

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

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SUBJECT: WILDLIFE INTERACTION REPORTING ACROSS SOUTH
AUSTRALIAN FISHERIES 2020/21

DATE: 22 APRIL 2022

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 2020 to 30 June 2021.

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 Sygnathids (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 2020 to 31 June 2021 are attached

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Protected species interactions reported in South Australian Managed Fisheries, Wildlife Interaction Forms (WIFs), for the period 1 July 2020 to 30 June 2021.

Section 1. Reported TEPS interactions (and individuals involved) for each South Australian managed fishery from 1 July 2020 to 30 June 2021.

Fishery	Cetacean	Pinniped	Bird	Reptile	Fish	Total
Abalone					1 (1)	1 (1)
Blue Crab						
Charter Boat						
Lakes & Coorong		291 (1062)	1 (2)			292 (1064)
Marine Scale						
Prawn - GSV						
Prawn - SG					34 (57)	34 (57)
Prawn - WC						
Rock Lobster - Nth Zone						
Rock Lobster - Sth Zone						
Sardine Fishery	133 (423)	2 (2)			1 (1)	136 (426)
Total	133 (423)	293 (1064)	1 (2)		36 (59)	463 (1548)

Section 2. Reported TEPS interactions (and individuals involved) – indicating interaction type, life status and fate – for South Australian managed fisheries from 1 July 2020 to 30 June 2021.

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 ^a	133	423	10	413	418	5	418	4	1
Pinniped	Fur seal ^b	2	2	2		2		2		
	Long-nosed fur seal	291	1062		1062	1062				1062
Fish	Great white shark	3	3	1	2	3		1		2
	Pipefish	19	41	41		41		41		
	Seahorse	14	15	15		15		15		
Bird	Cormorant ^c	1	2	2			2			2
All		463	1548	372	1176	1541	7	479	4	1065

- a. Some recorded as 'dolphin', the only species associating with the fishery has been the common dolphin. Dolphins usually encircled without contacting the net (recorded by fishers as 'caught' or 'other'), a few become entangled in net.
- b. Recorded as Australian fur seals which are rare in the area. Probably long-nosed fur seals or Australian sea lions.
- c. Cormorants are not protected species.

Section 3. Reported TEPS individuals interacting with each South Australian managed fishery – indicating interaction type, life status and fate – from 1 July 2020 to 30 June 2021.

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

Abalone

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

The 2m shark was sighted by a diver while diving at 26 m depth.

Lakes & Coorong

Group	Species' common name	Individuals	Interaction type		Life status			Fate		
			Caught/ entangled/ impacted	Other	Alive, alive/ injured	Dead	Unknown	Released/ discarded	Retained	Other
Mammal	LONG-NOSED FUR SEAL	1062		1062	1062					1062
Bird	CORMORANT	2	2			2		2		
	All taxa	1064	8	1056	1062	2		2		1062

Long-nosed fur seal numbers sum fishers' daily estimates of seals damaging gillnets and removing fish. One logbook record noted 6 seals 'caught', however, no seals have been caught in this fishery and the record was considered a mis-entry. The average estimate was 4 seals interacting per day, one fisher reported 5 seals every day, and the maximum was 10 seals reported in a single day.

Although 'cormorant' (pied cormorant identified by an observer that was present) was recorded, cormorants are not protected species.

Prawn – Spencer Gulf

Taxa group	Species' common name	Individuals	Interaction type		Life status			Fate		
			Caught/ entangled/ impacted	Other	Alive, alive/ injured	Dead	Unknown	Released/ discarded	Retained	Other
Fish	GREAT WHITE SHARK	1	1		1			1		
	PIPEFISH	41	41		41			41		
	SEA HORSE	15	15		15			15		
	Total	57	57		57			57		

The shark species was not confirmed. Almost half the pipefish/seahorses (26) were recorded during survey shots.

Sardine

Taxa group	Species' common name	Individuals	Interaction type		Life status			Fate		
			Encircled (caught/ other)	Entangled	Alive, alive/ injured	Dead	Unknown	Released/ discarded	Retained	Other
Mammal	COMMON DOLPHIN	423	413	10	418	5		418	4	1
Mammal	FUR SEAL	2	1	1	2			2		
Mammal	GREAT WHITE SHARK	1	1 (other)		1					1
	Total	426	415	11	421	5		420	4	2

All dolphins were assumed to be common dolphins. The only other dolphin in the region (bottlenose dolphin) has not been recorded to associate with this fishery (also see [Kirkwood and Goldsworthy 2021](#)). Dolphins are encircled by purse-seine nets (recorded as 'caught' or 'other'), and most are released without coming into contact with the net. Net shots are aborted when dolphins are sighted.

Fur seals were recorded as Australian fur seals, but were most likely the more common long-nosed fur seals or Australian sea lions. Seals, mostly long-nosed fur seals, often jump in and out of purse-seine nets taking sardines, and are not routinely reported by this fishery.

The great white shark came from outside the net and bit a hole in the net.

Section 4. Reported marine mammal interactions - by financial year (F/Y), fishery, common name, interaction type, life status and fate - for all South Australian managed fisheries in the period 1 July 2015 to 30 June 2021.

Fin. Year	Fishery	Group	Common name	No.	Interaction			Status			Fate				Summary			
					Encircled	Entangled	Other	Alive	Dead	Injured	Released	Retained	Discarded	Other	Mortality	Released injured	Released uninjured	
2015/16	Lakes and Coorong Fishery	PINNIPED	LONG-NOSED FUR SEAL	2393 ^a			2393	2393							2393			2393
2016/17	Lakes and Coorong Fishery	PINNIPED	LONG-NOSED FUR SEAL	1781 ^a			1781	1779		2					1781		2	1779
2017/18	Lakes and Coorong Fishery	PINNIPED	LONG-NOSED FUR SEAL	2771 ^a			2771	2771							2771			2771
2018/19	Lakes and Coorong Fishery	PINNIPED	LONG-NOSED FUR SEAL	2719 ^a			2719 ^b	2719							2719			2719
2019/20	Lakes and Coorong Fishery	PINNIPED	LONG-NOSED FUR SEAL	1473 ^a			1473	1473							1473			1473
2020/21	Lakes and Coorong Fishery	PINNIPED	LONG-NOSED FUR SEAL	1062 ^a			1062	1062							1062			1062
2015/16	Sardine Fishery	CETACEAN	COMMON DOLPHIN	195	189	6		192	1	2	186	1			8	1	2	192
2016/17	Sardine Fishery	CETACEAN	COMMON DOLPHIN	201	201			199	1	1	200		1			1	1	199
2017/18	Sardine Fishery	CETACEAN	COMMON DOLPHIN	331	327	4		328		3	331						3	328
2018/19	Sardine Fishery	CETACEAN	COMMON DOLPHIN	362	355	7		346	9	7	353	3	5	1	9	7	346	
2019/20	Sardine Fishery	CETACEAN	COMMON DOLPHIN	461	456	5		456	4	1	457	3		1	4	1	456	
2020/21	Sardine Fishery	CETACEAN	COMMON DOLPHIN	423	413	10		413	5	5	418	4		1	5	5	413	
2016/17	Sardine Fishery	PINNIPED	AUSTRALIAN SEA LION	1	1			1			1							1
2017/18	Sardine Fishery	PINNIPED	LONG-NOSED FUR SEAL	2	2			2			2							2
2020/21	Sardine Fishery	PINNIPED	FUR SEAL ^c	2	1	1		2			2							2
2019/20	Southern Zone Rock Lobster	CETACEAN	HUMPBACK WHALE ^d	1		1				1	1							1
2016/17	Spencer Gulf Prawn Fishery	CETACEAN	DOLPHIN ^e	1			1		1						1	1		

a. Seal numbers are estimates by fishers of the number that, overnight, damage their nets/ take fish. Estimates have ranged from 1 to 100 per night.

Estimates >5-10 would have been over-estimates. Larger over-estimates have reduced over time.

b. Five seals had been mis-entered as dolphins (comments indicated these were long-nosed fur seals).

c. Recorded as Australian fur seals – most likely long-nosed fur seals or Australian sea lions. More seal interactions occur (enter and leave purse-seine nets over the cork line – take fish), but are not routinely recorded.

d. Humpback whale was sighted entangled in rope to a lobster pot. The pot was cut free and the whale swam off.

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