

ADVICE TO: EXECUTIVE DIRECTOR, PIRSA FISHERIES AND AQUACULTURE
(PROF. GAVIN BEGG)

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SUBJECT: WILDLIFE INTERACTION REPORTING ACROSS SOUTH
AUSTRALIAN FISHERIES 2021/22

DATE: 14 JUNE 2023

KEY ISSUES:

- A policy for reporting wildlife interactions with any threatened, endangered, and protected species (TEPS) covered by Part 13 of the *Environment Protection and Biodiversity Conservation Act 1999* within commercial fisheries was introduced by PIRSA Fisheries and Aquaculture in July 2007. SARDI Aquatic Sciences has been designated the responsibility to collect, collate, and enter these interactions and report to PIRSA Fisheries.
- This advice note outlines protected species interactions reported in South Australian Managed Fisheries, Wildlife Interaction Forms (WIFs) for the period 1 July 2021 to 30 June 2022.

BACKGROUND:

As part of the ongoing requirements under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*, from 1 July 2007 licence holders in all South Australian fisheries are required to report any interactions with listed TEPS that occur during fishing operations. Species listed under the EPBC Act include all marine mammals and seabirds, marine and freshwater reptiles, and some protected fish species, including White Sharks and Syngnathids (seahorses, pipefish).

In addition to reporting requirements under the EPBC Act, US Government legislation requires nations importing seafood into the US to demonstrate that they have a regulatory program for reducing impacts on marine mammal comparable in effectiveness to the US standards. To comply with US standards, the new rule under the United States *Marine Mammal Protection Act 1972* (MMPA) requires reasonable proof from the government of any nation from which fish or fish products will be exported to the United States of the effects on ocean mammals of the commercial fishing technology in use in the fishery from which that product derives. As part of these requirements, a summary of marine mammal interactions with South Australian managed fisheries across six financial years, by fishery and marine mammal species is provided.

A Wildlife Interactions Reporting Logbook is provided to all licence holders to ensure all interactions are correctly reported. If any interaction occurs, a Wildlife Interactions Form (WIF) must be filled out on the day of the interaction and sent with the commercial fishing log to SARDI Aquatic Sciences, Fisheries - Information Services unit. SARDI Aquatic Sciences collect, collate, and enter these interactions and report information to PIRSA Fisheries and Aquaculture.

RESULTS/DISCUSSION:

Summaries of the protected species interactions reported in South Australian Managed Fisheries, WIFs for the period 1 July 2021 to 31 June 2022 are attached.

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Protected species interactions reported in South Australian Managed Fisheries, Wildlife Interaction Forms (WIFs), for the period 1 July 2021 to 30 June 2022.

Section 1. Reported TEPS interaction events (in brackets are individuals involved) for each South Australian managed fishery from 1 July 2021 to 30 June 2022.

Fishery	Cetacean	Pinniped	Bird	Reptile	Fish	Total
Abalone						
Blue Crab						
Charter Boat						
Lakes & Coorong		163 (596)				163 (596)
Marine Scale					1 (1)	1 (1)
Prawn - GSV						
Prawn - SG					19 (52)	19 (52)
Prawn - WC						
Rock Lobster - Nth Zone						
Rock Lobster - Sth Zone						
Sardine Fishery	110 (395)	3 (4)	1 (8)		5 (5)	119 (412)
Total	110 (395)	166 (600)	1 (8)		25 (58)	302 (1061)

Section 2. Reported TEPS interaction events (and individuals involved) – indicating interaction type, life status and fate – for South Australian managed fisheries from 1 July 2021 to 30 June 2022.

Group	Common name	Events	Individuals	Interaction type		Life status		Fate		
				Caught/ entangled/ impacted	Other	Alive (may be injured)	Dead	Released	Retained	Other
Cetacean	Common dolphin	109	394	5	389	391	3	391	2	1
	Southern right whale	1	1		1	1		1		
Pinniped	Long-nosed fur seal	164	598		598	598				598
	Australian sea lion	2	2		2	2				2
Fish	Great white shark	6	6	2	4	5	1	5	1	
	Pipefish	14	45	45		45		45		
	Seahorse	4	6	6		6		6		
	Leafy sea-dragon	1	1	1		1		1		
Bird	Shearwater	1	8	8			8			8
All		302	1061	67	994	1049	12	449	3	609

Section 3. Reported TEPS individuals interacting with each South Australian managed fishery – indicating interaction type, life status and fate – from 1 July 2021 to 30 June 2022.

No interactions reported with Abalone, Blue Crab, Charter Boat, Prawn - Gulf St Vincent & West Coast, and Rock Lobster - Northern Zone & Southern Zone.

Lakes & Coorong

Group	Species' common name	Individuals	Interaction type		Life status				Fate		
			Caught/ entangled/ impacted	Other	Alive uninj.	Alive injured	Dead	Unknown	Released/ discarded	Retained	Other
Mammal	LONG-NOSED FUR SEAL	596		596	596						596
	All taxa	596		596	596						596

The total sums the fisher's daily estimates of seals damaging gill-nets and removing fish. One fisher estimated 5 seals each day for 96 days and 1 seal on 1 day (total 481 seals, 81% of the individuals). Other entries (n=66) averaged 1.7 seals per day (range 1 to 7).

Marine Scale

Group	Species' common name	Individuals	Interaction type		Life status				Fate		
			Caught/ entangled/ impacted	Other	Alive uninj.	Alive injured	Dead	Unknown	Released/ discarded	Retained	Other
Fish	GREAT WHITE SHARK	1	1			1			1		
	All taxa	1	1			1			1		

Caught on hand-line, released hook still in mouth – estimated 3 m long.

Prawn – Spencer Gulf

Group	Species' common name	Individuals	Interaction type		Life status				Fate		
			Caught/ entangled/ impacted	Other	Alive uninjured	Alive injured	Dead	Unknown	Released/ discarded	Retained	Other
Fish	PIPEFISH	45	45		45				45		
Fish	SEA HORSE	6	6		6				6		
Fish	LEAFY SEADRAGON	1	1		1				1		
	Total	52	52		52				52		

Almost half the fish (24) were recorded during survey shots.

Sardine

Group	Species' common name	Individuals	Interaction type		Life status				Fate		
			Encircled (caught/ other)	Entangled	Alive uninj.	Alive injured	Dead	Unknown	Released/ discarded	Retained	Other
Mammal	COMMON DOLPHIN ^a	394	391	3	391		3		391	2	1
Mammal	SOUTHERN RIGHT WHALE ^b	1	1		1				1		
Mammal	LONG-NOSED FUR SEAL ^c	2	2		2				2		
Mammal	AUSTRALIAN SEA LION ^c	2	2		2				2		
Bird	SHEARWATER ^d	8		8			8		8		
Fish	GREAT WHITE SHARK	5	5		4		1		4	1	
	Total	412	401	11	400		12		408	3	

a. Some records were 'dolphin': the only dolphin species associating with the fishery has been the common dolphin.

b. Southern Right Whale encircled by purse-seine net on 26 Nov. 2021 off bottom of Eyre Peninsula. Shot was aborted and whale released unharmed.

c. Seals feeding on sardines can jump over the cork-line in and out of purse-seine nets.

c. Most likely these were short-tailed shearwaters, *Ardenna tenuirostris*, which can be abundant around purse-seine nets.

Section 4. Reported marine mammal interactions by financial year, fishery, common name, interaction type, life status and fate – for all South Australian managed fisheries in the period 1 July 2016 to 30 June 2022 (those in 2021/22 are shaded).

Fin. year	Fishery	Group	Common name	No.	Interaction			Status			Fate			
								Alive		Dead				
					Encircled	Entangled	Other	Uninjured	Injured		Released	Retained	Discarded	Other
2016/17	Lakes and Coorong	PINNIPED	LONG-NOSED FUR SEAL	1781 ^a			1781	1779	2					1781
2017/18	Lakes and Coorong	PINNIPED	LONG-NOSED FUR SEAL	2771 ^a			2771	2771						2771
2018/19	Lakes and Coorong	PINNIPED	LONG-NOSED FUR SEAL	2719 ^a			2719	2719						2719
2019/20	Lakes and Coorong	PINNIPED	LONG-NOSED FUR SEAL	1473 ^a			1473	1473						1473
2020/21	Lakes and Coorong	PINNIPED	LONG-NOSED FUR SEAL	1062 ^a			1062	1062						1062
2021/22	Lakes and Coorong	PINNIPED	LONG-NOSED FUR SEAL	596 ^a			596	596						596
2016/17	Sardine	CETACEAN	COMMON DOLPHIN	201	201			199	1	1	200		1	
2017/18	Sardine	CETACEAN	COMMON DOLPHIN	331	327	4		328	3		331			
2018/19	Sardine	CETACEAN	COMMON DOLPHIN	362	355	7		346	7	9	353	3	5	1
2019/20	Sardine	CETACEAN	COMMON DOLPHIN	461	456	5		456	1	4	457	3		1
2020/21	Sardine	CETACEAN	COMMON DOLPHIN	423	413	10		413	5	5	418	4		1
2021/22	Sardine	CETACEAN	COMMON DOLPHIN	394	391	3		391		3	391	2		1
2021/22	Sardine	CETACEAN	SOUTHERN RIGHT WHALE ^b	1	1			1			1			
2016/17	Sardine	PINNIPED	AUSTRALIAN SEA LION	1	1			1			1			
2017/18	Sardine	PINNIPED	LONG-NOSED FUR SEAL	2	2			2			2			
2020/21	Sardine	PINNIPED	FUR SEAL ^c	2	1	1		2			2			
2021/22	Sardine	PINNIPED	AUSTRALIAN SEA LION	2	2			2			2			
2021/22	Sardine	PINNIPED	LONG-NOSED FUR SEAL	2	2			2			2			
2019/20	South Zone Rock Lobster	CETACEAN	HUMPBACK WHALE ^d	1		1		1	1		1			
2016/17	Spencer Gulf Prawn	CETACEAN	DOLPHIN ^d	1			1			1				1

a. Estimates of seals/night ranged up to 40.

b. Southern Right Whale encircled by purse-seine net on 26 Nov. 2021 off bottom of Eyre Peninsula. Shot was aborted and whale released unharmed.

c. Recorded as Australian fur seals, which are uncommon in SA. Most likely were long-nosed fur seals or Australian sea lions.

d. Humpback whale event 18 Nov. 2019: fisher reported whale entangled in one of his pot ropes. Pot was stuck. Cut pot free and whale swam off.

d. Dolphin hit by propeller (species not identified).