The following supplement accompanies the article

Genetic evidence reveals a unique lineage of Bryde's whales in the northern Gulf of Mexico

Patricia E. Rosel*, Lynsey A. Wilcox

National Marine Fisheries Service, 646 Cajundome Blvd, Lafayette, Louisiana 70506, USA

*Corresponding author: patricia.rosel@noaa.gov

Endangered Species Research 25:19–34 (2014)

Supplement. The supplementary materials include GenBank sequence information for samples used in analyses of the mtDNA control region, mtDNA *cytb* and *coxI* genes, as well as 9 nuclear genes. Information is provided for 54 microsatellite loci tested in the Gulf of Mexico (GOMx) Bryde's whale population with results for 17 polymorphic loci. Phylogenetic results from Bayesian analyses of the 305bp mtDNA control region alignment are shown

Table S1a. GenBank sequences used in analyses using mtDNA control region. Species names are listed as they are provided in GenBank. Samples in red have conflict between species name in Genbank and where the sequence groups in phylogenetic reconstructions. GenBank entries with identical sequences are shown in parentheses.

*Sasaki *et al*. 2006 sequences considered to represent each species based on morphological data.

375bp Control Region Alignment		
Species	**Accession Number**	**Reference**
***Balaenoptera e. edeni* clade**		
*B. edeni** (*B. edeni*)	AB201258* (AB146378)	Sasaki *et al.* 2006 (Yoshida & Kato 1999)
B. edeni	AB116099	Wada *et al.* 2003; Junge 1950
B. edeni	AF146379	Yoshida & Kato 1999
B. edeni	AF146380	Yoshida & Kato 1999
B. edeni	EF057443	Jayasankar *et al.* 2009
***Balaenoptera e. brydei* clade**		
*B. brydei**	AB201259*	Sasaki *et al.* 2006
B. brydei	AB116098	Wada *et al.* 2003
B. brydei	AP006469	Sasaki *et al.* 2005
B. brydei	DQ231170	Herath 2007
B. brydei (*B. edeni*)	DQ340979 (AF146388)	S. Hilderbrandt *et al.* unpubl. (Yoshida & Kato 1999)
B. edeni	AF146381	Yoshida & Kato 1999
B. edeni	AF146382	Yoshida & Kato 1999
B. edeni	AF146383	Yoshida & Kato 1999
B. edeni	AF146384	Yoshida & Kato 1999
B. edeni	AF146385	Yoshida & Kato 1999
B. edeni	AF146386	Yoshida & Kato 1999
B. edeni	AF146387	Yoshida & Kato 1999
B. edeni	X72196	Árnason *et al.* 1993

***Balaenoptera omurai* clade**		
*B. omurai** (*B. omurai*, *B. omurai**, *B. edeni*)	AB201256* (AB116095, AB201257*, AF398372)	Sasaki *et al.* 2006 (Wada *et al.* 2003, Sasaki *et al.* 2006, Yang *et al.* 2002)
B. omurai	AB116096	Wada *et al.* 2003
B. omurai	AB116097	Wada *et al.* 2003
B. edeni	AF146389	Yoshida & Kato 1999
Other Baleen Whale Species		
B. acutorostrata	AP006468	Sasaki *et al.* 2005
B. bonaerensis	AP006466	Sasaki *et al.* 2005
B. borealis	AP006470	Sasaki *et al.* 2005
B. borealis	X72195	Árnason *et al.* 1993
B. borealis	DQ145042	C. Baker unpubl.
B. musculus	X72204	Árnason *et al.* 1993
B. physalus	X61145	Árnason *et al.* 1991
M. novaeangliae	AP006467	Sasaki *et al.* 2005
E. australis	AP006473	Sasaki *et al.* 2005

305bp Control Region Alignment		
Species	**Accession Number**	**Reference**
***Balaenoptera e. edeni* clade**		
*B. edeni** (*B. edeni*)	AB201258* (AB146378)	Sasaki *et al.* 2006 (Yoshida & Kato 1999)
B. edeni	AB116099	Wada *et al.* 2003, Junge 1950
B. edeni (*B. edeni*)	AF146379 (KC561138)	Yoshida & Kato 1999, (Kershaw *et al.* 2013)
B. edeni	AF146380	Yoshida & Kato 1999
B. edeni	EF057443	Jayasankar *et al.* 2009
***Balaenoptera e. brydei* clade**		
*B. brydei** (*B. brydei*)	AB201259* (EF068032)	Sasaki *et al.* 2006 (Kanda *et al.* 2007)
B. brydei (*B. edeni*, *B. brydei, B. brydei, B. brydei*)	AB116098 (AF146388, DQ340979, EF068048, EU030282)	Wada *et al.* 2003 (Yoshida & Kato 1999, S. Hilderbrandt *et al.* unpubl., Kanda *et al.* 2007, Alves *et al.* 2010)
B. brydei (*B. brydei*)	AP006469 (EF068017)	Sasaki *et al.* 2005 (Kanda *et al.* 2007)
B. brydei	DQ231170	Herath 2007
B. brydei (B. edeni, B. edeni, B. edeni, B. edeni)	EF068061 (GU085094, GU085095, GU085098, X72196)	Kanda *et al.* 2007 (Penry 2010, Penry 2010, Penry 2010, Árnason *et al.* 1993)
B. brydei	EF068013	Kanda *et al.* 2007
B. brydei	EF068014	Kanda *et al.* 2007
B. brydei	EF068015	Kanda *et al.* 2007
B. brydei (*B. edeni*)	EF068016 (AF146385)	Kanda *et al.* 2007 (Yoshida & Kato 1999)
B. brydei (*B. edeni*)	EF068018 (AF146382)	Kanda *et al.* 2007 (Yoshida & Kato 1999)
B. brydei	EF068019	Kanda *et al.* 2007
B. brydei (*B. edeni*)	EF068020 (AF146384)	Kanda *et al.* 2007 (Yoshida & Kato 1999)
B. brydei	EF068021	Kanda *et al.* 2007

B. brydei (*B. edeni*)	EF068022 (AF146381)	Kanda *et al.* 2007 (Yoshida & Kato 1999)
B. brydei (*B. edeni*)	EF068023 (AF146383)	Kanda *et al.* 2007 (Yoshida & Kato 1999)
B. brydei	EF068024	Kanda *et al.* 2007
B. brydei	EF068025	Kanda *et al.* 2007
B. brydei	EF068026	Kanda *et al.* 2007
B. brydei	EF068027	Kanda *et al.* 2007
B. brydei	EF068028	Kanda *et al.* 2007
B. brydei	EF068029	Kanda *et al.* 2007
B. brydei	EF068030	Kanda *et al.* 2007
B. brydei	EF068031	Kanda *et al.* 2007
B. brydei	EF068033	Kanda *et al.* 2007
B. brydei	EF068034	Kanda *et al.* 2007
B. brydei	EF068035	Kanda *et al.* 2007
B. brydei	EF068036	Kanda *et al.* 2007
B. brydei	EF068037	Kanda *et al.* 2007
B. brydei	EF068038	Kanda *et al.* 2007
B. brydei	EF068039	Kanda *et al.* 2007
B. brydei	EF068040	Kanda *et al.* 2007
B. brydei	EF068041	Kanda *et al.* 2007
B. brydei	EF068042	Kanda *et al.* 2007
B. brydei	EF068043	Kanda *et al.* 2007
B. brydei	EF068044	Kanda *et al.* 2007
B. brydei	EF068045	Kanda *et al.* 2007
B. brydei	EF068046	Kanda *et al.* 2007
B. brydei	EF068047	Kanda *et al.* 2007
B. brydei	EF068049	Kanda *et al.* 2007
B. brydei	EF068050	Kanda *et al.* 2007
B. brydei	EF068051	Kanda *et al.* 2007
B. brydei	EF068052	Kanda *et al.* 2007
B. brydei	EF068053	Kanda *et al.* 2007
B. brydei	EF068054	Kanda *et al.* 2007
B. brydei	EF068055	Kanda *et al.* 2007
B. brydei	EF068056	Kanda *et al.* 2007
B. brydei	EF068057	Kanda *et al.* 2007
B. brydei	EF068058	Kanda *et al.* 2007
B. brydei	EF068059	Kanda *et al.* 2007
B. brydei (*B. edeni*)	EF068060 (AF146387)	Kanda *et al.* 2007 (Yoshida & Kato 1999)
B. brydei	EF068062	Kanda *et al.* 2007
B. brydei	EF068063	Kanda *et al.* 2007
B. brydei	GU085097	Penry 2010
B. brydei	JX090150	Kershaw *et al.* 2013
B. brydei	JX090151	Kershaw *et al.* 2013
B. brydei	JX090152	Kershaw *et al.* 2013
B. brydei	KC261305	Kershaw *et al.* 2013

B. edeni	AF146386	Yoshida & Kato 1999
B. edeni	GU085096	Penry 2010
B. edeni	GU085099	Penry 2010
***Balaenoptera omurai* clade**		
*B. omurai** (*B. omurai*, *B. omurai**, *B. edeni*)	AB201256* (AB116095, AB201257*, AF398372)	Sasaki *et al.* 2006 (Wada *et al.* 2003, Sasaki *et al.* 2006, Yang *et al.* 2002)
B. omurai	AB116096	Wada *et al.* 2003
B. omurai	AB116097	Wada *et al.* 2003
B. edeni	AF146389	Yoshida & Kato 1999
Other Baleen Whale Species		
B. acutorostrata	AP006468	Sasaki *et al.* 2005
B. bonaerensis	AP006466	Sasaki *et al.* 2005
B. borealis	AP006470	Sasaki *et al.* 2005
B. borealis	X72195	Árnason *et al.* 1993
B. borealis	DQ145042	C. Baker unpubl.
B. musculus	X72204	Árnason *et al.* 1993
B. physalus	X61145	Árnason *et al.* 1991
M. novaeangliae	AP006467	Sasaki *et al.* 2005
E. australis	AP006473	Sasaki *et al.* 2005

Table S1b. GenBank sequences used in analyses using mtDNA *cytb*. Species names are listed as they are provided in GenBank. GenBank entries with identical sequences are shown in parentheses.

*Sasaki et al. 2006 sequences considered to represent each species based on morphological data.

421bp *cytb* Alignment		
Species	**Accession Number**	**Reference**
Balaenoptera e. edeni clade		
*B. edeni**	AB201258*	Sasaki *et al.* 2006
B. edeni (*B. edeni*)	JN190948 (JN190949)^	Bijukumar *et al.* 2012 (Bijukumar *et al.* 2012)
B. edeni (*B. edeni*)	JN190949 (JN190948)^	Bijukumar *et al.* 2012 (Bijukumar *et al.* 2012)
***Balaenoptera e. brydei* clade**		
*B. brydei**	AB201259*	Sasaki *et al.* 2006
B. brydei	AP006469	Sasaki *et al.* 2005
***Balaenoptera omurai* clade**		
*B. omurai**	AB201256*	Sasaki *et al.* 2006
*B. omurai**	AB201257*	Sasaki *et al.* 2006
Other Baleen Whale Species		
B. acutorostrata	AP006468	Sasaki *et al.* 2005
B. bonaerensis	AP006466	Sasaki *et al.* 2005
B. borealis	AP006470	Sasaki *et al.* 2005
B. musculus	X72204	Árnason *et al.* 1993
B. physalus	X61145	Árnason *et al.* 1991
M. novaeangliae	AP006467	Sasaki *et al.* 2005
E. australis	AP006473	Sasaki *et al.* 2005

^These entries have identical sequences for *cytb* (421bp) but are different in the concatenated alignment because they have different *cox1* sequences.

Table S1c. GenBank sequences used in analyses using mtDNA *cox1*. Species names are listed as they are provided in GenBank. GenBank entries with identical sequences are shown in parentheses.

*Sasaki et al. 2006 sequences considered to represent each species based on morphological data.

653bp *cox1* Alignment		
Species	**Accession Number**	**Reference**
***Balaenoptera e. edeni* clade**		
*B. edeni** (*B. edeni*)	AB201258* (JN190944)^	Sasaki *et al.* 2006 (Bijukumar *et al.* 2012)
B. edeni	JN190944	Bijukumar *et al.* 2012
B. edeni (*B. edeni**)	JN190945 (AB20258*)^	Bijukumar *et al.* 2012 (Sasaki *et al.* 2006)
***Balaenoptera e. GOMex* clade**		
B. edeni	EU496283	Viricel & Rosel 2012
***Balaenoptera e. brydei* clade**		
*B. brydei**	AB201259*	Sasaki *et al.* 2006
B. brydei	AP006469	Sasaki *et al.* 2005
***Balaenoptera omurai* clade**		
*B. omurai**	AB201256*	Sasaki *et al.* 2006
*B. omurai**	AB201257*	Sasaki *et al.* 2006
Other Baleen Whale Species		
B. acutorostrata	AP006468	Sasaki *et al.* 2005
B. acutorostrata	EU496285	Viricel & Rosel 2012
B. bonaerensis	AP006466	Sasaki *et al.* 2005
B. borealis	AP006470	Sasaki *et al.* 2005
B. borealis	EU496284	Viricel & Rosel 2012
B. musculus	X72204	Árnason *et al.* 1993
B. physalus	X61145	Árnason *et al.* 1991
B. physalus	EU496282	Viricel & Rosel 2012
M. novaeangliae	AP006467	Sasaki *et al.* 2005
M. novaeangliae	EU496287	Viricel & Rosel 2012
E. australis	AP006473	Sasaki *et al.* 2005

^These entries have identical sequences for *cox1* but are different in the concatenated alignment because they have different *cytb* sequences.

Table S1d. List of all microsatellite loci tested, result and whether the locus was retained or dropped and why from the analysis. # of samples tested refers to # of Bryde's whale samples tested. n/a: not applicable

Locus	Reference	Amplified? (Y/N)	Polymorphic? (Y/N)	# of Alleles Found	Allele size range (bp)	# of Samples Tested	Dropped? (Y/N)	Reason for dropping
ACCC392	Palsbøll *et al.* 1997	Y	N	1	306	25	Y	monomorphic
GATA028	Palsbøll *et al.* 1997	Y	Y	3	230-234	25	N	
GATA053	Palsbøll *et al.* 1997	Y	Y	3	289-301	25	N	
GATA098	Palsbøll *et al.* 1997	Y	Y	3	82-98	25	N	
GATA417	Palsbøll *et al.* 1997	Y	Y	2	187-215	25	N	
GGAA520	Palsbøll *et al.* 1997	Y	Y	4	207-227	25	N	
AC045	Bérubé *et al.* 2005	Y	N	1	196	25	Y	monomorphic
AC137	Bérubé *et al.* 2005	Y	Y	3	109-113	25	N	
CA234	Bérubé *et al.* 2005	Y	Y	2	202-204	25	N	
DL1	Buchanan *et al.* 1996	Y	N	1	126	18	Y	monomorphic
DL3	Buchanan *et al.* 1996	Y	N	1	149	18	Y	monomorphic
DL4	Buchanan *et al.* 1996	Y	N	1	174	18	Y	monomorphic (has very low stutter)
DL6	Buchanan *et al.* 1996	N	n/a	n/a	n/a	3	Y	non-specific amplification
DL8	Buchanan *et al.* 1996	N	n/a	n/a	n/a	3	Y	non-specific amplification
EV1	Valsecchi & Amos 1996	Y	N	1	150	25	Y	monomorphic
EV3	Valsecchi & Amos 1996	N	n/a	n/a	n/a	3	Y	non-specific amplification
EV5	Valsecchi & Amos 1996	Y	N	1	151	18	Y	monomorphic (has very low stutter)
EV14	Valsecchi & Amos 1996	Y	N	1	149	21	Y	monomorphic
EV21	Valsecchi & Amos 1996	Y	N	1	122	25	Y	monomorphic
EV30	Valsecchi & Amos 1996	Y	n/a	n/a	n/a	3	Y	1 bp stutter
EV37	Valsecchi & Amos 1996	N	n/a	n/a	n/a	3	Y	no amplification
EV92	Valsecchi & Amos 1996	N	n/a	n/a	n/a	2	Y	non-specific amplification
EV94	Valsecchi & Amos 1996	Y	N	1	187	21	Y	monomorphic (has very low stutter)
EV96	Valsecchi & Amos 1996	N	n/a	n/a	n/a	3	Y	no amplification
EV104	Valsecchi & Amos 1996	Y	Y	2	143-159	25	N	
GM199/200	Amos *et al.* 1993	Y	Y	3	101-113	25	N	
GM409/470	Amos *et al.* 1993	Y	N	1	186	25	Y	monomorphic

GM415/416	Amos *et al.* 1993	Y	n/a	n/a	n/a	3	Y	no stutter, imperfect repeat unit
GM417/418	Amos *et al.* 1993	Y	Y	2	182-202	25	N	
GM464/465	Amos *et al.* 1993	Y	N	1	137	21	Y	monomorphic
GM468/469	Amos *et al.* 1993	N	n/a	n/a	n/a	2	Y	no amplification
GT011	Bérubé *et al.* 1998	Y	N	1	125	25	Y	monomorphic
GT023	Bérubé *et al.* 2000	Y	Y	2	89-105	25	N	
GT122	Bérubé *et al.* 2005	Y	Y	2	147-151	25	N	
GT195	Bérubé *et al.* 2000	Y	N	1	137	22	Y	monomorphic (has very low stutter)
GT307	Bérubé *et al.* 2000	Y	Y	2	128-148	25	N	
GT541	Bérubé *et al.* 2005	Y	Y	3	90-106	25	N	
MK5	Krützen *et al.* 2001	Y	N	1	212	18	Y	monomorphic
MK6	Krützen *et al.* 2001	Y	N	1	141	18	Y	monomorphic
MK8	Krützen *et al.* 2001	Y	n/a	n/a	n/a	3	Y	no stutter, 1bp hump to left of allele
MK9	Krützen *et al.* 2001	Y	N	1	176	18	Y	monomorphic
Ppho102	Rosel *et al.* 1999	Y	N	1	114	18	Y	monomorphic
Ppho104	Rosel *et al.* 1999	N	n/a	n/a	n/a	3	Y	no amplification
Ppho110	Rosel *et al.* 1999	Y	N	1	90	18	Y	monomorphic (has very low stutter)
Ppho130	Rosel *et al.* 1999	Y	Y	2	161-171	25	N	
Ppho131	Rosel *et al.* 1999	Y	N	1	177	18	Y	monomorphic (has very low stutter)
Ppho133	Rosel *et al.* 1999	Y	N	1	176	18	Y	monomorphic (has very low stutter)
Ppho137	Rosel *et al.* 1999	Y	Y	2	132-136	25	N	
Ppho139	Rosel *et al.* 1999	N	n/a	n/a	n/a	4	Y	no amplification
Ppho142	Rosel *et al.* 1999	Y	N	1	141	25	Y	monomorphic
RW34	Waldick *et al.* 1999	Y	N	1	88	25	Y	monomorphic
SW13	Richard *et al.* 1996	Y	Y	2	82-84	25	N	
Ttr58	Rosel *et al.* 2005	Y	N	1	168	18	Y	monomorphic (has very low stutter)
TxVt5	Rooney *et al.* 1999	Y	N	1	192	18	Y	monomorphic (has very low stutter)

Table S1e. Final PCR conditions, heterozygosities and allelic richness for 17 polymorphic microsatellite loci. The last column lists other Bryde's whales publications that used each locus. T_a: annealing temperature; H_o: observed heterozygosity; H_e: expected heterozygosity; n/a not applicable

Locus	**Reference**	**T_a, # of cycles and [$MgCl_2$]**	**Amplified with**	**Coloaded with**	**# alleles**	**Allele size range (bp)**	**H_o**	**H_e**	**Allelic Richness**	**Other publications**
GATA028	Palsbøll *et al.* 1997	55°C, 26x, 3mM $MgCl_2$	GATA053 / GATA417	n/a	3	230-234	0.56522	0.51304	3	Kanda *et al.* 2007, Wiseman 2008, Penry 2010
GATA053	Palsbøll *et al.* 1997	55°C, 26x, 3mM $MgCl_2$	GATA028 / GATA417	n/a	3	289-301	0.08696	0.08599	3	Kanda *et al.* 2007, Wiseman 2008, Penry 2010
GATA098	Palsbøll *et al.* 1997	50°C, 25x, 3mM $MgCl_2$	GT023	EV104	3	82-98	0.30435	0.26957	3	Kanda *et al.* 2007, Wiseman 2008, Penry 2010
GATA417	Palsbøll *et al.* 1997	55°C, 26x, 3mM $MgCl_2$	GATA028 / GATA053	n/a	2	187-215	0.08696	0.08502	2	Kanda *et al.* 2007, Wiseman 2008, Penry 2010
GGAA520	Palsbøll *et al.* 1997	55°C, 30x, 1.5mM $MgCl_2$	AC137	n/a	4	207-227	0.6087	0.57874	4	Kanda *et al.* 2007
AC137	Bérubé *et al.* 2005	55°C, 30x, 1.5mM $MgCl_2$	GGAA520	n/a	3	109-113	0.43478	0.44348	3	
CA234	Bérubé *et al.* 2005	55°C, 25x, 1.5mM $MgCl_2$	n/a	n/a	2	202-204	0.08696	0.08502	2	
EV104	Valsecchi & Amos 1996	50°C, 25x, 3mM $MgCl_2$, BSA	n/a	GT023 / GATA098	2	143-159	0.04348	0.04348	2	Kanda *et al.* 2007, Wiseman 2008, Penry 2010
GT023	Bérubé *et al.* 2000	50°C, 25x, 3mM $MgCl_2$	GATA098	EV104	2	89-105	0.04348	0.04348	2	Kanda *et al.* 2007, Wiseman 2008, Penry 2010
GT122	Bérubé *et al.* 2005	55°C, 28x, 1.5mM $MgCl_2$	n/a	n/a	2	147-151	0.13043	0.12464	2	
GT307	Bérubé *et al.* 2000	50°C, 33x, 3mM $MgCl_2$	n/a	n/a	2	128-148	0.17391	0.16232	2	
GT541	Bérubé *et al.* 2005	57°C, 26x, 1.5mM $MgCl_2$	n/a	n/a	3	90-106	0.65217	0.58744	3	

Ppho130	Rosel *et al.* 1999	50°C, 27x, 1.5mM $MgCl_2$	n/a	n/a	2	161-171	0.08696	0.08502	2	
Ppho137	Rosel *et al.* 1999	60°C, 25x, 1.5mM $MgCl_2$	n/a	n/a	2	132-136	0.17391	0.16232	2	
SW13	Richard *et al.* 1996	55°C, 25x, 3mM MCl_2, BSA	n/a	/n/a	2	82-84	0.26087	0.23188	2	
GM199/200	Amos *et al.* 1993	45°C, 28x, 1.5mM $MgCl_2$, BSA	n/a	n/a	3	101-113	0.30435	0.27343	3	
GM417/418	Amos *et al.* 1993	45°C, 33x, 1.5mM $MgCl_2$	n/a	n/a	2	182-202	0.30435	0.32174	2	
Mean							0.25575	0.24098	2.467	
SD							0.20153	0.18684	0.624264273	

Table S1f. List of GenBank sequences available for selected balaenopterids for 9 nuclear genes for comparison within the Bryde's whale complex. Most of these sequences attributed to *B. edeni* in GenBank are likely to be from *B. edeni brydei* based on collection location, except for AY954635 which is likely from *B. omurai*

Genbank species ID	Genbank Accession	Reference
ADRB2		
None		
APP		
None		
ATP7A		
B. edeni	EU444958	Deméré *et al.* 2008
B. borealis	EU444957	Deméré *et al.* 2008
B. physalus	EU444955	Deméré *et al.* 2008
BDNF		
B. edeni	EU444883	Deméré *et al.* 2008
B. edeni	AY954635	Z. Zou & G. Yang unpubl.
B. borealis	EU444882	Deméré *et al.* 2008
B. physalus	EU444880	Deméré *et al.* 2008
CHRNA1		
B. physalus	GQ407713	Jackson *et al.* 2009
F9		
None		
G6PD		
B. edeni	EF043318	Alter et al. 2007
B. borealis	EF043315	Alter *et al.* 2007
B. physalus	EF043319	Alter *et al*. 2007
B. physalus	GQ407363	Jackson *et al*. 2009
INT		
B. omurai	HQ585540	X. M. Zhou *et al*. unpubl.
MGF		
B. edeni	EU444908	Deméré *et al.* 2008
B. borealis	EU444907	Deméré *et al.* 2008
B. physalus	EU444905	Deméré *et al.* 2008

Fig. S1. Bayesian phylogeny of 305bp control region alignment for Bryde's whales. Clades corresponding to *B. omurai, B. edeni edeni* and *B. e. brydei* are identified. Gulf of Mexico Bryde's whale haplotypes are labeled Bede1 and Bede2hpl. Length of scale bar is proportional to the number of nucleotide subsitutions per site. Numbers represent posterior probabilities >0.90.

Taxa are identified with their GenBank accession number and the species name ascribed to them in GenBank (hence some are named *B. brydei*). Species names abbreviated as: Egla- *Eubalaena glacialis*; Eaus- *Eubalaena australis*; Bbon- *Balaenoptera bonaerensis*; Bacu- *Balaenoptera acutorostrata;* Bmus- *Balaenoptera musculus*; Bede- *Balaenoptera edeni*; Bbor- *Balaneoptera borealis*; Bbry- *Balaenoptera brydei*; Bphy- *Balaenoptera physalus*; Mnov- *Megaptera novaeangliae*.

LITERATURE CITED

Alter SE, Rynes E, Palumbi SR (2007) DNA evidence for historic population size and past ecosystem impacts of gray whales. Proc Natl Acad Sci USA 104:15162–15167

Alves F, Dinis A, Cascão I, Freitas L (2010) Bryde's whale (*Balaenoptera brydei*) stable associations and dive profiles: New insights into foraging behavior. Mar Mamm Sci 26:202–212

Amos B, Schlötterer C, Tautz D (1993) Social structure of pilot whales revealed by analytical DNA profiling. Science 260:670–672

Árnason Ú, Gullberg A, Widegren B (1991) The complete nucleotide sequence of the mitochondrial DNA of the fin whale, *Balaenoptera physalus.* J Mol Evol 33:556–568

Árnason Ú, Gullberg A, Widegren B (1993) Cetacean mitochondrial DNA control region sequences of all extant baleen whales and two sperm whale species. Mol Biol Evol 10:960–970

Bérubé M, Aguilar A, Dendanto D, Larsen F and others (1998) Population genetic structure of North Atlantic, Mediterranean Sea and Sea of Cortez fin whales, *Balaenoptera physalus* (Linnaeus 1758): analysis of mitochondrial and nuclear loci. Mol Ecol 7:585–599

Bérubé M, Jørgensen H, McEwing R, Palsbøll PJ (2000) Polymorphic di-nucleotide microsatellite loci isolated from the humpback whale, *Megaptera novaeangliae.* Mol Ecol 9:2181–2183

Bérubé M, Rew MB, Skaug H, Jørgensen H and others (2005) Polymorphic microsatellite loci isolated from humpback whale, *Megaptera novaeangliae* and fin whale, *Balaenoptera physalus.* Conserv Genet 6:631–636

Bijukumar A, Jijith SS, Kumar US, George S (2012) DNA barcoding of the Bryde's whale *Balaenoptera edeni* Anderson (Cetacea: Balaenopteridae) washed ashore along Kerala coast, India. J Threat Taxa 4:2436-2443

Buchanan FC, Friesen MK, Littlejohn RP, Clayton JW (1996) Microsatellites from the beluga whale *Delphinapterus leucas.* Mol Ecol 5:571–575

Deméré TA, McGowen MR, Berta A, Gatesy J (2008) Morphological and molecular evidence for a stepwise evolutionary transition from teeth to baleen in mysticete whales. Syst Biol 57:15–37

Herath DR (2007) Identification of a stranded whale by mitochondrial DNA analysis - www.DNA-Surveillance program in action. Asian Fish Sci 20:319–324

Jackson JA, Baker CS, Vant M, Steel DJ, Medrano-González L, Palumbi SR (2009) Big and slow: phylogenetic estimates of molecular evolution in baleen whales (suborder Mysticeti). Mol Biol Evol 26:2427–2440

Jayasankar P, Anoop B, Rajagopalan M, Yousuf KMM and others (2009) Indian efforts on the inventorization of marine mammal species for their conservation and management. Asian Fish Sci 22:143–155

Junge GCA (1950) On a specimen of the rare fin whale, *Balaenoptera edeni* Anderson, stranded on Pulu Sugi near Singapore. Zool Verh 9:1–26

Kanda N, Goto M, Kato H, McPhee MV, Pastene LA (2007) Population genetic structure of Bryde's whales (*Balaenoptera brydei*) at the inter-oceanic and trans-equatorial levels. Conserv Genet 8:853–864

Kershaw F, Leslie MS, Collins T, Mansur RM and others (2013) Population differentiation of 2 forms of Bryde's whales in the Indian and Pacific Oceans. J Hered 104:755–764

Krützen M, Valsecchi E, Connor RC, Sherwin WB (2001) Characterization of microsatellite loci in *Tursiops aduncus.* Mol Ecol 1:170–172

Palsbøll PJ, Bérubé M, Larsen AH, Jørgensen H (1997) Primers for the amplification of tri- and tetramer microsatellite loci in baleen whales. Mol Ecol 6:893–895

Penry GS (2010) The biology of South African Bryde's whales. PhD dissertation, University of St. Andrews

Richard KR, Whitehead H, Wright JM (1996) Polymorphic microsatellites from sperm whales and their use in the genetic identification of individuals from naturally sloughed pieces of skin. Mol Ecol 5:313–315

Rooney AP, Merritt DB, Derr JN (1999) Microsatellite diversity in captive bottlenose dolphins (*Tursiops truncatus*). J Hered 90:228–231

Rosel PE, Tiedemann R, Walton M (1999) Genetic evidence for limited trans-Atlantic movements of the harbor porpoise, *Phocoena phocoena.* Mar Biol 133:583–591

Rosel PE, Forgetta V, Dewar K (2005) Isolation and characterization of twelve polymorphic microsatellite markers in bottlenose dolphins (*Tursiops truncatus*). Mol Ecol 5:830–833

Sasaki T, Nikaido M, Hamilton H, Goto M and others (2005) Mitochondrial phylogenetics and evolution of mysticete whales. Syst Biol 54:77–90

Sasaki T, Nikaido M, Wada S, Yamada TK, Cao Y, Hasegawa M, Okada N (2006) *Balaenoptera omurai* is a newly discovered baleen whale that represents an ancient evolutionary lineage. Mol Phylogenet Evol 41:40–52

Valsecchi E, Amos W (1996) Microsatellite markers for the study of cetacean populations. Mol Ecol 5:151–156

Viricel A, Rosel PE (2012) Evaluating the utility of *cox1* for cetacean species identification. Mar Mamm Sci 28:37–62

Wada S, Oishi M, Yamada TK (2003) A newly discovered species of living baleen whale. Nature 426:278–281

Waldick RC, Brown MW, White BN (1999) Characterization and isolation of microsatellite loci from the endangered North Atlantic right whale. Mol Ecol 8:1763–1765

Wiseman N (2008) Genetic identity and ecology of Bryde's whales in the Hauraki Gulf, New Zealand. PhD dissertation, University of Auckland

Yang G, Liu H, Zhou K, Guo Qing J (2002) Identification of a *Balaenoptera edeni* specimen by using mitochondrial DNA sequences. Chin J Zool 37:35–38

Yoshida H, Kato H (1999) Phylogenetic relationships of Bryde's whales in the western north Pacific and adjacent waters inferred from mitochondrial DNA sequences. Mar Mamm Sci 15:1269–1286