

Supporting information Table S1. Information on free-ranging cetaceans with bent dorsal fins, including new records ($n = 52$; of which 49 are presented in Supporting Information [S.I.] S1a to S1aw, two are from pers. comm., and one gives detailed information on a record documented only briefly) and records from literature. Each row represents one individual (new record), except for records presented in literature. Data are organized by species, location, and year the animal was first seen. Age class: A – Adult, SA – Subadult, J – Juvenile. Side: R – Right, L – Left, B – Both. Intensity (inten.): 1 – Slightly, 2 – Moderately, 3 – Severely. ‘no. times’ means number of times an individual was identified. Blank cells indicate that information is not available.

Species	Location	Year (no. times)	Sex	Age class	Health status	Injur- ed	Bent side	Bent inten.	Source
<i>Balaenoptera brydei</i>	Madeira, Portugal	2014 (1) 2015 (2)		A	Good	No	L	2	This study (S.I. S1a)
<i>B. brydei</i>	Madeira, Portugal	2015 (1)		SA		No	R	3	This study (S.I. S1b)
<i>B. borealis</i>	Berkeley Sound, Falkland Islands	2017 (1)		A	Good	No	R	2	This study (S.I. S1c)
<i>B. physalus</i>	Long Island, USA	2014 (1) 2015 (1)		A	Good	Yes	R	3	This study (S.I. S1d)
<i>B. physalus</i>	Long Island, USA	2014 (1)	♀	A	Good	Yes	R	3	This study (S.I. S1e)
<i>Delphinus delphis</i>	Hauraki Gulf, New Zealand	2012 (1) 2013 (1)		A	Good	No	R	1	This study (S.I. S1f)
<i>D. delphis</i>	Hauraki Gulf, New Zealand	2013 (1)		A	Good	No	L	2	This study (S.I. S1g)
<i>D. delphis</i>	Hauraki Gulf, New Zealand	2013 (1)		A	Good	No	L	2	This study (S.I. S1h)
<i>D. delphis</i>	Madeira, Portugal	2017 (3)		A	Good	No	R	3	This study (S.I. S1i)
<i>D. capensis</i>	Algoa Bay, South Africa	2016 (1)		A	Good	No	L	2	This study (S.I. S1j)
<i>Stenella coeruleoalba</i>	Gulf of Corinth, Greece	2011 to 2015 (20)		A	Good	No	B	3	This study (S.I. S1k)
<i>S. coeruleoalba</i>	Gulf of Corinth, Greece	2011 to 2014 (8)		A	Good	Yes	R	2	This study (S.I. S1l)
<i>S. coeruleoalba</i>	Gulf of Corinth, Greece	2012 (1) 2013 (1)		A	Good	No	L	2	This study (S.I. S1m)
<i>S. coeruleoalba</i>	Strait of Gibraltar	2008 (1)		A	Good	No	R	3	Pers. comm. from Jörn Selling, FIRMM, Spain, July 2016
<i>S. coeruleoalba</i>	Strait of Gibraltar	2015 (1)		A	Good	No	L	3	Pers. comm. from Jörn Selling, FIRMM, Spain, July 2016
<i>S. clymene</i>	Gulf of Guinea, Gabon	2017 (1)		A	Good	No	L	3	This study (S.I. S1n)
<i>Feresa attenuata</i>	Hawaii, USA	2012 to 2016 (13)		J	Good	Yes	R	3	This study (S.I. S1o)
<i>Tursiops truncatus</i>	Moray Firth, Scotland	1989 to 1993	♀	A			R	1	Wilson <i>et al.</i> 1997 ¹
<i>T. truncatus</i>	Madeira, Portugal	2009 (1)		A	Good	Yes	L	3	This study (S.I. S1p)

<i>T. truncatus</i>	Southern Evoikos Gulf, Greece	2014 (2)	♀?	A	Good	Yes	L	3	This study (S.I. S1q)
<i>T. truncatus</i>	Hawaii, USA	2003 to 2010 (10)		A	Good	Yes	L	3	This study (S.I. S1r)
<i>T. aduncus</i>	Ponta do Ouro, Mozambique	1999 to 2008 (119)	♀	A	Good	No	R	2	This study (S.I. S1s)
<i>T. aduncus</i>	Ponta do Ouro, Mozambique	2007 to 2016 (41)	♂	A	Good	Yes	L	3	This study (S.I. S1t)
<i>Lagenorhynchus albirostris</i>	Newfoundland, Canada	2004 (1)		A	Good	Yes	L	3	Higdon & Snow 2008
<i>L. albirostris</i>	Faxafloi Bay, Iceland	2003 (1) 2008 (2)		A	Good	No	B	2	This study (S.I. S1u) ²
<i>L. obscurus</i>	Kaikoura, New Zealand	2007 to 2012 (5)		A	Good	No	R	2	Kügler & Orbach (2014) and this study ³
<i>Grampus griseus</i>	Canary, Spain	2013 (1)		A	Good	No	R	3	This study (S.I. S1v)
<i>G. griseus</i>	Azores, Portugal	2007 to 2016 (~10)	♀	A	Good	Yes	R	3	This study (S.I. S1w)
<i>Globicephala macrorhynchus</i>	Sea of Cortez, Mexico	2015 (1)		A	Good	Yes ⁴	R	3	This study (S.I. S1x)
<i>G. macrorhynchus</i>	Madeira, Portugal	2015 (2)		A	Poor	Yes ⁴	L	3	This study (S.I. S1y)
<i>Phocoenoides dalli</i>	British Columbia, Canada	2014 (1)		A	Good	Yes	R	3	This study (S.I. S1z)
<i>Pseudorca crassidens</i>	Hawaii, USA	2000 to 2013	3 ♀	A	Good	Yes	3 R 2 L	(3) 2 (2) 3	Baird & Gorgone 2005, Baird <i>et al.</i> 2015 ⁵
<i>P. crassidens</i>	Hawaii, USA	1988 (1)	♀	A	Good	Yes	R	2	This study (S.I. S1aa)
<i>P. crassidens</i>	Hawaii, USA	2000 to 2014 (9)		A	Good	Yes	L	2	This study (S.I. S1ab)
<i>Orcinus orca</i>	New Zealand	1981 to 1997	7 ♂	A	Good	5 No 2 Yes	6 R	(2) 1 (3) 2 (1) 3	Visser 1998 ⁶
<i>O. orca</i>	Eastern Tropical Pacific	1986 to 2006	7 ♂ 1 ♀	A	Good	7 No 1 Yes	4 R 4 L	(7) 1 (1) 3	Olson & Gerrodette 2008 ⁷
<i>O. orca</i>	California, USA		♂	A	Good	No	L	3	Black <i>et al.</i> 1997 ⁸
<i>O. orca</i>	Alaska, USA		3 ♂	A	Good	No ⁹		(2) 3	Matkin <i>et al.</i> 1999 ⁹
<i>O. orca</i>	British Columbia, Canada (Nort. resid. pop.) ¹⁰	1974 to 2015	13 ♂ 1 ♀	13 A 1 SA	Good	6 No 8 Yes	7 R 5 L 2 B	(3) 1 (5) 2 (6) 3	Bigg 1982, Bigg <i>et al.</i> 1987, Ford <i>et al.</i> 1994, 2000, Ellis <i>et al.</i> 2007, 2011, Towers <i>et al.</i> 2015
<i>O. orca</i>	British Columbia, Canada (N. resid.)	2005 (6) 2006 (1)	♂	A	Good	No	R	3	This study (S.I. S1ac)
<i>O. orca</i>	British Columbia, Canada (Bigg's pop.) ¹¹	1986 to 2012	8 ♂	7 A 2 J ⁴	Good	6 No 3 Yes	3 R 6 L	(4) 1 (3) 2 (2) 3	Bigg <i>et al.</i> 1987, Baird & Stacey 1989, Ford & Ellis 1999, Ellis <i>et al.</i> 2008, Towers <i>et al.</i> 2012
<i>O. orca</i>	British Columbia, Canada (Bigg's)	2016 (2)	J	A	Good	No	R	2	This study (S.I. S1ad)
<i>O. orca</i>	British Columbia, Canada (Bigg's)	2016 (2)	♂	A	Good	No	L	3	This study (S.I. S1ae)
<i>O. orca</i>	British Columbia, Canada (Bigg's)	2009 to 2015 (15)	♂	A	Good	Yes	L	3	This study (S.I. S1af)
<i>O. orca</i>	British Columbia, Canada (Bigg's)	2009 (1)	♂	A	Good	No	L	3	This study (S.I. S1ag)
<i>O. orca</i>	British Columbia, Canada (Bigg's)	2013 (2)	♂	A	Good	Yes	R	1	This study (S.I. S1ah)

<i>O. orca</i>	Vesterålen, Norway	2014 to 2016 (5)	♂	A	Good	No	R	3	This study (S.I. S1ai)
<i>O. orca</i>	Vesterålen, Norway	2015 (2) 2016 (4)	SA	Poor	Yes ⁴	L	2		This study (S.I. S1aj)
<i>O. orca</i>	Vesterålen, Norway	2015 (1) 2016 (1)	♂	A	Good	No	L	1	This study (S.I. S1ak)
<i>O. orca</i>	Vesterålen, Norway	2016 (1)	♀	A	Good	No	R	1	This study (S.I. S1al)
<i>O. orca</i>	Vesterålen, Norway	2016 (1)	♂	A	Good	No	L	2	This study (S.I. S1am)
<i>O. orca</i>	Iceland	1999 to 2016 (35)	♂	A	Good	No	R	3	This study (S.I. S1an)
<i>O. orca</i>	Iceland	2013 (2) 2015 (1)	♂	A	Good	No	L	3	This study (S.I. S1ao)
<i>O. orca</i>	Vestmannaeyjar, Iceland	2001 to 2015 (8)	♂	A	Good	No	R	3	This study (S.I. S1ap)
<i>O. orca</i>	Keflavík & Ólafsvík, Iceland	2003 (1) 2008 (2)	♂	A	Good	No	L	3	This study (S.I. S1aq)
<i>O. orca</i>	Vestmannaeyjar, Iceland	2010 (1) 2014 (3)	♂	A	Good	No	R	2	This study (S.I. S1ar)
<i>O. orca</i>	Vestmannaeyjar, Iceland	2014 (4)	♂	A	Good	Yes ⁴	R	1	This study (S.I. S1as)
<i>O. orca</i>	Iceland & Scotland	2013 to 2016 (7)	♂	A	Good	No	R	3	This study (S.I. S1at)
<i>O. orca</i>	Sagres, Portugal	2011 (1) 2013 (1)	♂	A	Good	No	L	3	This study (S.I. S1au) ¹²
<i>O. orca</i>	South Georgia, Antarctica	2015 (5)	♀	A	Good	Yes	L	1	This study (S.I. S1av)
<i>O. orca</i>	Port Elizabeth, South Africa		♀	A		Yes	L	2	This study (S.I. S1aw)

¹ report on two animals with bent dorsal fins, but present information for only one.

² image shown in Bertulli *et al.* (2016) but only as part of other goals and with no additional information.

³ bent fin briefly mentioned in Kügler and Orbach (2014); additional information given by personal communication from Dara Orbach, Whitehead Lab, Dalhousie University, Canada, September 2016.

⁴ with vertebral column malformation.

⁵ two and three animals with bent fins are mentioned in Baird and Gorgone (2005) and Baird *et al.* (2015), respectively.

⁶ describes seven animals with bent dorsal fins (NZ15, NZ26, NZ66, NZ83, NZ85, NZ86, NZ100).

⁷ includes eight animals with bent dorsal fins (E027, E077, E081, E082, E096, E104, E161, E268).

⁸ Bigg's (U061-CA43) also sighted in British Columbia. Also reports on another animal (ME77) with bent fin in Mexico.

⁹ includes three animals, two of which had their fins collapse shortly after exposure to oil spill.

¹⁰ 14 residents with bent fins (R43, B13, I46, G39, I3, R9, H4, H7, I64, C9, G1, G11, I10, H2) are mentioned/shown in literature.

¹¹ nine Bigg's with bent fins (T040, T002C2, T019B, T080, T087, T141A, T142, T145, T175,) are mentioned/shown in literature.

¹² this individual was sighted off the Strait of Gibraltar in 2013 (Personal communication from Jörn Selling, FIRMM, Spain, July 2016).