

Estimated Captures of Sea Turtles in the Bottom Longline Portion of the Eastern Gulf of Mexico Reef Fish Fishery

July 2006 through December 2007
Based on Observer Data



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From: Southeast Fisheries Science Center. 2008. Estimated takes of sea turtles in the bottom longline portion of the Gulf of Mexico reef fish fishery July 2006 through 2007 based on observer data. NMFS Southeast Fisheries Science Center Contribution PRD-07/08-15, September 2008, 21p.

<http://www.sefsc.noaa.gov/seaturtleunpublishedreports.jsp>

Reef Fish Fishery Bycatch Overview for the Eastern GOM

Total effort

Coastal logbook data – self-reported trip-based effort data

Catch rates

Observer data – by set, stratified

Shark bottom longline observer program (SBLOP)

Reef fish observer program (RFOP)

Eastern GOM estimated captures

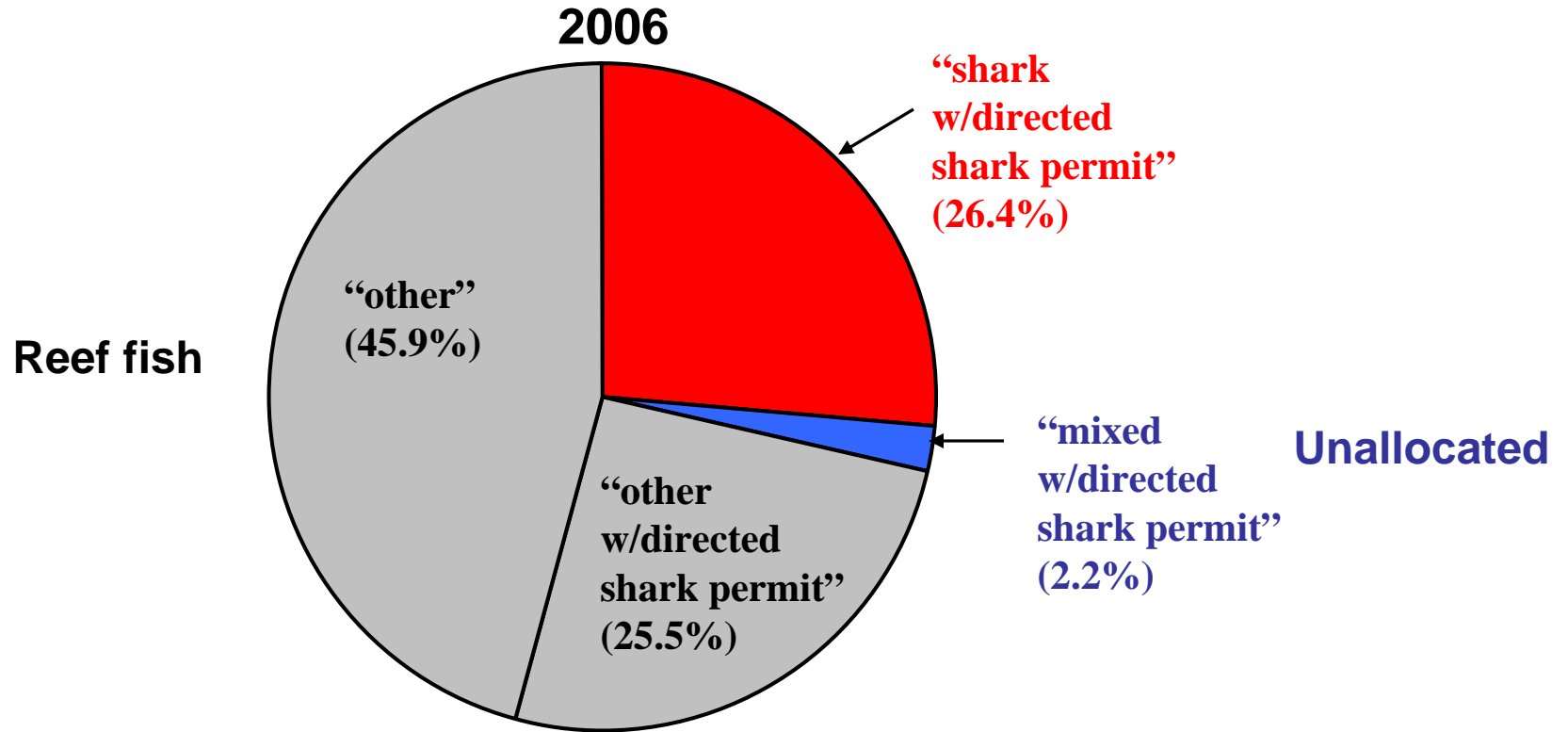
(July 2006 thru Dec. 2007, 18 months)

All hardshell sea turtles 902 (410 -1983)

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Bottom Longline Trips: Effort allocation based on landings



Shark directed = “shark w/directed shark permit”

**Reef fish = “other” – no directed shark permit
+ “other w/directed shark permit”**

Unallocated = “mixed” – neither shark directed nor reef fish

Percent Observed Effort (n) in Eastern GOM

Observed trips

Year	Season	SBLOP	RFOP
2006	July - Dec.	0.8 (1.6)	2.2 (12)
2007	Jan. – June	1.7 (5.0)	0.8 (5)
2007	July – Dec.	2.1 (3.9)	1.5 (6)

Observed sets

Year	Season	SBLOP	RFOP
2006	July – Dec.	0.7 (27)	1.7 (200)
2007	Jan. – June	1.8 (99)	0.4 (54)
2007	July – Dec.	2.2 (79)	1.0 (100)

Observed hooks

Year	Season	SBLOP	RFOP
2006	July – Dec.	0.8 (40606)	1.5 (203300)
2007	Jan. – June	1.6 (113311)	0.7 (111175)
2007	July – Dec.	1.8 (85793)	0.8 (96825)

Observed Sea Turtle Summary for Eastern GOM

Approximately 1% of the total fishery bottom longline effort was observed

18 Sea turtle captures were observed (8 released alive) between July 2006 and Dec. 31, 2007

16 were loggerhead sea turtles

2 were unidentified hardshell sea turtles

24% of observed trips captured sea turtles

(8 trips captured sea turtles of the 33 total observed trips)

3% of observed sets captured sea turtles

(16 sets captured sea turtles of the 559 total observed sets)

Sea Turtle Catch in Eastern GOM by Observer Program

Year	Month	Trip	Set	Hooks	Gangion Length (ft)	Depth (Fathoms)	Number Captured	Observer Program
2006	July	1	1	2077	9	21	1	SBLOP
2006	July	1	5	1815	9	21	1	SBLOP
2006	July	1	6	754	9	23	1	SBLOP
2006	July	1	11	1981	9	24	1	SBLOP
2006	July	1	17	1929	9	28	2	SBLOP
2006	July	1	21	1964	9	28	1	SBLOP
2006	Aug.	2	5	1500	3	20	1	RFOP
2006	Aug.	3	1	1400	5.5	23	2	RFOP
2007	April	4	1	2400	8	53	1	RFOP
2007	June	5	4	2500	10	32	1	RFOP
2007	June	5	5	2500	10	35	1	RFOP
2007	June	5	16	2500	10	25	1	RFOP
2007	July	6	8	1475	6	37	1	RFOP
2007	July	6	15	1475	6	32	1	RFOP
2007	Aug.	7	7	650	3	22	1	RFOP
2007	Sept.	8	3	1100	8	40	1	SBLOP

Estimated Total Hardshell Sea Turtle Captures in the Eastern GOM

Year	Season	Captures	95% CI
SBLOP			
2006	July - Dec.	837	391 - 1,789
2007	Jan. – June	0	-
2007	July - Dec.	56	11 – 285
Sum SBLOP stratified		892	433 - 1,839
RFOP			
2006	July - Dec.	143	39 – 531
2007	Jan. – June	467	189 – 1150
2007	July - Dec.	346	114 – 1043
Sum RFOP stratified		955	545 – 1671
Mean sum stratified (weighted)		902	411 – 1983