

## Supplement 2

Table S1. See Supplement 1 ([www.int-res.com/articles/suppl/d156p099\\_suppl1.xlsx](http://www.int-res.com/articles/suppl/d156p099_suppl1.xlsx))

Table S2. External features examined, with classifications and methods used, for *Delphinus delphis* collected from the South Australian Sardine Fishery 2006–2019. Authors involved in assessments are indicated by their initials. Feature terminology is consistent with Moore and Barco (2013).

Feature	Rating	Evidence	Source
Bruising	mild, moderate, severe	Rated by colour intensity and swelling, focal or extensive, by body region. Recorded by pencil shading (darkness indicated severity) on body outline diagram at time of necropsy. DH, TS, IT	Kuiken (1996), Moore et al. (2013)
Lesions	deep, superficial, broken/missing teeth:	Cuts, lacerations, penetrating wounds, unidentified marks, net marks, counts of broken/missing teeth, by body region. Present (number not recorded), present (1–10 teeth), present (>10 teeth). CK, DH, IT, TS	Kuiken et al. (1994), Kuiken et al. (1996), Parsons and Jefferson (2000), Read and Murray (2000), Moore and Barco (2013), Wenzel et al. (2016)
Tooth rakes	few, many	Unhealed parallel incisions at spacing consistent with <i>Delphinus</i> tooth rows, by body region. Few = few and not extensive on body, many = many and extensive over body. CK, GB	Moore and Barco (2013)
Body condition	robust, slightly emaciated, very emaciated	Presence/absence of a dorsal concavity behind head; of a concavity along dorso-lateral surface of the body; of convexities where the transverse processes of caudal vertebrae located along peduncle; clear convexities at ribs. CK, IT	Kemper et al. (2016)

Table S3. Internal features examined, with classifications and methods used (primarily by gross pathology), for *Delphinus delphis* captured in the South Australian Sardine Fishery 2006–2019. \*Includes gross and histopathological findings.

Feature	Rating	Evidence	Source
Haemorrhage	mild, moderate, severe	Pre- or ante-mortem based on surrounding tissue colour and swelling, superficial/deep, focal/extensive, by body region. Recorded by pencil shading (darkness indicated severity) on body outline diagram at time of necropsy. Mild, moderate, severe. DH, TS, IT.	Baker (1996), Kuiken et al. (1994), Read and Murray (2000), Moore et al. (2013)
Body cavity accumulated fluid	present (amount not recorded), mild, moderate, copious	Relative amount of blood-coloured fluid in thorax and abdomen. Mild = small amount when cavity cut, moderate = considerable amount when cavity cut, copious = fluid gushes out when cavity cut. IT, TS, CK.	none
Respiratory contents*	present (amount not recorded), mild, moderate, copious	Trachea, bronchi and lungs examined for fluid and froth, colour noted. Trachea: mild = small amount of fluid/froth present, moderate = considerable amount of fluid/froth present, copious = fluid/froth filled the trachea. Lungs: mild = small amount of fluid/froth exuded from bronchial airways, moderate = considerable amount of fluid/froth exuded from bronchi, copious = fluid/froth gushed out when incised. IT	Kuiken et al. (1994), Baker (1996), Garcia-Hartmann et al. (1996), Kuiken (1996), Lipscomb (1996), Parsons and Jefferson (2000), Read and Murray (2000), Moore et al. (2013)
Stomach/oesophageal contents	present, absent	Intact and/or partially-digested (including bones, without flesh) prey in oesophagus and stomach, milk-like substance noted. SG	Baker (1996), Garcia-Hartmann et al. (1996), Kuiken (1996), Kuiken et al. (1996), Lipscomb (1996), Parsons and Jefferson (2000), Read and Murray (2000), Moore et al. (2013)
Recent fractures	absent/present, focal/extensive	Incomplete and complete recent fractures counted, by body region. Focal = confined to one or two adjacent regions, extensive = numerous and found in several regions. IT	Kuiken et al. (1994), Kuiken (1996), Moore et al. (2013), Wenzel et al. (2016)

Table S4. Summary of external bruising recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Body region	Absent	Present (unknown)	Mild	Moderate	Severe	Total present
Head/neck	12	16	9	0	12	37 (75%)
Urogenital	27	6	6	2	8	22 (45%)
Peduncle	37	1	6	1	4	12 (24%)
Flipper/scapula	39	4	3	1	2	10 (20%)

Table S5. Summary of external lesions (broken/missing teeth) recorded in common dolphins (*Delphinus delphis*) that died in South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N= 49.

Absent	Present (unknown no.)	1–10	11–42	Total present
17	1	15	16	32 (65%)

Table S6. Summary of external lesions (cuts and grazes, superficial/deep) recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Absent	Present	Head	Flippers	Trunk	Dorsal fin	Peduncle/flukes
3	46 (94%)	38	24	24	15	28

Table S7. Summary of external lesions (net marks) recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Absent	Present	Comments
11	38 (77%)	mostly on trunk, head and peduncle

Table S8. Summary of recent tooth rakes in all body regions recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Absent	Present (unknown)	Few	Many	Total present
5	1	25	18	44 (90%)

Table S9. Summary of the subdermal haemorrhage recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Body region	Absent	Present (unknown)	Mild	Moderate	Severe	Total present
Head	0	2	2	1	44	49 (100%)
Thorax/abdomen	10	9	8	7	15	39 (79%)
Flippers/scapulae	3	2	4	9	31	46 (94%)
Peduncle	17	5	12	3	12	32 (65%)

Table S10. Relative amount of accumulated fluid in body cavities (thorax and abdomen) recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. N = 49.

Body region	Absent	Present (unknown)	Mild	Moderate	Copious	Total present
Thorax	11	3	8	8	19	38 (77%)
Abdomen	5	3	5	16	20	44 (90%)

Table S11. Summary of lung contents (fluid, froth and air) recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Type	Absent	Present (unknown)	Mild	Moderate	Copious	Total present
Fluid	1	8	8	2	30	49 (100%)
Froth	30	0	14	0	5	19 (39%)
Air	17	2	16	0	14	32 (65%)

Table S12. Summary of tracheal contents recorded in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 49.

Type	Absent	Present (unknown)	Mild	Moderate	Copious	Total present
Fluid	47	1			1	2 (4%)
Froth	47	1	1			2 (4%)

Table S13. Summary of indicators of stress in heart tissue examined histologically in common dolphins (*Delphinus delphis*) that died in the South Australian Sardine Fishery 2006–2019. Numbers are of dolphins in each category. N = 24.

	Hyalinised fibres	Wavy fibres	Perinuclear vacuoles	Contraction banding
Number of dolphins	10	17	0	1

Table S14. Comparison of SASF evidence of interaction with other studies. Definitions of prevalence for this study: most/all cases = 90–100%, many cases = 50–89%, some cases = <50%. Information from other studies was limited to small cetaceans. Confirmed, probable and suspect ratings were applied by Jepson et al. (2013). Supportive = evidence not considered diagnostic.

Feature/circumstance	This study (cases)	Other studies	Source
Reported by Fisheries Officer	all	<ul style="list-style-type: none"> <li>confirmed entanglement/entrapment</li> </ul>	Jepson et al. (2013)
<u>External features</u>			
Bruising	most/all	<ul style="list-style-type: none"> <li>difficult to identify</li> <li>highly probable (peri-mandibular, other body regions)</li> </ul>	Read & Murray (2000) Jepson et al. (2013)
Lesions (teeth)	many	<ul style="list-style-type: none"> <li>many cases of missing teeth</li> <li>broken teeth (not rated)</li> </ul>	Kuiken (1996) Jepson et al. (2013)
Lesions (cuts/grazes)	most/all	<ul style="list-style-type: none"> <li>usually on head</li> <li>abrasions on rostrum (purse-seine)</li> <li>confirmed/probable (but trawl cases have few)</li> </ul>	Moore & Barco (2013) Read & Murray (2000) Jepson et al. (2013)
Lesions (net marks)	many	<ul style="list-style-type: none"> <li>present</li> <li>braided rope impressions on head and extremities</li> <li>confirmed/probable but not always present</li> </ul>	Moore & Barco (2013) Read & Murray (2000) Jepson et al. (2013)
Lesions (tooth rakes)	most/all	<ul style="list-style-type: none"> <li>natural marks</li> </ul>	Moore & Barco (2013) Read & Murray (2000)
Robust body condition	most/all	<ul style="list-style-type: none"> <li>many cases, supportive</li> <li>not diagnostic</li> <li>confirmed/probable/suspect</li> </ul>	Kuiken et al. (1994) Kuiken (1996) Jepson et al. (2013)

<u>Internal features</u>			
Subdermal haemorrhage	most/all	<ul style="list-style-type: none"> <li>• associated with lesions</li> <li>• mandibles, occipital condyles, other regions</li> <li>• head/neck in 50% of purse-seine cases</li> <li>• blunt trauma in many trawl cases</li> <li>• probable</li> </ul>	<p>Moore and Barco (2013)                      Kuiken (1994)                      Read and Murray (2000)                      Kuiken (1996)                      Jepson et al. (2013)</p>
Accumulated fluid in body cavities	many		
Fluid in lungs	most/all	<ul style="list-style-type: none"> <li>• incomplete lung collapse</li> <li>• rarely noted (not diagnostic)</li> <li>• sea water absent</li> <li>• oedema (suspect)</li> </ul>	<p>Kuiken et al. (1994)                      Read and Murray (2000)                      Kuiken (1996)                      Jepson et al. (2013)</p>
Froth in lungs/bronchi/trachea	some	<ul style="list-style-type: none"> <li>• present (supportive)</li> <li>• present</li> <li>• present (not diagnostic)</li> <li>• most cases</li> <li>• present (suspect)</li> </ul>	<p>Moore and Barco (2013)                      Kuiken et al. (1994)                      Read and Murray (2000)                      Kuiken (1996)                      Jepson et al. (2013)</p>
Recent fractures	some	<ul style="list-style-type: none"> <li>• skull</li> <li>• many in mandible, flippers, vertebrae, ribs (associated with haemorrhage)</li> <li>• mandibles and skull</li> <li>• present (associated with haemorrhage) (suspect)</li> </ul>	<p>Kuiken et al. (1994)                      Read and Murray (2000)                      Kuiken (1996)                      Jepson et al. (2013)</p>
Stomach contents	Partially-digested in many	<ul style="list-style-type: none"> <li>• recent feeding (supportive)</li> <li>• semi-digested/digested in 61% of cases</li> <li>• partially/undigested</li> <li>• partially digested (confirmed/probably)</li> </ul>	<p>Moore and Barco (2013)                      Kuiken et al. (1994)                      Read and Murray (2000)                      Jepson et al. (2013)</p>

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