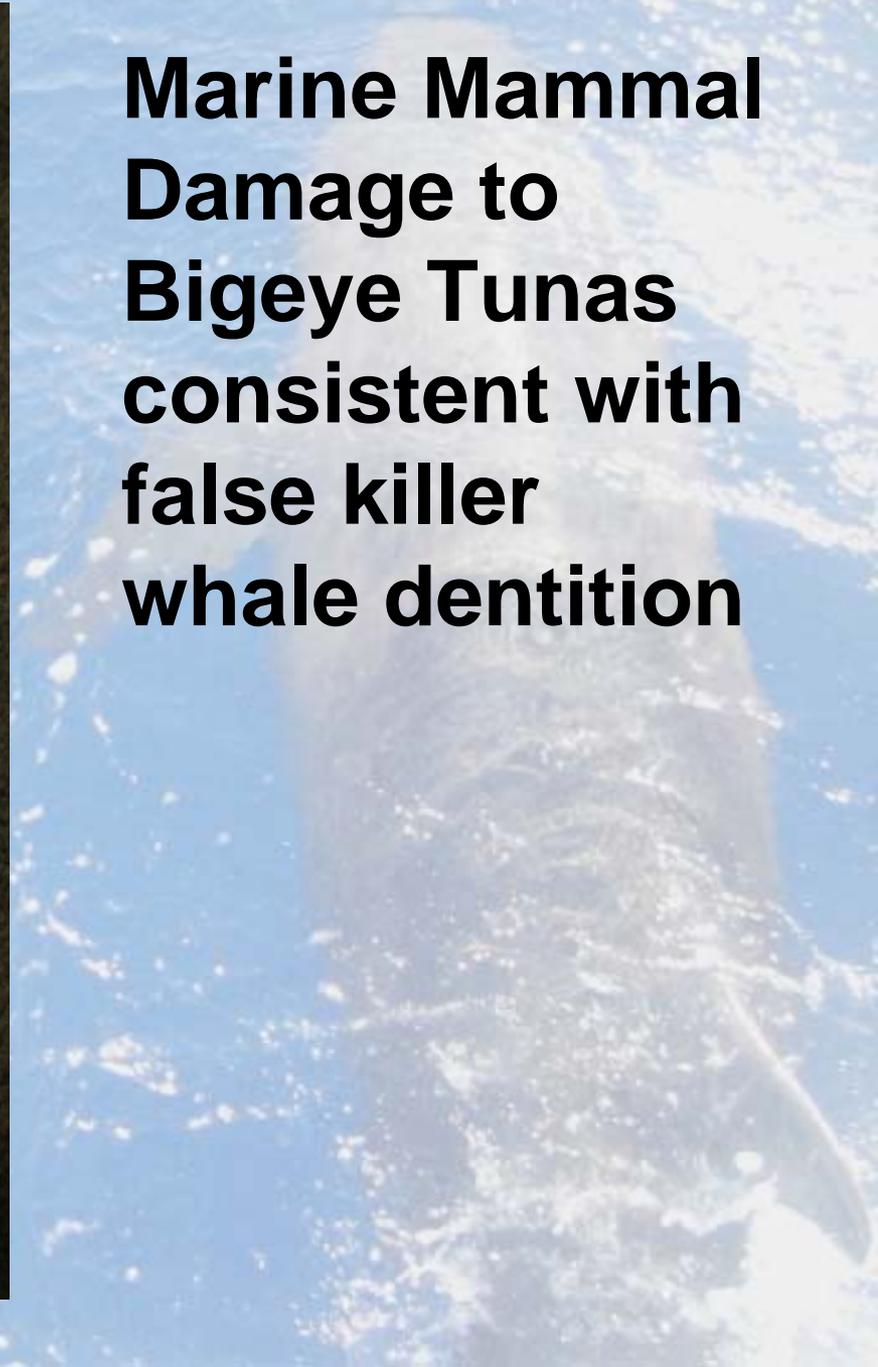


Since 2005, about 1.15% of the tunas landed on observed trips showed signs of marine mammal damage





**Marine Mammal
Damage to
Bigeye Tunas
consistent with
false killer
whale dentition**



Observers are taught handling and release tactics and encouraged to pass them on to the crews



**Of the 42 Interactions, 25 were photographed / filmed,
6 produced a biological specimen,
and 4 secured both a specimen and photo / video**



Thank You.

**Photos Courtesy: Observers in
the Pacific Islands Region
Observer Program**

