

## Aerial\_Master\_1979\_2011\_v3\_37 Version History

Edits made by AAB

4 May 2022

ALW did a final QAQC of the 2009-2021 ASAMM data in April/May 2022, which resulted in the following edits.

E530, F205, 7/1/2009 – Behavior = unknown

E302 and E304, F6, 9/14/2009 – saved = 0

E419, F223, 8/27/2009 – Clinometer = -1, added to notes: “avg clino 42”, X/YofWhale = -1, Lat/LongTemp changed to ArcLat/Long

E106, F224, 8/29/2009 – Clinometer = -1 added to notes: “avg clino 90”, X/YofWhale = -1, Lat/LongTemp changed to ArcLat/Long

E515, F235, 9/26/2009 – Swimspeed = “.”, Swimdir\_True = -1

E528, F227, 9/6/2009 – notes “tug and barge; clino changed from 0 to 1 post flight because we wouldn’t really be able to see a ship as far as the location that a clino of 0 would calculate to; X/YofWhale missing because the clino was originally 0”

E201, F16, 10/12/2009 – Swimdir\_True = 270

E538, F240, 10/12/2009 – Behavior swim, Swimdir\_True = 252

E1068, F240, 10/12/2009 – Behavior swim, Swimdir\_True = 246

E396, F245, 10/19/2009 – Swimdir\_True = 215

E334, F238, 9/28/2010 – ObsRight = Brendan Hurley

E223, 226, 233, 235, 237, F8, 9/21/2010 – Transect\_id = 102

E232, 235, 237, F226, 9/1/2010 – Transect\_id = 5

E47, F225, 7/31/2011 – Swim\_dir = “.”, Swimdir\_True = -1

E514, F5, 8/30/2011 – enttag = 5

E121, 294, 296, F3, 8/24/2011 – Swimdir\_True = -1

E192, F250, 9/14/2011 – Swimdir\_True = -1

E362, F202, 6/18/2011 –Swimdir\_True = 304

Updated NoReacted field based on Response yes, notes, and Final\_group fields (because NoReacted field wasn't added until 2012 and if people are looking for reactions for 2009-2011 they might not realize they would have had to go to the notes field and calculate that info).

2009:

Event	Flt_No	GMT_Minus8_DateTime	Final_group	Response	NoReacted	NEW NOTES are highlighted
102	8	9/19/2009 10:32:37 AM	1	yes	1	.
298	9	9/25/2009 2:17:05 PM	5	yes	5	No rxn notes, so final group count added as NoReacted default
307	9	9/25/2009 2:20:07 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
93	10	9/28/2009 10:04:02 AM	1	yes	1	Pp sized
259	10	9/28/2009 10:56:47 AM	1	yes	1	.
496	10	9/28/2009 12:29:00 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
663	10	9/28/2009 1:34:42 PM	3	yes	3	No rxn notes, so final group count added as NoReacted default
717	10	9/28/2009 1:56:58 PM	3	yes	3	No rxn notes, so final group count added as NoReacted default
293	12	10/1/2009 12:28:04 PM	1	yes	1	.
794	12	10/1/2009 4:43:14 PM	7	yes	7	No rxn notes, so final group count added as NoReacted default
827	12	10/1/2009 4:54:47 PM	8	yes	8	No rxn notes, so final group count added as NoReacted default
290	14	10/6/2009 11:18:21 AM	1	yes	1	.
292	14	10/6/2009 11:18:37 AM	1	yes	1	.
293	14	10/6/2009 11:18:51 AM	1	yes	1	.
476	14	10/6/2009 12:19:24 PM	1	yes	1	.
486	14	10/6/2009 12:22:20 PM	5	yes	5	No rxn notes, so final group count added as NoReacted default
540	14	10/6/2009 12:37:39 PM	1	yes	1	.
922	14	10/6/2009 4:20:28 PM	3	yes	3	No rxn notes, so final group count added as NoReacted default
928	14	10/6/2009 4:22:21 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
940	14	10/6/2009 4:26:53 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
141	18	10/18/2009 10:43:21 AM	1	yes	1	.
702	18	10/18/2009 2:04:09 PM	15	yes	2	cross island rxn 2 animals swam offshore
202	201	6/24/2009 5:23:05 PM	5	yes	5	No rxn notes, so final group count added as NoReacted default
276	202	6/26/2009 8:22:51 PM	25	yes	25	100% responded
330	202	6/26/2009 8:52:21 PM	34	yes	34	100% responded
333	202	6/26/2009 8:54:28 PM	125	yes	50	40% responded
357	202	6/26/2009 9:08:56 PM	5	yes	5	100% responded
378	202	6/26/2009 9:19:58 PM	45	yes	45	100% responded
383	202	6/26/2009 9:23:44 PM	18	yes	18	100% responded
267	204	6/30/2009 2:06:11 PM	3	yes	3	100% rxn
268	204	6/30/2009 2:06:48 PM	1	yes	1	100% rxn
323	204	6/30/2009 2:36:34 PM	2	yes	1	50% rxn
384	204	6/30/2009 3:06:24 PM	50	yes	25	50% rxn
272	205	7/1/2009 12:52:21 PM	8	yes	2	25% rxn
464	205	7/1/2009 2:35:16 PM	1	yes	1	100% rxn
465	205	7/1/2009 2:35:22 PM	2	yes	2	100% rxn
746	205	7/1/2009 6:32:00 PM	38	yes	1	1% rxn; NoReacted rounded up
871	205	7/1/2009 7:59:18 PM	50	yes	5	10% rxn
1079	205	7/1/2009 9:47:48 PM	12	yes	3	25% rxn
137	206	7/2/2009 3:25:31 PM	1	yes	1	100% rxn

Event	Flt_No	GMT_Minus8_DateTime	Final_group	Response	NoReacted	NEW NOTES are highlighted
481	207	7/5/2009 1:32:54 PM	1	yes	1	100% rxn
42	209	7/9/2009 1:57:00 PM	45	yes	1	2% react; NoReacted rounded up
53	209	7/9/2009 2:05:28 PM	500	yes	25	5% react
58	209	7/9/2009 2:09:06 PM	3	yes	1	one react
215	210	7/11/2009 3:16:01 PM	15	yes	10	66 % rxn, on ice; NoReacted rounded up
413	210	7/11/2009 5:15:10 PM	75	yes	19	25% reaction; on ice; NoReacted rounded up
595	211	7/12/2009 2:29:45 PM	50	yes	5	5 animals react, on ice and in water
115	212	7/25/2009 1:14:52 PM	15	yes	8	50% reacting; NoReacted rounded up
56	213	7/26/2009 9:54:08 AM	2	yes	2	100% reacting
66	213	7/26/2009 9:59:58 AM	2	yes	2	100% rxn
68	213	7/26/2009 10:00:18 AM	1	yes	1	100% rxn
203	213	7/26/2009 11:13:12 AM	2	yes	2	100% reacting
361	213	7/26/2009 12:44:25 PM	9	yes	3	25% reacting; no clino; NoReacted rounded up
382	213	7/26/2009 12:56:27 PM	3	yes	1	33% responding
386	213	7/26/2009 12:58:34 PM	1	yes	1	.
395	213	7/26/2009 1:01:56 PM	50	yes	10	20% rxn
424	213	7/26/2009 1:19:24 PM	6	yes	1	16.7 % rxn
432	213	7/26/2009 1:23:47 PM	30	yes	1	3.3 % rxn
444	213	7/26/2009 1:31:12 PM	10	yes	5	50% responding
475	213	7/26/2009 1:47:33 PM	1	yes	1	100% rxn
485	213	7/26/2009 1:53:25 PM	20	yes	20	98% responding; NoReacted rounded up
487	213	7/26/2009 1:54:30 PM	80	yes	12	15% rxn
488	213	7/26/2009 1:54:32 PM	12	yes	6	50% rxn
777	213	7/26/2009 6:40:49 PM	1	yes	1	100% rxn
782	213	7/26/2009 6:43:07 PM	1	yes	1	.
784	213	7/26/2009 6:43:39 PM	1	yes	1	100% rxn
816	213	7/26/2009 7:00:03 PM	2	yes	2	100% rxn
820	213	7/26/2009 7:01:37 PM	20	yes	10	50% rxn
841	213	7/26/2009 7:12:11 PM	1	yes	1	100% rxn
846	213	7/26/2009 7:14:07 PM	25	yes	21	84% rxn
847	213	7/26/2009 7:14:45 PM	2	yes	1	50% rxn
66	214	7/28/2009 3:41:36 PM	2	yes	1	50% rxn
133	214	7/28/2009 4:11:13 PM	2	yes	1	50% rxn
170	214	7/28/2009 4:29:11 PM	7	yes	7	100% rxn
173	214	7/28/2009 4:29:57 PM	6	yes	3	50% rxn
183	214	7/28/2009 4:36:13 PM	2	yes	2	100% rxn
186	214	7/28/2009 4:37:35 PM	1	yes	1	.
232	214	7/28/2009 5:04:13 PM	1	yes	1	.
253	214	7/28/2009 5:13:51 PM	1	yes	1	.
321	214	7/28/2009 5:51:04 PM	1	yes	1	.
90	217	8/12/2009 11:44:28 AM	6	yes	3	50 % rxn
91	217	8/12/2009 11:45:01 AM	1	yes	1	.
98	217	8/12/2009 11:47:56 AM	5	yes	3	50% rxn; NoReacted rounded up
102	217	8/12/2009 11:51:53 AM	1	yes	1	.
205	217	8/12/2009 12:43:53 PM	3	yes	1	33% rxn
464	220	8/20/2009 1:35:16 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
646	220	8/20/2009 2:45:24 PM	1	yes	1	.
120	221	8/21/2009 1:18:32 PM	1	yes	1	.
131	223	8/27/2009 3:01:32 PM	2	yes	2	100 % rxn (dove)

Event	Flt_No	GMT_Minus8_DateTime	Final_group	Response	NoReacted	NEW NOTES are highlighted
417	223	8/27/2009 4:54:16 PM	3	yes	2	50 % reaction; NoReacted rounded up
510	223	8/27/2009 5:26:58 PM	2	yes	2	cow calf pair 100 % reaction
539	223	8/27/2009 5:36:04 PM	1	yes	1	100 % Reaction
555	223	8/27/2009 5:40:41 PM	1	yes	1	100 % rxn
561	223	8/27/2009 5:42:56 PM	8	yes	3	30 sec count/Gary 8/Laura 0/30 % Reaction; NoReacted rounded up
497	224	8/29/2009 1:23:29 PM	1	yes	1	100 % reaction
163	225	9/2/2009 10:34:14 AM	2	yes	2	100% rxn - both animals dove
176	226	9/4/2009 10:21:11 AM	2	yes	2	100% rxn; both dove as overhead
290	226	9/4/2009 11:08:21 AM	2	yes	2	100% rxn; fast dive
360	226	9/4/2009 11:34:54 AM	2	yes	2	100% rxn
608	226	9/4/2009 1:09:17 PM	1	yes	1	100% rxn; tail slap and dove
337	227	9/6/2009 1:44:06 PM	3500	yes	875	20-25% rxn (700-875 individuals based on best estimate) Used higher number for NoReacted, 3500 best estimate, 3000 low, 4000 high
359	227	9/6/2009 1:51:18 PM	1	yes	1	100% rxn; animal dove
706	229	9/13/2009 4:39:29 PM	1	yes	1	100% rxn
128	231	9/19/2009 10:19:02 AM	2	yes	2	No rxn notes, so final group count added as NoReacted default
211	231	9/19/2009 10:49:03 AM	1	yes	1	.
736	231	9/19/2009 2:11:47 PM	1	yes	1	.
755	231	9/19/2009 2:18:09 PM	1	yes	1	.
772	231	9/19/2009 2:24:26 PM	6	yes	6	No rxn notes, so final group count added as NoReacted default
789	231	9/19/2009 2:28:55 PM	1	yes	1	.
166	234	9/25/2009 10:41:55 AM	1	yes	1	.
184	234	9/25/2009 10:47:22 AM	1	yes	1	.
338	240	10/12/2009 12:19:46 PM	30	yes	30	No rxn notes, so final group count added as NoReacted default
401	244	10/17/2009 1:58:38 PM	20	yes	20	No rxn notes, so final group count added as NoReacted default
414	244	10/17/2009 2:03:13 PM	5	yes	5	No rxn notes, so final group count added as NoReacted default

## 2010-2011:

ID	Event	Flt_No	GMT_Minus8_DateTime	Final_group	Response	No Reacted	NEW NOTES are highlighted
166984	509	202	7/6/2010 3:25:43 PM	80	yes	32	40% dove
166884	514	202	7/6/2010 3:27:02 PM	100	yes	20	20% dove
169612	903	208	7/21/2010 4:12:04 PM	800	yes	320	30 sec count, 40% responding
169684	955	208	7/21/2010 4:27:12 PM	7	yes	7	100% rxn
169957	1178	208	7/21/2010 6:01:49 PM	250	yes	13	5% rxn, NoReacted rounded up
170657	352	210	7/23/2010 3:53:19 PM	1	yes	1	.
170658	353	210	7/23/2010 3:53:42 PM	1	yes	1	.
171521	758	211	7/24/2010 4:42:34 PM	1	yes	1	100% responding. didn't know if it was a walrus or whale at first.
171776	1039	211	7/24/2010 6:39:32 PM	1	yes	1	100% responding.
172342	385	212	7/25/2010 1:45:43 PM	2	yes	2	100%rxn
172357	409	212	7/25/2010 1:53:09 PM	15	yes	15	100%rxn
172416	532	212	7/25/2010 2:35:42 PM	1	yes	1	100%rxn
172558	563	212	7/25/2010 2:44:35 PM	180	yes	108	60%rxn
172948	237	213	7/26/2010 11:56:45 AM	1	yes	1	.
173112	423	213	7/26/2010 12:57:29 PM	1	yes	1	.
173116	437	213	7/26/2010 1:01:05 PM	1	yes	1	.
173165	541	213	7/26/2010 1:37:37 PM	2	yes	2	100% rxn
173645	220	214	7/27/2010 9:18:22 AM	1	yes	1	.

173718	293	214	7/27/2010 9:44:40 AM	15	yes	5	33% rxn, NoReacted rounded up
173799	374	214	7/27/2010 10:16:49 AM	1	yes	1	slithered and wriggled through a hole in the ice and jumped in
174362	935	214	7/27/2010 3:56:11 PM	1	yes	1	.
174507	1033	214	7/27/2010 4:34:39 PM	3	yes	1	33%rxn
174423	1050	214	7/27/2010 4:41:16 PM	2	yes	2	100%rxn
174571	1145	214	7/27/2010 5:22:16 PM	1	yes	1	.
175434	274	216	7/31/2010 10:56:32 AM	1	yes	1	.
175437	277	216	7/31/2010 10:57:09 AM	50	yes	13	25% reaction; NoReacyed rounded up
175612	311	216	7/31/2010 11:06:04 AM	2	yes	2	100% reaction
175920	104	218	8/14/2010 9:25:32 AM	1	yes	1	.
176858	1068	218	8/14/2010 5:10:46 PM	1	yes	1	.
177884	446	220	8/16/2010 1:21:39 PM	2	yes	1	50% reaction
178072	536	220	8/16/2010 1:57:39 PM	2	yes	2	100%
177936	544	220	8/16/2010 2:00:03 PM	1	yes	1	.
178191	680	220	8/16/2010 3:44:29 PM	1	yes	1	.
178255	806	220	8/16/2010 4:24:47 PM	2	yes	1	50%
178184	819	220	8/16/2010 4:27:30 PM	16	yes	1	6.25%
178377	873	220	8/16/2010 4:49:20 PM	1	yes	1	100%
178441	904	220	8/16/2010 5:02:57 PM	1	yes	1	.
180271	122	224	8/25/2010 3:42:25 PM	1	yes	1	.
180327	178	224	8/25/2010 3:59:12 PM	1	yes	1	.
180348	186	224	8/25/2010 4:01:08 PM	1	yes	1	.
180619	127	225	8/30/2010 10:06:51 AM	12	yes	2	17% rxn
180901	354	225	8/30/2010 1:18:09 PM	1	yes	1	100% rxn
181059	568	225	8/30/2010 2:39:46 PM	200	yes	200	haulout, 100% rxn, approached from south at 1500' to photograph from belly, all animals flushed before we flew overhead
181339	792	225	8/30/2010 4:07:23 PM	3	yes	1	33% response
181852	413	226	9/1/2010 7:18:00 PM	1	yes	1	100% rxn dove
182044	82	227	9/2/2010 3:40:08 PM	1	yes	1	100% rxn
182066	104	227	9/2/2010 3:45:07 PM	3	yes	3	100% rxn dove
182077	115	227	9/2/2010 3:48:17 PM	1	yes	1	100% rxn dove
182080	118	227	9/2/2010 3:48:38 PM	20	yes	10	50% rxn dove, 30 sec group
182084	122	227	9/2/2010 3:50:09 PM	7	yes	4	4 animals dove rxn
182468	453	227	9/2/2010 6:11:54 PM	1	yes	1	100% rxn dove
182485	496	227	9/2/2010 6:30:17 PM	4	yes	4	100% rxn dove
182488	499	227	9/2/2010 6:31:24 PM	1	yes	1	100% rxn dove
182407	516	227	9/2/2010 6:37:47 PM	2	yes	1	50% rxn dove
182495	518	227	9/2/2010 6:38:08 PM	1	yes	1	100% rxn dove
182730	191	228	9/6/2010 12:22:08 PM	1	yes	1	rxn dove
182750	211	228	9/6/2010 12:28:38 PM	2	yes	2	100% rxn dove
182951	417	228	9/6/2010 1:54:55 PM	4	yes	2	50% rxn dove
183292	189	229	9/12/2010 10:19:51 AM	1	yes	1	.
183763	619	229	9/12/2010 3:41:40 PM	1	yes	1	.
183876	732	229	9/12/2010 4:29:12 PM	1	yes	1	.
184165	37	230	9/13/2010 9:58:26 AM	3	yes	3	No rxn notes, so final group count added as NoReacted default
184176	48	230	9/13/2010 10:02:27 AM	6	yes	6	No rxn notes, so final group count added as NoReacted default
184287	172	230	9/13/2010 10:48:55 AM	1	yes	1	.
184304	211	230	9/13/2010 11:03:19 AM	1	yes	1	.
184403	224	230	9/13/2010 11:08:35 AM	1	yes	1	.

155381	399	4	9/13/2010 12:39:03 PM	5	yes	3	50%, bears sighted in surf swimming away from island; NoReacted rounded up
185636	177	232	9/16/2010 1:20:03 PM	100	yes	30	30% rxn, 30 second count
185638	179	232	9/16/2010 1:20:52 PM	200	yes	20	10% rxn, 30 second count
185776	317	232	9/16/2010 2:18:20 PM	36	yes	4	10% rxn, 30 second count; NoReacted rounded up
185777	318	232	9/16/2010 2:18:21 PM	20	yes	2	10% rxn, 30 second count
185906	354	232	9/16/2010 2:32:10 PM	3	yes	2	67% rxn
186008	367	232	9/16/2010 2:37:25 PM	2	yes	2	100% rxn
186172	141	233	9/17/2010 1:35:18 PM	6	yes	1	17% rxn
186344	313	233	9/17/2010 2:46:18 PM	1	yes	1	.
186419	388	233	9/17/2010 3:17:51 PM	2	yes	2	100% rxn
186447	416	233	9/17/2010 3:29:56 PM	1	yes	1	.
186449	418	233	9/17/2010 3:30:21 PM	1	yes	1	.
186451	420	233	9/17/2010 3:30:51 PM	1	yes	1	.
186455	424	233	9/17/2010 3:31:19 PM	1	yes	1	.
186458	427	233	9/17/2010 3:32:11 PM	1	yes	1	.
156421	188	6	9/17/2010 5:35:31 PM	14	yes	4	28%; NoReacted rounded up
157840	708	8	9/21/2010 1:57:41 PM	10	yes	3	30%, 3 bears were seen swimming away from the island after we flew by
188280	119	237	9/24/2010 10:19:43 AM	1	yes	1	.
188368	170	237	9/24/2010 10:39:12 AM	5	yes	3	50% rxn; NoReacted rounded up
158822	304	10	9/24/2010 11:45:50 AM	2	yes	1	50%
160570	308	12	9/30/2010 5:08:11 PM	2	yes	2	100% rxn dove
160816	556	12	9/30/2010 6:40:49 PM	11	yes	3	rxn 3 bears looked up; AK sat rt, BKR took photos
190018	129	240	10/8/2010 11:48:13 AM	1	yes	1	100% rxn dove
190026	137	240	10/8/2010 11:52:12 AM	1	yes	1	100% rxn dove
190551	685	240	10/8/2010 3:30:51 PM	1	yes	1	100% rxn dove
191358	576	241	10/9/2010 2:50:01 PM	1	yes	1	.
191320	583	241	10/9/2010 2:51:23 PM	1	yes	1	.
191328	598	241	10/9/2010 2:54:43 PM	4	yes	2	50% rxn
191331	601	241	10/9/2010 2:55:49 PM	1	yes	1	.
191366	603	241	10/9/2010 2:56:04 PM	2	yes	2	100% rxn
190831	702	241	10/9/2010 3:29:14 PM	1	yes	1	.
254769	343	201	6/17/2011 5:03:17 PM	2	yes	2	directly below aircraft; No rxn notes, so final group count added as NoReacted default
254773	347	201	6/17/2011 5:04:41 PM	20	yes	2	30 sec count; 2/20 rxn; animals that reacted were beneath the aircraft
254776	350	201	6/17/2011 5:05:46 PM	50	yes	5	30 sec count; 5/50 rxn
254914	488	201	6/17/2011 6:02:46 PM	20	yes	3	30 sec count; 3/20 rxn
254920	494	201	6/17/2011 6:04:27 PM	6	yes	1	30 sec count; 1/6 rxn
255111	52	202	6/18/2011 10:54:50 AM	1	yes	1	.
256266	479	203	6/19/2011 1:06:26 PM	1	yes	1	dove
256272	494	203	6/19/2011 1:09:56 PM	3	yes	2	2/3 rxn; dove
256290	530	203	6/19/2011 1:21:19 PM	1	yes	1	.
256327	602	203	6/19/2011 1:47:55 PM	20	yes	20	100% flushed
256654	891	203	6/19/2011 5:02:25 PM	3	yes	1	33%
256795	1008	203	6/19/2011 5:42:55 PM	2	yes	1	50%
256844	1017	203	6/19/2011 5:44:34 PM	2	yes	2	100%
256805	1027	203	6/19/2011 5:46:48 PM	3	yes	2	67%
256854	1035	203	6/19/2011 5:49:22 PM	2	yes	2	100%

256825	1068	203	6/19/2011 6:01:42 PM	1	yes	1	100%
256871	1073	203	6/19/2011 6:03:21 PM	1	yes	1	100%
256889	1102	203	6/19/2011 6:14:46 PM	1	yes	1	100%
256912	1148	203	6/19/2011 6:31:59 PM	1	yes	1	100%
257044	1309	203	6/19/2011 7:35:57 PM	2	yes	2	100%
257616	389	204	6/21/2011 1:02:54 PM	20	yes	20	100% flushed
257828	35	205	6/22/2011 4:01:01 PM	250	yes	1	0.4% rxn, 1 rxn by flushing
258020	160	206	6/25/2011 12:04:42 PM	1	yes	1	.
259928	126	208	6/27/2011 10:44:01 AM	2	yes	2	100%
259643	207	208	6/27/2011 11:14:45 AM	1	yes	1	100%
259773	243	208	6/27/2011 11:27:05 AM	30	yes	29	97%
260004	427	208	6/27/2011 12:34:23 PM	1	yes	1	.
260220	565	208	6/27/2011 1:19:59 PM	7	yes	2	29%
262681	674	214	7/8/2011 3:39:43 PM	1	yes	1	.
262833	792	214	7/8/2011 4:28:58 PM	1	yes	1	.
263435	85	216	7/11/2011 12:41:43 PM	50	yes	25	50% looked up, no flush, no clino b/c on turn
265168	680	219	7/17/2011 7:14:37 PM	35	yes	18	50% flushed; NoReacted rounded up
265171	683	219	7/17/2011 7:15:05 PM	15	yes	8	50% moved but not flush; NoReacted rounded up
265200	702	219	7/17/2011 7:21:02 PM	3	yes	3	100%
265545	204	220	7/18/2011 1:09:15 PM	1	yes	1	.
266349	131	221	7/20/2011 1:01:42 PM	2	yes	2	100% rxn
266362	144	221	7/20/2011 1:05:55 PM	5	yes	2	2 rxn
268971	1255	225	7/31/2011 6:48:03 PM	1	yes	1	rxn dive
269826	55	227	8/2/2011 9:10:50 AM	1	yes	1	probable bearded seal
270168	397	227	8/2/2011 11:17:28 AM	1	yes	1	.
270249	496	227	8/2/2011 11:45:02 AM	46	yes	12	30 sec count; 25%rxn
270253	500	227	8/2/2011 11:46:05 AM	27	yes	7	30 sec count; 25% rxn; NoReacted rounded up
270321	504	227	8/2/2011 11:46:59 AM	13	yes	4	30 sec count; 25% rxn; NoReacted rounded up
270492	709	227	8/2/2011 1:06:09 PM	1	yes	1	.
270512	729	227	8/2/2011 1:12:19 PM	1	yes	1	rxn=dive
270539	756	227	8/2/2011 1:21:46 PM	1	yes	1	dive
270845	985	227	8/2/2011 4:00:36 PM	2	yes	1	50% rxn
271689	562	228	8/6/2011 6:05:20 PM	2	yes	2	100% rxn
272641	94	230	8/8/2011 11:48:19 AM	2	yes	2	100% rxn dive
272666	119	230	8/8/2011 11:55:43 AM	1	yes	1	dive
272693	146	230	8/8/2011 12:02:23 PM	19	yes	2	30 sec count; 2 rxn = dive
272710	163	230	8/8/2011 12:06:15 PM	23	yes	3	30 sec count; 3 rxn = dive
272729	182	230	8/8/2011 12:10:12 PM	15	yes	2	30 sec count; 2 rxn = dive
272854	233	230	8/8/2011 12:22:02 PM	10	yes	2	30 sec count; 2 rxn = dive
272790	268	230	8/8/2011 12:30:25 PM	19	yes	1	30 sec count; 1 rxn = dive
272835	360	230	8/8/2011 1:04:54 PM	2	yes	2	100% rxn dive
238044	328	2	8/22/2011 5:47:03 PM	1	yes	1	.
238060	344	2	8/22/2011 5:52:55 PM	1	yes	1	.
238523	296	3	8/24/2011 5:42:33 PM	5	yes	1	1 rxn dove
277543	76	238	8/26/2011 12:15:34 PM	3	yes	1	feeding and milling, 1 gray with substantial amount of white on rostrum, 1/3 rxn
280154	503	241	9/2/2011 1:56:06 PM	1	yes	1	.
280540	892	241	9/2/2011 5:19:06 PM	1	yes	1	.
282764	404	244	9/6/2011 11:51:03 AM	1	yes	1	.
283265	170	245	9/8/2011 11:37:20 AM	2	yes	2	100% rxn

284877	220	248	9/12/2011 11:06:33 AM	9	yes	3	3 rxn dove
245024	345	15	9/12/2011 12:07:22 PM	1	yes	1	.
245317	584	15	9/12/2011 1:34:33 PM	2	yes	1	50% rxn
244935	606	15	9/12/2011 1:42:18 PM	2	yes	2	100% rxn
285496	1000	248	9/12/2011 5:47:00 PM	1	yes	1	.
285512	1036	248	9/12/2011 5:58:47 PM	2	yes	1	50% rxn
245987	222	16	9/13/2011 2:08:32 PM	11	yes	6	6/11 rxn
245996	231	16	9/13/2011 2:11:51 PM	15	yes	9	9/15 rxn
246103	376	16	9/13/2011 3:08:01 PM	25	yes	19	75% rxn = dive; NoReacted rounded up
246131	426	16	9/13/2011 3:28:40 PM	1	yes	1	.
286372	774	249	9/13/2011 4:24:12 PM	2	yes	2	100% rxn
286429	783	249	9/13/2011 4:26:30 PM	1	yes	1	100% rxn
286974	184	250	9/14/2011 11:18:58 AM	3	yes	2	67% rxn
286986	196	250	9/14/2011 11:21:08 AM	25	yes	4	no clino, grouped; (17% rxn) 4 animals reacted to aircraft; 30 sec counts initiated
287040	250	250	9/14/2011 11:37:29 AM	8	yes	3	(38%) 3 rxn
249321	49	21	9/28/2011 9:50:17 AM	1	yes	1	animal came up to the surface and as we approached it quickly dove
249433	430	21	9/28/2011 12:05:11 PM	1	yes	1	.
249802	481	21	9/28/2011 12:24:35 PM	1	yes	1	.
290719	1198	256	9/28/2011 7:00:00 PM	3	yes	1	1 dove
290753	1209	256	9/28/2011 7:04:33 PM	4	yes	4	4/4 rxn dove
290754	1210	256	9/28/2011 7:04:35 PM	10	yes	8	75% rxn; NoReacted rounded up
290757	1213	256	9/28/2011 7:05:25 PM	11	yes	9	80% rxn dove; NoReacted rounded up
291217	264	257	9/29/2011 1:30:04 PM	1	yes	1	.
291137	274	257	9/29/2011 1:33:20 PM	1	yes	1	.
291141	278	257	9/29/2011 1:34:41 PM	1	yes	1	.
291550	558	257	9/29/2011 3:21:53 PM	1	yes	1	.
291460	561	257	9/29/2011 3:22:30 PM	3	yes	3	3/3 rxn
291464	565	257	9/29/2011 3:23:24 PM	2	yes	2	2/2 rxn
291698	740	257	9/29/2011 4:35:21 PM	1	yes	1	.
292369	618	258	9/30/2011 2:40:22 PM	83	yes	4	4/83 rxn, dove
293472	306	260	10/2/2011 2:16:21 PM	1	yes	1	.
293484	331	260	10/2/2011 2:25:23 PM	1	yes	1	.
294110	135	262	10/5/2011 11:56:39 AM	2	yes	2	2/2 rxn
294347	459	262	10/5/2011 1:57:08 PM	1	yes	1	.
294445	470	262	10/5/2011 2:00:56 PM	1	yes	1	.
294453	478	262	10/5/2011 2:03:28 PM	2	yes	1	1/2 rxn
295781	121	265	10/17/2011 2:39:08 PM	1	yes	1	.
295782	122	265	10/17/2011 2:39:10 PM	1	yes	1	.
295810	150	265	10/17/2011 2:47:56 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
295811	151	265	10/17/2011 2:48:06 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
295814	154	265	10/17/2011 2:48:42 PM	1	yes	1	.
295819	159	265	10/17/2011 2:49:30 PM	2	yes	2	No rxn notes, so final group count added as NoReacted default
295836	173	265	10/17/2011 2:53:32 PM	1	yes	1	.
295850	187	265	10/17/2011 2:58:16 PM	1	yes	1	.
295852	189	265	10/17/2011 2:58:41 PM	1	yes	1	.
295926	211	265	10/17/2011 3:05:37 PM	1	yes	1	.
295928	213	265	10/17/2011 3:05:56 PM	1	yes	1	.

295869	224	265	10/17/2011 3:09:00 PM	1	yes	1	.
295950	255	265	10/17/2011 3:19:55 PM	1	yes	1	.
295954	259	265	10/17/2011 3:21:32 PM	1	yes	1	GPS antenna dislodged; lat_long taken from spidertracks

Aerial\_Master\_1979\_2011\_v3\_36 Version History

Edits made by AAB

11 August 2020

1979 (entire year) – Aerial\_Survey: changed from NOSC\_Goose to NARL\_Otter

Added to notes: “Flight 30, 32, and 33 are out of sequence; there was no flight 31”:

ID 59427 F30 E1 9/7/1979

ID 59442 F32 E1 9/7/1979

ID 59457 F33 E1 9/7/1979

Added to notes: “Two aircraft were conducting surveys from 6-15 Oct 1982; flights were numbered sequentially (80-94) by date, not by aircraft”:

ID 38846 F80 E1 10/6/1982

ID 38876 F81 E1 10/7/1982

ID 38880 F82 E1 10/9/1982

ID 38890 F83 E1 10/9/1982

ID 38962 F84 E1 10/10/1982

ID 38983 F85 E1 10/11/1982

ID 39021 F86 E1 10/11/1982

ID 39088 F87 E1 10/12/1982

ID 39122 F88 E1 10/12/1982

ID 39135 F89 E1 10/13/1982

ID 39165 F90 E1 10/14/1982

ID 39200 F91 E1 10/15/1982

ID 39208 F92 E1 10/15/1982

ID 39269 F93 E1 10/16/1982

ID 39304 F94 E1 10/17/1982

Added to notes: “Flt 206 was the first flight in 1990”

ID 56029 F206 E1 10/14/1990

## Aerial\_Master\_1979\_2011\_v3\_35 Version History

Edits made by AAB

10 April 2020

ID 102983 F21 E32 – Totalno 3, notes “photos taken. 3<sup>rd</sup> whale found in photos -April 2020.”

ID 103945 F28 E26 – Behavior feed, notes “Several pairs. photos taken” (data had cow with calf as Behavior for a sighting of 12 whales with 2 calves, but in discovering photos in April 2020, photos clearly show several bowheads with mouth open, baleen on display, and echelon formation.)

Aerial\_Master\_1979\_2011\_v3\_34 Version History

Edits made by AAB

19 February 2020

Mike Hay updated the Block field to "1a" for the following events:

YEAR	Flt_No	Event
1979	18	7
1979	18	9
1979	39	6
1979	39	7
1979	39	8
1979	54	8
1979	54	9
1979	60	15
1979	60	40
1979	62	11
1980	25	4
1980	25	6
1980	26	22
1980	26	23
1980	26	25
1980	26	35
1980	26	36
1980	26	38
1980	26	41
1980	28	40
1980	28	41
1980	65	3
1980	90	31
1981	78	2
1982	70	15
1982	70	49
1983	45	5
1983	45	6
1983	45	14
1983	59	29
1984	22	50
1984	35	34
1984	35	50
1984	63	4
1984	71	4
1984	73	33
1988	1	39

1988	1	40
1988	10	48
1990	3	12
1990	8	52
1990	11	5
1992	12	48
1992	19	77
1992	27	3
1992	41	34
1993	11	4
1993	25	99
1993	41	11
1993	41	12
1994	29	102
1994	30	25
1995	9	76
1995	10	80
1995	14	28
1995	15	4
1995	20	93
1996	29	7
1996	31	4
1996	32	4
1996	32	23
1996	33	51
1997	9	140
1997	10	171
1997	12	3
1998	4	5
1998	9	4
1998	10	4
1998	10	5
1998	13	7
1998	16	4
1998	16	89
1998	17	4
1998	18	8
1998	19	8
1998	19	101
1998	21	6
1998	21	29
1998	21	30
1998	21	46
1998	21	81

1998	22	3
1998	22	4
1998	23	4
1998	24	4
1998	24	5
1998	26	71
1998	27	7
1998	27	23
1998	27	24
1998	35	115
1998	35	116
1998	38	33
1998	39	40
1998	40	3
1998	40	4
1998	40	6
1998	43	89
1998	44	3
1998	44	4
1999	3	18
1999	10	15
1999	10	16
1999	12	143
1999	12	144
1999	12	145
1999	14	4
1999	24	12
1999	29	6
1999	29	7
1999	29	35
1999	29	37
1999	29	43
1999	29	44
1999	29	46
2000	7	99
2000	8	86
2000	22	51
2001	7	113
2001	9	93
2001	22	23
2001	22	25
2002	4	80
2002	12	5
2002	13	26

2002	14	113
2002	14	140
2003	4	3
2003	7	5
2003	8	16
2003	15	76
2004	2	58
2004	3	21
2004	3	22
2004	5	274
2004	6	115
2004	6	116
2004	7	55
2004	12	6
2004	13	234
2004	13	235
2004	15	5
2004	16	11
2004	23	63
2004	23	96
2005	2	37
2005	2	74
2005	6	6
2005	11	67
2005	22	112
2006	5	147
2006	14	5
2006	14	6
2006	14	9
2006	14	109
2006	18	77
2006	20	139
2006	21	54
2007	3	211
2007	8	4
2007	8	7
2007	8	8
2007	8	217
2007	8	218
2007	8	221
2007	8	283
2007	9	4
2007	9	5
2007	18	75

2008	20	41
2008	20	43
2008	20	69
2008	20	70
2008	22	158
2008	23	60
2008	23	186
2008	30	73
2008	31	56
2008	32	20
2008	38	138
2009	1	553
2009	1	559
2009	9	312
2009	9	340
2009	9	342
2009	10	335
2009	10	691
2009	10	722
2009	10	727
2009	13	29
2009	13	36
2009	13	39
2009	16	576
2009	16	582
2009	16	586
2009	18	462
2010	10	690
2010	10	1038
2010	10	1041
2010	10	1069
2010	10	1088

AAB mapped all Block 1 events and found more sightings along the Block 1 shoreline that were not included in the Block 1 to Block 1a update because the Block 1a shapefile did not extend all the way to overlap the shoreline. AAB updated these events to Block 1a:

ID	Event	Flight	Date
20521	4	34	10/9/1996 9:55
2412	43	39	10/18/1998 12:24
2413	44	39	10/18/1998 12:26
2415	46	39	10/18/1998 12:29
2420	5	40	10/22/1998 11:12
2528	4	41	10/23/1998 10:42
71425	231	21	10/13/2001 15:34

75635	6	1	9/1/2004 14:07
80157	6	12	9/25/2005 10:00
82404	4	8	9/7/2006 10:02
82560	5	10	9/13/2006 9:44
82562	7	10	9/13/2006 9:46
82801	2	11	9/14/2006 9:00
96710	138	8	9/17/2007 15:14
97045	289	8	9/17/2007 18:13
103226	146	23	9/12/2008 16:42

Carcass updates:

2009:

E703, F221, 8/21/2009 – notes = “frames Carcass09\_1018-1023. species determination based on post-script photo analysis. Resighted on 8/27/09 F223 E641 and 9/2/09 F225 E795. Killer whale predation.”

E641, F223, 8/27/2009 – notes = “Resight of 8/21/2009 F221, E703 and 9/2/09 F225, E795. Killer whale predation via 8/21/09 E703 photos.”

E652, F223, 8/27/2009 – Habitat beach (based on plot of lat/long)

E795, F225, 9/2/2009 – notes = “Resight of E703 F221 8/21/2009 and E641 F223 8/27/2009. Killer whale predation via 8/21/09 E703 photos.”

E225, F227, 9/6/2009 – notes = “frames Carcass09\_1024-1031. Suspect KW predation.”

E194, F231, 9/19/2009 – Habitat = beach (on beach in photos), notes = “frames Carcass09\_1032-1037. Species determination based on post-script photo analysis. Suspect killer whale predation.” (the notes say frames: 245-250 but the changed file names on the LAN = frames Carcass09\_1032-1037)

E555, F231, 9/19/2009 – Species = gray whale, notes = “frames Carcass09\_1038-1044, BKR photos; heavily decomposed; flukes trailing; gray whale based on pec flippers, based on post-script photo analysis. Killer whale predation.”

2011:

E364, F237, 8/24/2011 – notes = “frame GrayWhale\_11\_0001. Code 4; species determination based on post-script photo analysis. Suspect killer whale predation.”

Compacted & Repaired.

Aerial\_Master\_1979\_2011\_v3\_33 Version History

Edits made by AAB

4 February 2020

ID116474, E333, F220, 8/20/2009 – notes “resighted on 8/27/2009, F223, E618. Advanced decomp. Visual COD investigation based on photos: R.Stimmelmayer 31Mar2019 -Fascinating carcass. No good evidence for killer whale predation, but back of skull is exposed.”

ID174577, E1166, F214, 7/27/2010 – notes “reported by Lisburne radio. Moderate decomp. Species based on post-script photo analysis. Visual COD investigation: R.Stimmelmayer 31Mar2019 -Circular tissue defect=killer whale predation.”

ID186773, E742, F233, 9/17/2010 – notes “Moderate decomp. Visual COD investigation: R.Stimmelmayer 31Mar2019 -Blown out, male, no other signs of injury; older whale based on light peduncle.”

Compacted & Repaired.

## Aerial\_Master\_1979\_2011\_v3\_32 Version History

Edits made by AAB  
14 November 2018

Added fields:  
Icepercent\_l  
Icepercent\_r  
assoc\_event

In Design View of the Output table, copy/pasted the Description entries for those fields from the 2018 master database:

Added Icepercent\_l Description: Estimate of the percent of ocean surface within the visual range of the left observer (beginning in 2018)

Added Icepercent\_r Description: Estimate of the percent of ocean surface within the visual range of the right observer (beginning in 2018)

Added assoc\_event Description: FltType 8, enttags 6 & 7 are populated with the Event number of the FltType 8, enttag 3 they are associated with. FltType 8, enttag 3 are populated with the Event numbers of the FltType 8, enttags 6 & 7 they are is associated with.

Changed the Block field from Number to ShortText in Design View:

(so that all Block fields are formatted the same throughout the master databases; in 2018, with the inclusion of block 13N, the field had to be changed to ShortText.)

When trying to change the field to ShortText, Access gave me this error: Microsoft Access can't change the data type. There isn't enough disk space or memory.

So I created a blank database/table with all the same table structure: copied the Design view of the Output table and pasted it into a new table's Design view. That created a table with all the fields, but no data yet. In this new table, changed Block to ShortText and saved it. Then ran an append query to append the 1979-2011 master data into the new table. Copied the FlightInfo, SummaryInfo, and lut tables into the new database.

Compacted & Repaired.

## Aerial\_Master\_1979\_2011\_v3\_31 Version History

Edits by Megan Ferguson, 25 August 2018:

MCF edits to Aerial\_Master\_1979\_2011\_v3\_30mcf\_v5.mdb

(AAB note: AAB renamed this version to v3\_31 and added edits listed at end of this v3\_31 edit log.)

All edits below are for survey year 2009, and are based on plotting each continuous section of transect and determining Transect\_id.

“t.id” = Transect\_id

Flt 201

\*E63-101: t.id = 9

\*E138-145: t.id=12

Flt 202

\*E44-51: t.id=1

\*E112-197: t.id=4

\*E209-297: t.id=5

\*E332-428: t.id=7

\*E467-472: t.id=10

Flt 203

\*E120-142: t.id=16

Flt 204

\*E74-159: t.id=16

\*E196-279: t.id=13

\*E295-352: t.id=12

\*E387-449: t.id=10

\*E472-531: t.id=”C”

Flight 205, year=2009

\*E176-309: Transect\_id=22

\*E361-401: Transect\_id=19

\*E589-644: Transect\_id=3

\*E704-812: Transect\_id=6

\*E846-947: Transect\_id=8

\*E984-1047: Transect\_id=10

Flt 206

\*E119-285: t.id=15

\*E323-483: t.id=12

\*E493-599: t.id=”C”

Flight 207, year=2009

\*E151-294: Transect\_id=20

\*E330-382, 388-484 : Transect\_id=17

Flight 208, year=2009

\*E105-197 : Transect\_id=C  
\*E213: T.id=2  
\*E253-300: T.id=4

flight 209, year=2009  
\*E191-222; Transect\_id = 3  
\*E248-261: Transect\_id=1

Flight 210, year=2009  
\*E89-121: Transect\_id=11  
\*E165-187: Transect\_id=9  
\*E211-229: Transect\_id=7  
\*E260-284: t.id=4

Flight 211, year=2009  
\*E80-235: Transect\_id=C  
\*E246-304: Transect\_id=23  
\*E418-537: Transect\_id=9

Flight 212, year=2009  
\*E207-208: T.id=18  
\*E239-278: t.id=18  
\*E330-468: Transect\_id=C  
\*E485-546: t.id=3  
\*E566-603 : t.id=2

Flight 213, year=2009  
\*E151-275 : t.id=10  
\*E280-311: Transect\_id=C  
\*E313-405: Transect\_id=7  
\*E453-529 : t.id=4  
\*E532-546: Transect\_id=C  
\*E647-711 : t.id=11  
\*E751-871: t.id=9

Flight 214  
\*E64- 86:t.id=8  
\*E114-134: t.id=6  
\*E151-228: t.id=5  
\*E282-297: t.id=1

Flight 216, year=2009  
\*E16-172: Transect\_id=C  
\*E179-252 : Transect\_id=17  
\*E291-342 and 351-355: Transect\_id=14  
\*E477-522: Transect\_id=4  
\*E535-576: Transect\_id=3

Flight 217  
\*E32-43: t.id=2  
\*E193-205: t.i.d=5  
\*E209-212: t.id=5

\*E218-237: t.id=

Flight 220, year=2009

\*E35-57: Transect\_id=1

\*E126-312: Transect\_id=4

\*E314-357: Transect\_id=C

\*E369-545: Transect\_id=7

\*E567-715 : Transect\_id=8

\*E724-740: Transect\_id=C

\*E841-984 : Transect\_id=5

\*E1018-1161 : Transect\_id=6

\*E1229-1273: Transect\_id=2

\*E1295-1371: Transect\_id=3

Flight 221, year 2009

\*E162-188: Transect\_id = 14

\*E258-362: Transect\_id = 11

\*E393-565: Transect\_id=9

\*E567-719: Transect\_id=C

Flt 222

\*E128-181: 15

Flight 223, year=2009

\*E115-281 : Transect\_id=13

\*E334-382, 392, 395: t.id=10

\*E402:524: t.id=10

\*E529-660: T.id=C

Flight 224, year=2009

\*E38-62 : Transect\_id=1

\*E134-238: Transect\_id=4

\*E294-310: Transect\_id=7

\*E365-477 : Transect\_id=5

\*E525-595: Transect\_id=3

\*E618-652: Transect\_id=2

Flight 225, year=2009

\*E161-374: t.id=17

\*E492-579: Transect\_id=14

\*E588-795: T.id=C

Flight 226, year=2009

\*E77-248 : Transect\_id=9

\*E336-474 : Transect\_id=6

\*E487-523: Transect\_id=C

\*E529-629 : Transect\_id=3

\*E673-683: Transect\_id=1

Flight 227, year=2009

\*E182-190 : Transect\_id=19

\*E252-262: T.id=19

\*E355-387, 410, 413, 475, 496-530: Transect\_id=C

Flt 228

\*E4-101: t.id=C

Flt 229

\*E181-391: t.id=19

\*E446-516: t.id=16

\*E529-664 : t.id=16

\*E667-746: t.id=C

Flt 230

\*E170-223: t.id=14

\*E275-293: t.id=11

\*E302: t.id=11

\*E354-366: t.id=C

MCF checked all other flights from 2009. Transects on all other flights had an associated TransectT\_ID in the database.

Edits by Amelia Brower, 28 August 2018:

Deleted lut\_Observer and lut\_Pilot tables.

Added Transect ID:

ID 107506 F202 E377 – Transect\_id 7

ID 134945 F244 E376 – Transect\_id C

ID 134948 F244 E379 – Transect\_id C

ID 134952 F244 E383 – Transect\_id C

Removed Transect ID:

ID 126685 F234 E177 – Transect\_id “.”

Aerial\_Master\_1979\_2011\_v3\_30 Version History

Edited by Amelia Brower

9 February 2018

ID 7395, E52, F9, 9/12/1992 – notes: "resighted on 9/17/1992, F13 E21"

ID 7694, E21, F13, 9/17/1992 – Repeat=no, notes: "resight of 9/12/1992, F9 E52"

ID 811, E10, F17, 9/18/1998 – Repeat=no

ID 947, E25, F18, 9/19/1998 – notes: "same whale as E49, different location, subsistence whale and towed to shore"

ID 971, E49, F18, 9/19/1998 – notes: "same whale as E25, different location, subsistence whale and towed to shore"

ID 1308, E49, F22, 9/26/1998 – Repeat=no

ID 116474, E333, F220, 8/20/2009 – Habitat beach, notes: "resighted on 8/27/2009, F223, E618"

ID 119243, E618, F223, 8/27/2009 – Habitat beach, notes: "resight of F220, E333, 8/20/2009, previously reported"

Aerial\_Master\_1979\_2011\_v3\_29 Version History

Edited by Amelia Brower

17 January 2018

ID 118223, E703, F221, Date 8/21/2009 - Species gray whale, Habitat beach, notes "species determination based on post-script photo analysis"

ID 123661, E194, F231, Date 9/19/2009 - Species gray whale, notes "inside beach, frames: 245-250, species determination based on post-script photo analysis"

ID 124022, E555, F231, Date 9/19/2009 - notes "BKR photos; heavily decomposed; flukes trailing; not bowhead, likely gray whale based on pec flippers, based on post-script photo analysis"

ID 133380, E441, F242, Date 10/15/2009 - PhotosTaken 0, notes "PhotosTaken=0 based on post-script photo analysis, no photos found"

ID 174577, E1166, F214, Date 7/27/2010 - Species bowhead whale, notes "reported by Lisburne radio; species determination based on post-script photo analysis"

ID 276679, E364, F237, Date 8/24/2011 - Species gray whale, notes "body on beach, code 4; species determination based on post-script photo analysis"

## Aerial\_Master\_1979\_2011\_v3\_28\_VH

Aerial\_Master\_1979\_2011\_v3\_28 Version History

Edited by Amelia Brower

4 December 2017

Output table:

Removed trailing spaces from "partly cloudy " to "partly cloudy"

30 Aug 2011, FLT5 E404, 408, 411, 422, 424, 427, 438,

31 Aug 2011, FLT6 E410, 415, 418.

SummaryInfo table:

Copied info from 2008, Flights 1-45 (the only records with entries in these columns)

from Bowhead\_Calves field and pasted into Bowhead\_Cow-calf\_Pairs field

from Bowhead\_Calves\_On\_Transect and pasted into Bowhead\_Cow-calf\_Pairs\_on\_transect

Deleted fields:

Bowhead\_Calves

Bowhead\_Calves\_On\_Transect

Renamed fields:

from Bowhead\_Cow-calf\_Pairs to Bowhead\_Calves

from Bowhead\_Cow-calf\_Pairs\_on\_transect to Bowhead\_Calves\_On\_Transect

Aerial\_Master\_1979\_2011\_v3\_27\_VH

Aerial\_Master\_1979\_2011\_v3\_27 Version History  
Edited by Amelia Brower  
25 October 2017

Output table:

Family 6 (unid and sm unid mar mam's):

ID	Event	Flt_No	GMT_Minus8_DateTime
110702	387	207	7/5/2009 12:42:20 PM
249821	534	21	9/28/2011 12:45:04 PM
272470	600	229	8/7/2011 12:45:23 PM
277932	541	238	8/26/2011 3:23:46 PM
279733	142	241	9/2/2011 11:44:48 AM
291033	617	257	9/29/2011 3:43:15 PM
291481	601	257	9/29/2011 3:35:20 PM
291559	577	257	9/29/2011 3:26:55 PM

Behavior dead:

ID	Event	Flt_No	GMT_Minus8_DateTime
101500	34	9	8/8/2008 5:13:21 PM
101503	37	9	8/8/2008 5:19:06 PM
101510	44	9	8/8/2008 5:38:27 PM

Entry s on transect, Species unid pinniped, Behavior dead, Totalno 1, Final\_group 1, Block 13, Family 2, enttag 3

ID	Event	Flt_No	GMT_Minus8_DateTime
116881	740	220	8/20/2009 3:20:50 PM

Transect\_id ". "

ID	Event	Flt_No	GMT_Minus8_DateTime
113783	537	213	7/26/2009 2:19:24 PM
113784	538	213	7/26/2009 2:22:24 PM
113787	541	213	7/26/2009 2:25:13 PM
113792	546	213	7/26/2009 2:28:09 PM

Aerial\_Master\_1979\_2011\_v3\_26\_VH

Aerial\_Master\_1979\_2011\_v3\_26 Version History  
Edited by Amelia Brower  
13 April 2017

Output table:

Removed trailing space from Skycon "partly cloudy "

ID	Event	Flt_No	Date
239422	404	5	8/30/2011
239426	408	5	8/30/2011
239429	424	5	8/30/2011
239432	427	5	8/30/2011
239481	411	5	8/30/2011
239492	422	5	8/30/2011
239495	438	5	8/30/2011
240035	410	6	8/31/2011
240040	415	6	8/31/2011
240043	418	6	8/31/2011

ID116474 F220 E333 (2009) - Habitat beach, notes "resighted 27Aug2009, FLT223 E618"

ID119243 F223 E618 (2009) - Habitat beach, notes "resight of 20Aug2009, FLT220 E333 (previously reported)"

ID41303 F15 E28 (1984) - Habitat beach, notes "position of sighting represents aircraft position; carcass location was on beach (based on 1984 report, Ljungblad et al. 1985)"

Aerial\_Master\_1979\_2011\_v3\_25\_VH

Aerial\_Master\_1979\_2011\_v3\_25 Version History  
Edited by Amelia Brower  
21 February 2017

Output table:

ID 103506 FLT25 E65 - notes: "photo names (have edited photos only) 'Beach bears', 'Lounging 3', 'Skulls and bears 2'"

Calf\_on\_Circle value changed to "1":

ID	Event	Flt_No
109802	124	206
111881	322	210
112562	581	211
113048	429	212
113049	430	212
142289	259	4
151731	346	17
138888	633	249
257844	51	205
260141	530	208
264073	268	217
264553	107	219
264573	114	219
285512	1036	248
285515	1039	248

Calf\_on\_Circle value changed to "2":

ID	Event	Flt_No
121154	323	226
157840	708	8
163256	222	16
287053	263	250

Calf\_on\_Circle value changed to "4":

ID	Event	Flt_No
150760	576	16
160816	556	12

Calf\_on\_Circle value changed to "6":

ID	Event	Flt_No
153149	702	18

Aerial\_Master\_1979\_2011\_v3\_24\_VH

Aerial\_Master\_1979\_2011\_v3\_24 Version History

Edited by Amelia Brower

11 January 2017

Output table:

ID35453 F14 E53 - Vis\_right from "Unlimited" (capital "U") to "unlimited" (lower case "u")

Aerial\_Master\_1979\_2011\_v3\_23\_VH

Aerial\_Master\_1979\_2011\_v3\_23 Version History  
Edited by Amelia Brower  
4 August 2016

Output table:

ID76736 FLT12 E120  
ID76916 FLT13 E23  
ID77257 FLT15 E131  
ID77483 FLT18 E131

Behavior: dead, notes: "dead" added to behavior in Aug 2016 based on Monnett and Gleason 2006

Aerial\_Master\_1979\_2011\_v3\_22\_VH

Output table:

Updated Transect\_id field with Beaufort Sea transects (140W to 157W) using transect ID numbers assigned by MCF, starting with 101 in the easternmost survey bin (140.0 to 140.5 W) and ending with transect ID 134 near Barrow.

Aerial\_Master\_1979\_2011\_v3\_21\_VH

Output table:

ID 287317 FLT250 E387 - Species "Dall sheep".

ID 39341 FLT1 E36, ID 33477 FLT45 E45, ID 66055 FLT38 E52, E53 - Species "Dall's porpoise".

Behavior "hauled out" (walrus with Habitat of broken floes or unconsolidated ice and had notes they were on ice):

ID 99660 FLT4 E208  
ID 100313 FLT16 E23  
ID 102084 FLT16 E39  
ID 102246 FLT16 E201  
ID 102259 FLT16 E214

Behavior "hauled out" (pinnipeds and walrus with Habitat of "on land"):

ID 4510 FLT8 E52  
ID 12835 FLT10 E66  
ID 26334 FLT6 E52  
ID 120620 FLT225 E591  
ID 121913 FLT227 E337  
ID 122336 FLT229 E119  
ID 122945 FLT229 E728  
ID 180608 FLT225 E116  
ID 181059 FLT225 E568  
ID 181060 FLT225 E569  
ID 181125 FLT225 E578  
ID 181288 FLT225 E741  
ID 182677 FLT228 E138  
ID 183277 FLT228 E138  
ID 183279 FLT229 E176  
ID 185610 FLT232 E151  
ID 186134 FLT233 E131  
ID 188297 FLT237 E136

Behavior "hauled out" (pinnipeds and walrus with Habitat of "on ice"):

bearded seal n=61  
ringed seal n=73  
small unid pinniped n=10  
unid pinniped n=164  
walrus n=342

Added "dive" to notes:

ID 19490 FLT17 E32  
ID 5723 FLT29 E31

In 2009, all automatic update FltTypes were stored as survey mode FltTypes in the first part of 2009, then morphed into "-1" in August, so that by flt 218, they were all entered as "-1". I ran update queries to change all automatic update FltTypes to "-1".

FltType of 1, n=1486  
FltType of 2, n=2591  
FltType of 4, n=1609  
FltType of 5, n=99  
FltType of 6, n=48

Icepercent - 99 (cetaceans that were in 100% ice):

ID 35183 FLT7 E13  
ID 39090 FLT87 E3  
ID 31559 FLT9 E52  
ID 31560 FLT9 E53

Aerial\_Master\_1979\_2011\_v3\_21\_VH

ID 31567 FLT9 E60  
ID 31572 FLT10 E3  
ID 31578 FLT10 E9  
ID 31632 FLT10 E63  
ID 39854 FLT77 E24  
ID 39978 FLT79 E28  
ID 41078 FLT11 E51  
ID 54231 FLT207 E12  
ID 54281 FLT207 E62  
ID 54371 FLT209 E40  
ID 54456 FLT211 E43  
ID 23641 FLT32 E14  
ID 84354 FLT25 E7  
ID 84403 FLT25 E56  
ID 84472 FLT26 E62  
ID 84510 FLT26 E100

Aerial\_Master\_1979\_2011\_v3\_20\_VH

Output table:

In Design View, Descriptions to Field Names:

Icepercent - within description, changed (1979-1991, 2008-2013) to (1979-1991, and starting again in 2008).

Icetype - within description, changed (1979-1991, 2008-2013) to (1979-1991, and starting again in 2008).

Aerial\_Master\_1979\_2011\_v3\_19\_VH

All entries with behavior "rest" and a Swimdir value other than "." or "No Dir":  
Swimdir was changed to "." (559 records).

IDs 55853, 55854, 55855 (10/30/89, Flt 227 E19, E20, E21) - ice percent 0, ice type  
no ice

Edited by Amelia Brower

Edits to Aerial\_Master\_1979\_2011\_v3\_18:

FLT202 E52 - X/Yofwhale -1, Lat/LongTemp changed to ArcLat/Long  
FLT232 E116 - X/Yofwhale -1, Lat/LongTemp changed to ArcLat/Long  
FLT249 E175 - X/Yofwhale -1, Lat/LongTemp changed to ArcLat/Long  
FLT256 E761 - X/Yofwhale -1, Lat/LongTemp changed to ArcLat/Long



# Versions saved for Aerial\_Master\_1979\_2011.MDB

All versions of this document are listed below with the new value of any changed properties.

Delete All Versions		Delete Minor Versions		
No. ↓	Modified	Modified By	Size	Comments
3.17	5/11/2015 2:11 PM	Amelia Brower	97.6 MB	Vis_left and Vis_right - changed "Unlimited" to "unlimited" (Vis_left: 27,397 records, Vis_right: 27,350 records)
3.16	11/1/2013 9:20 AM	Amelia Brower	97.6 MB	CLC Edits Part III/III N=104-chgd swimspeed "fast >" to "fast" N=689-chgd swimspeed "slow <" to "slow" N=113-chgd observer "Becky Scott" to "Rebecca Scott" N=436-chgd visimpleft "-1" to "" N=418-chgd visimpright "-1" to "" N=10-chgd vis_left "-1" to "" N=29-chgd vis_right "-1" to "" N=43,833 -chgd transectid "-1" to "" N=912-chgd transectid "0" to "" Transectid - replaced "c" with "C" N=644-chgd datarecorder "Becky Scott" to "Rebecca Scott" N=1-chgd obsleft "Amelia Brower" to "Amelia Brower" N=451-chgd obsleft "Becky Scott" to "Rebecca Scott" N=979-chgd obsright "Becky Scott" to "Rebecca Scott" Inserted "NoReacted" and "alt_gps" fields into Output table design. Updated field definitions in Output table design.
3.15	11/1/2013 9:13 AM	Amelia Brower	97.6 MB	CLC Edits Part II/III N=2-chgd habitat "bay or waters inland of barrier islands" to "bay or lagoon" N=11-chgd habitat "large, broken floe (old ice)" to "lrg broken floes" N=4-chgd habitat "leads or lead system" to "lead" N=23-chgd habitat "med-lg floes (old & new ice)" to "med broken floes" N=1713-chgd habitat "on ice (near lead or on floe)" to "on ice" N=5-chgd habitat "river mouth" to "river delta" N=1112-chgd behavior "3/4s to entire body exposed; resting/lying on surface of water" to "rest" N=4-chgd behavior "feeding at bonepile" to "feed"; added notes N=2-chgd behavior "feeding on seal on ice" to "feed"; added notes N=17-chgd behavior "hauled out on land" to "hauled out" N=1-chgd behavior "head to half the body exposed in water" to "rest" N=272-chgd behavior "lying, resting or alert on ice" to "rest" N=47-chgd behavior "sitting or lying on ground or ice" to "rest"
3.14	11/1/2013 8:52 AM	Amelia Brower	97.6 MB	CLC Edits Part I/III ID265487,F220,E146,Yr2011-chgd entry "s on circling" to "s on circling - search" ID272420,F229,E603,Yr2011-chgd entry "s on circling" to "s on circling - transect" N=11-chgd species "icebreaker" to "vessel icebreaker" N=4-chgd species "lg. rec. vessel" to "vessel lg. rec." N=34-chgd species "seismic vessel" to "vessel seismic" N=11-chgd species "sm. rec. vessel" to "vessel sm. rec." N=238-chgd species "small craft" to "vessel small craft" N=303-chgd species "commercial vesse" to "vessel commercial" N=1-chgd species "coast guard vessel" to "vessel coast guard"
3.13	8/7/2013 2:35 PM	Megan Ferguson	95.8 MB	Output: Changed Entry field design to allow 50 characters. Updated Entry & Fltype fields to distinguish between transect circling (n=769) and search circling (n=463). Revisions were made by MHay on 5/8/2013.  lut_Fltype: Changed code 5 to "circling - transect" and added code 6.
3.12	3/13/2013 4:17 PM	Cynthia Christman	97.2 MB	Changed totalno and notes for the following walrus sightings based on actual group sizes found in annual reports (verified by JTC): ID36526/F32/E74 ID38341/F69/E47 ID38932/F82/E41 ID34771/F65/E70 ID34773/F65/E72 ID39591/F72/E11 ID40125/F81/E56 ID40126/F81/E57 ID40127/F81/E58 ID40130/F81/E61 ID40131/F81/E62 ID40133/F81/E64 ID40135/F81/E66 ID40136/F81/E67 ID44038/F65/E49
3.11	1/31/2013 11:56 AM	Cynthia Christman	97.2 MB	Revised/updated LatTemp, LongTemp, and Block fields in all data from 1979-2011. Populated LatTemp/LongTemp fields to include actual positions where available. 1. Only sightings have blocks numbers; other records are NULL. 2. To determine block assignments, actual positions were used when available, otherwise plane positions were used (LatTemp/LongTemp). 3. Sightings have blocks 1-29 or 12.1-16.1, if in bounds. 4. Sightings have block 0, if out of bounds. 5. Blocks 12.1-16.1 represent blocks 12N-16N. 6. Block boundary precision was to three decimal places where applicable (e.g., 71.333, 71.167, etc.).
3.10	1/9/2013 8:32 AM	Cynthia Christman	97.2 MB	Inserted "PrimObs" column in Output table. Numeric codes 1 and 0 indicate primary observer or non-primary observer, respectively. Populated "PrimObs" for all records from 1989-2010, using the PrimObs2_9.csv created by MCF (n=181,165). Primary observers could not be determined pri Populated "PrimObs" for all 2011 records using info in the ObsLeft/Right/Fourth and DataRecorder fields. (n=59,237)  Note: 181,165 (pre-2011) + 59,237 (2011)=240,402. There are a total of 240,403 records in the mdb; however, 1 record is blank (no data, including date/t
3.9	1/7/2013 3:02 PM	Cynthia Christman	96.2 MB	Changed file name from "Aerial_Master" to "Aerial_Master_1979_2011".
3.8	1/7/2013 3:01 PM	Cynthia Christman	96.2 MB	Database was over 100MB with 2012 data appended; file size too large for SharePoint server. Removed all 2012 data from FlightInfo, SummaryInfo and Out
3.7	12/14/2012 10:35 AM	Cynthia Christman	127.9 MB	Ver 3.6 below has ASAMM2012_v02.mdb appended to it. A few additional edits were made to ASAMM2012_v03.mdb, which are included here in Ver 3.7. Edits: Output: ID341766/F265/E652 - chgd enttag to 5 SummaryInfo: Subtracted refuel time from total and deadhead minutes for 2012 F265.
3.6	12/13/2012 5:17 PM	Cynthia Christman	127.9 MB	Appended 2012 data to Output/FlightInfo/SummaryInfo (details below). Added tables for 2012 obs & pilot names.

MHay chgd Output Ice% from number to text to allow "n/a".  
 Current master mdb too lrg to chg datatypes in design view (MaxLocksPerFile error).  
 To resolve, created a new empty table, copy/pasted 1979-2011 mdb design into new table, modified field properties (General>Required/Allow Zero Length/Added Output fields "Pilot/Co\_Pilot"; FlightInfo field "ObsFourth"; SummaryInfo fields "RefuelMin/RefuelSubtFromTotal&DeadMin".  
 Output=323,471 records [240,403 (79-11) + 83,068 (2012)]  
 FlightInfo/SummaryInfo=1068 records each [936 (79-11) + 132 (2012)]

Output "Species" chgs:  
 bowhead to bowhead whale (n=6238)  
 orca to killer whale (n=6)  
 humpback to humpback whale (n=1)  
 minke to minke whale (n=2)  
 unknown cetacean to unid cetacean (n=265)  
 unknown pin to unid pinniped (n=3073)

3.5	5/14/2012 11:48 AM	Cynthia Christman	92.3 MB	No changes. Comment only. Note that record ID "59021" in FlightsConcatenated_BWASPCOMIDA2011.mdb was dropped when 2011 data were appended to
3.4	4/19/2012 2:32 PM	Cynthia Christman	92.3 MB	ID277527, 277528, 185610, 131300, 148924, 148927 - chgd PhotosTaken to "1"
3.3	2/8/2012 4:53 PM	Cynthia Christman	92.3 MB	Revised all DIST_FROM_SHORE (DFS) values using new normalized shoreline (NS) projected to NAEC but now with custom parameters that better fit study ;  DFS calculated for all saved sightings from 1979-2011, north of 67.5N and west of 139.5W using actual positions when available, otherwise plane positions (if  DFS is negative when sightings are landward of NS (n=686). DFS is positive when sightings are seaward of NS (n=26571). DFS is Null for all remaining records.
3.2	1/12/2012 11:06 AM	Cynthia Christman	92.3 MB	DIST_FROM_SHORE - Added additional sightings to DFS calculations described in v3.1. Extended boundary of query to include sightings north of 67.5 and w  All calculations created point data (x/y events) using LatTemp/LongTemp (populated these fields temporarily for 1979-2010 data to run calculation; i.e., X/Yc  All calculations used new normalized shoreline. Negative values indicate that sightings are landward of the normalized shoreline.
3.1	1/11/2012 3:36 PM	Cynthia Christman	92.3 MB	Recalculated all DIST_FROM_SHORE values for 1979-2010 data using new normalized shoreline (AlaskaWVS_NewCoastNAEC_Polyline created by Christman

This is the current published major version

3.0	1/7/2013 3:01 PM	Cynthia Christman	92.3 MB	Output, FlightInfo, SummaryInfo tables: 1. In design view, changed all text fields "allow zero length" to NO (see http://allenbrowne.com/bug-09.html). 2. Appended 2011 data from FlightsConcatenated_BWASPCOMIDA2011_v0_8.mdb.
2.10	12/20/2011 5:15 PM	Cynthia Christman	69.1 MB	FlightInfo - changed "Mike Baffrey" to "Michael Baffrey" where applicable  Output - ID39320 beluga sighting totalno chgd from "100" to "250" based on info from JTC/MCF
2.9	12/7/2011 2:31 PM	Cynthia Christman	69 MB	Deleted Queries.  FlightInfo - updated initials with full names where known; fixed misspellings.  Output - 1. Aerial_Survey chgd "NMML_Comma" to "NMML_Cmdr" (n=30500); 2. ObsRight chgd "Brenden" to "Brendan" (n=7); 3. Observer updated initials with full names where known, fixed misspellings, chgd lowercase to uppercase; 4. Design view updated field definitions.
2.8	6/24/2011 2:09 PM	Cynthia Christman	69 MB	Initially made X/YofWhale edits to v2.4, but upload became corrupt (only loaded 5MB of data and did not recognize file as an .mdb). Deleted v2.6 (5MB file). be relevant.  Edits: V2.4 - ID98342 - species: chgd to 'track-polar bear'; was originally 'track-polar bear' w/ totalno=0; accidentally chgd to 'polar bear'; chgd back to 'track-pole V2.8 - Added observer and pilot names to lut tables. Updated X/YofWhale for all cetaceans (n=2596), pinnipeds and land mammals (n=799) from 1998-pre: total records w/ X/YofWhale values after update = 6460.
2.7	6/23/2011 5:12 PM	Cynthia Christman	69 MB	
2.5	6/23/2011 5:00 PM	Cynthia Christman	69 MB	
2.3	4/14/2011 5:09 PM	Cynthia Christman	69 MB	Recalculated depth values (Depth_m) for all 1979-2009 data using updated bathymetry files.  Files used: Aerial_Master_v2_2.mdb BWASP_geographics.mdb CalcDepthAndDistance.bas (pulling positions from ArcLat/ArcLong) IBCAO raster (updated by Mike Hay 12/19/2010; projected in Polar Stereographic with 2.036 km resolution after geo-processing)
2.2	4/5/2011 1:34 PM	Cynthia Christman	69 MB	Edits: ID83060 - airhead; chgd 1014 to -1 ID49761 - calfn; chgd 4 to 0 (see Ljungblad et al. 1987) Output design view - inserted field descriptions
2.1	3/31/2011 10:13 AM	Cynthia Christman	69 MB	Added notes to 193 records where totalno=100 prior to 2007; note describes how totalno may be a minimum estimate.  ID104072 - del 31 from group; arctic fox, not a pinniped
2.0	1/7/2011 10:36 AM	Cynthia Christman	69 MB	Prepped tables for 2010 data. Flightinfo - renamed as FlightInfo. SummaryInfo - changed Bowhead_Cow_calf_Pairs/on_Transsect to Bowhead_Cow_calf_Pa  Appended 2010 FlightInfo, SummaryInfo and Output data from FlightsConcatenated_BWASPCOMIDA2010_v0_11.mdb.
1.37	8/9/2010 4:30 PM	Cynthia Christman	54.5 MB	Edits:  Group n=190 records - chgd 2,3,4,5 to 13 n=72 records - chgd 6,10,11 where totalno>2 to -1 n=33 records - chgd 6,9,10,11 where totalno=2 to 14 n=7 records - chgd 7 to 14 (totalno=2) n=12 records - chgd 12 where totalno>2 to 15 n=16 records - chgd 12 where totalno=2 to 14
1.36	6/28/2010 4:52 PM	Cynthia Christman	54.5 MB	Edits:  n=576 records - IceType: chgd frazzle to frazil n=9116 records - Skycon,VisImpLeft/Right,Vis_left/right,IceType,Seastate - chgd to "n/a" & Icepercent chgd to 0 where flttype=1 (deadheads)
1.35	6/25/2010 2:35 PM	Cynthia Christman	54.5 MB	Edits:  updated lut_GroupClassification table: added codeFamily column and groupclass values for codes 13-16, 37-39  ID54279,2863,75404, - Icepercent: chgd to 0  ID2897,2927,58253,58254,58263,58264,10102,9410,9559,14226,16241,16940,16671,19639,30259,30715,70607,72355,75379-75382,79038-79043,79141  ID98342,98651,103522,97558-97559,102988,104205,100287,103766,104207,104841,100310,98776 - Group: chgd to -1

1.34	6/24/2010 3:34 PM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>ID98652,99148,99591,99592,103874,104696,106386,106465,107623,116341 - Air_Head: chgd to value in airhead_gps field; airhead_gps comes directly frc</p> <p>ID104696 - Swimdir_True: chgd from 328 to 329; this value should be calculated from the airhead_gps field not the air_head field</p> <p>n=224 - Swimdir_True: del where it is not assoc. w/ a sighting (most cases occur when data trickled down in 2009)</p> <p>ID146565,146567 - Swimdir_True: del; sightings were on circling</p> <p>ID2261,36109,67353 - Swimdir_True: del; sightings are dead</p> <p>ID2261,25319,35977,36109,36178,36490,36494,38331,38714,67353 - Swimspeed: del; sightings are dead</p> <p>ID39955,39956,43483-43484,47378,49529,49592-49595,50056,50286,50371-50372,50543,22537 - Ictype: chgd to -1</p> <p>ID50058,51555-51556 - Icepercent: chgd to 0</p>
1.33	6/17/2010 9:26 AM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>ID707-Totalno: chgd to 2</p> <p>Behav: del cow/calf:</p> <p>ID32779,32799-(1 calf, accounted for)(Ljungblad 1984)</p> <p>35063-(no report info, totalno=1)(Ljungblad 1983)</p> <p>35234-(only 1 bear)(Ljungblad 1983)</p> <p>43449-(totalno=1, size=adult, no report info)</p> <p>63925-(totalno=1, no report info)</p> <p>32654-(Ljungblad 1984)</p> <p>37327-also added note (only calf seen)(Ljungblad 1983)</p> <p>ID32073-Calfno: chgd to 1 (Ljungblad 1984)</p> <p>ID35110,35122,35724,35742,37567,37569,37583,63918,64655,66524,66525,66526,68885 - Calfno: chgd to -1 (reports suggest calves)</p> <p>ID64026-Calfno: chgd to 1 (pup noted)(Ljungblad 1982)</p> <p>ID56041-Calfno: del 2 (totalno=1, no report info)</p> <p>ID76528-Behav/Calfno: del cow/calf/6 (totalno=1, no report info)</p> <p>ID82512-Notes: calfn&gt;totalno (bowheads/left as is; no report info)</p> <p>ID1006,28929,56311,57680,75761,79394 - Calfno: del (totalno=calfno, size=adult, no report info)</p> <p>n=34 records-Calfno: chgd blanks/0 to -1</p> <p>ID99997,101096,103220-Obs: chgd to Jeff Childs</p> <p>ID103217,103221,103222,103623-Obs: chgd to Gary Friedrichsen</p>
1.32	6/15/2010 3:33 PM	Cynthia Christman	54.5 MB	<p>Edits from 6/14 &amp; 6/15:</p> <p>ID81006 - Habitat/Icepercent: del "on ice (near or on floe)"/chgd 100 to 99</p> <p>ID14603,14864,14880,15878,15888,19563,19970 - Habitat: del "open water"</p> <p>ID82590 - Behavior: del "dead"</p> <p>n=96 records - Behavior: del "run" (for pinnipeds &amp; whales)</p> <p>ID44644,2040 - Behavior: del "swim"</p> <p>ID148084,148087 - Habitat: del "on ice (near lead or on floe)"</p> <p>ID2041,12812,58053,131300 - Icepercent/type: chgd to -1</p>
1.31	6/11/2010 4:12 PM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>ID35098 - Species: chgd to narwhal (see tech report for 1982, Ljungblad et al. 1983)</p> <p>Deleted aux sighting data where species was blank:</p> <p>ID74613,74120,56671,62767,63293,11443,62049,38370,60146,22886,45185,47633,30493,101188,101516,7159,25444,31431,31528,31706,31761,31772,;</p> <p>ID33049 - Sightcue/Behavior: chgd to ""</p> <p>ID97124,97297,97348,97636,99096,98342,n=116 records (exclu "kill site no bear" and "track-" sightings), chgd totalno to 1</p> <p>n=25 records - Sightcue: chgd 9 to "display" (cross referenced w/ publ. report)</p> <p>ID481 - Sightcue: chgd to ""</p> <p>n=355 records - Size: deleted size data from 2007-2009; size was used prior to 2007; group replaced size in 2007 and size should no longer be populated</p> <p>ID42654 - Behavior/Size: chgd to ""</p> <p>ID707,25173,25742,76681,76895 - Calfno: chgd to 1</p>
1.30	6/11/2010 7:04 AM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>ID98271,98875,101972,102024,103854,106751,96676,97027,97044,98041,98049,98053,98055,98061,98062,98443,98683,98938,98940,96591,96592,976</p> <p>ID99563,99803,101352,101716,102280 - Entry: chgd to deadhead</p> <p>ID98128,98363,100894 - enttag: chgd to 1</p> <p>ID97187,102456,100016,101024 - Family: chgd to 2</p> <p>ID98652 - Family: chgd to 1</p> <p>n=18 records in 2008 - Species: chgd "Polar Bear" to "polar bear"</p>
1.29	6/3/2010 3:44 PM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>ID111426, 111435-111437 - Flttype: chgd to 4</p> <p>ID115077-115078 - Flttype: chgd to 2</p>
1.28	6/2/2010 3:40 PM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>SummaryInfo table: added record (OBJECTID817) for 2009 flt 215; flt 215 summary was not generated in the field due to computer problems; I pulled the fl</p> <p>ID32131 - chgd record to reflect data found in following record ID32132; removed dead from behavior and 1 from totalno; ID32132 date/time coincides with</p> <p>ID6447,27855,69655 - FltType: chgd to 1</p> <p>ID102219,103299,104378 - FltType: chgd to 4</p> <p>ID98530-98533,98128 - FltType: chgd to 2</p>
1.27	6/1/2010 3:51 PM	Cynthia Christman	54.5 MB	<p>Edits:</p> <p>Multiple records - Aerial_Survey: chgd to new "agency_platform" convention: years 1986-1991, 2009</p>
1.26	5/28/2010 4:47 PM	Cynthia Christman	54.3 MB	<p>Edits:</p> <p>Multiple records - GMT_Minus8_DateTime: added 8 hours to time on the following flights:</p> <p>8/2/1979, flt 13</p> <p>9/7/1979, flt 30</p>

6/7/1980, flt 30  
7/23/1980, flt 50  
9/18/1980, flt 72  
10/6/1980, flt 85

9/15/1980, flt 69 - chgd times per JTC old records

Multiple records - Aerial\_Survey: chgd to new agency\_platform convention:  
years 1979-1985 (n=27773) chgd to NOSC\_Goose  
years 1992-2007 (n=41916) chgd to MMS\_Otter  
year 2008 (n=7382) chgd to NMML\_Otter

1.25	5/27/2010 5:34 PM	Cynthia Christman	53.9 MB	Edits:  Multiple records - Flt_No: years 1986-1991 flight numbers were repeated; added 200 to flight numbers where secondary aircraft was flying so that each year  1986 (multiple records) - chgd fltno for flights starting on 9/7 1987 (n=2056) - chgd fltno for "NOSC" flights 1988 (n=570) - chgd fltno for "NOSC" flights 1989 (n=1571) - chgd fltno for "NOSC" flights 1990 (n=1120) - chgd fltno for "NOSC" flights 1991 (n=1665) - chgd fltno for "NOSC" flights  Flight numbering scheme based on discussions w/ JTC. Note that Aerial_Survey field will soon be revised, so above "NOSC" designation may no longer apply.
1.24	5/21/2010 4:42 PM	Cynthia Christman	53.9 MB	Edits:  ID948-952, 28936-28937, 30511-30515, 30664-30665, 70662-70664, 72750-72751, 73706-73708, 74102-74103, 74125-74127, 74287-74288, 74445-7444 either remove duplicates or to have numbers follow proper ascending order by date/time
1.23	5/20/2010 4:15 PM	Cynthia Christman	53.9 MB	Edits:  ID40508, 40509, 21146, 21147, 21337, 21338 - Entry/Flttype: chgd to p on connect/3 ID170 - Event/Entry/Flttype: chgd to 40/s on transect/2 ID169 - Event: chgd to 39 ID74821 - Event: chgd to 91 ID74822 - Event: chgd to 92
1.22	5/12/2010 5:20 PM	Cynthia Christman	53.9 MB	Edits:  ID153258 - inserted row for start transect and renumbered Event ID66950 - Entry/Flttype: chgd to p on transect/2
1.21	5/11/2010 4:43 PM	Cynthia Christman	53.9 MB	Edits:  ID96500, 96857 - Entry/Flttype/Enttag: chgd to p on connect/3/2 ID96501, 96502 - Entry/Flttype: chgd to p on connect/3 ID96503 - Entry: chgd to start transect ID57907, 73302, 83112 - Entry: chgd to p on search ID72027 - Entry: chgd to p on connect ID96614, 97302, 97650, 98657, 103103 - chgd "s on" entries to "p on", del aux sighting data, & chgd codes Multiple records (n=9) - Species/etc: del "no sight" species and aux sighting data ID2231, 25683, 31017, 39176, 55297, 71438, 76808, 79741, 102410 - Entry: chgd to s on search ID54185, 54241, 57418, 75987, 76509, 76643, 76644, 76645, 77049, 81150 - Entry: chgd to s on transect ID82801 - Entry/Flttype: chgd to s on search/4 ID153250 - inserted row for deadhead, renumbered Event ID153251-153257 - inserted row for sighting, renumbered Event ID35735, 1941, 81286, 81548, 82838, 66631, 96589 - moved sighting to inserted rows ID153251-153257
1.20	5/10/2010 7:21 PM	Cynthia Christman	53.9 MB	Edits:  ID80842-80844 - Entry/Flttype: chgd to p on transect/2 ID80845 - Entry/Flttype: chgd to s on transect/2 ID153249 - inserted deadhead and adjusted Event
1.19	5/7/2010 7:00 PM	Cynthia Christman	53.9 MB	Edits:  ID153241-153245 - inserted end transect and adjusted Event numbers Multiple records - Entry: chgd initial/final p on deadhead to deadhead ID105369 - Entry: chgd to s on search ID105817 - Entry/Enttag: chgd to resume transect/1 ID106317 - Entry: chgd to end transect ID106323 - Entry: chgd to start transect
1.18	5/6/2010 4:47 PM	Cynthia Christman	53.9 MB	Edits:  ID57471 - Entry/Flttype: chgd to end transect/3 ID57472-57474, 79940, 80069 - Entry/Flttype: chgd to deadhead/1 ID57475, 79942, 80072 - Entry: chgd to start transect ID72658 - Entry/Flttype: chgd to p on connect/3 ID75676 - Entry/Flttype: chgd to s on transect/2 ID78772, 78773, 78775 - Entry/Flttype: chgd to p on search/4 Saved: chgd blanks to 0 where Entry & other fields were blank (2007-2008) Entry: chgd start/end connects (n=247/227) to p on connect Flttype: chgd 4 to 3 where Entry=p on connect (n=226) ID153233, 153232, 153221 - revised inserted row w/ data from following row ID82328 - Entry/Flttype: chgd to s on connect/3 ID153236-153240 - inserted end transect row and adjusted Event numbers ID97576, 101973, 100290, 102769, 100429, 104023 - Entry: chgd to deadhead ID98056, 98057 - Entry/Flttype/Enttag: chgd to p on search/4/2
1.17	5/5/2010 3:37 PM	Cynthia Christman	53.9 MB	Edits:  Numerous records in 2007 & 2008 - Entry: chgd initial or final p on deadhead to deadhead ID97610 - Entry/Enttag: chgd to p on transect/2 ID153234 - inserted initial deadhead and renumbered Event ID97934 - Flttype: chgd to 1 ID153235 - inserted final deadhead ID98092, 103304 - Enttag: chgd to 2 ID98935, 103305 - Enttag: chgd to 5
1.16	5/4/2010 4:16 PM	Cynthia Christman	53.9 MB	Edits:  ID153223, 153225, 153228, 153230, 153231 - inserted final deadhead record ID153224, 153226, 153227 - inserted initial deadhead record ID153232, 153233 - inserted end transect record (*note - need to consult jtc/mf on insertion of start/end transects) ID79266 - Entry/Flttype: chgd to s on transect/2 ID79394-79397, 82231, 82353, 82464 - Entry/Flttype: chgd to s on search/4 ID82354, 82794 - Entry/Flttype: chgd to p on search/4 ID96684, 96685, 97077, 97078, 97316 - Entry: chgd to deadhead ID81867 - Entry: chgd to p on transect ID82548 - Entry: chgd to s on search ID82474 - Event: chgd to 75 ID96658 - Flttype/Enttag: chgd to 2/2
1.15	5/3/2010 4:33 PM	Cynthia Christman	53.9 MB	Edits:

				ID153220, 153222 - inserted initial deadhead and renumbered Event ID153221 - inserted end transect and renumbered Event 9/13/2004, 9/14/2004, 9/16/2004, 9/19/2004, 9/21/2004, 9/22/2004 - Event: renumbered ID76657, 77737 - Entry/Flttype: chgd to s on connect/3 ID76683, 77095, 78008, 78752 - Entry/Flttype: chgd to s on search/4 ID76789, 77486, 78030, 78123 - Entry/Flttype: chgd to s on transect/2 ID77293, 77597, 78325, 78552, 78553, 78659 - Entry/Flttype: chgd to p on search/4 ID77889, 78399 - Entry/Flttype: chgd to p on transect/2
1.14	4/30/2010 3:47 PM	Cynthia Christman	53.9 MB	Edits:  ID57975, 30816 - Entry/Flttype: chgd to p on search/4 ID57989, 72566 - Entry/Flttype: chgd to s on search/4 ID58248, 27704, 30889 - Entry/Flttype: chgd to p on transect/2 ID26423, 26424, 29214 - Entry/Flttype: chgd to s on transect/2 ID29246, 29363 - Entry/Flttype: chgd to end transect/3 ID29728 - Entry/Flttype: chgd to deadhead/1 ID153216, 153217, 153218 - inserted initial deadhead and renumbered Events ID153215 - inserted end transect and renumbered Events 10/8/1998 & 9/29/1999 - Event: renumbered ID2500/2499 - Event: chgd to 84/83
1.13	4/29/2010 4:45 PM	Cynthia Christman	53.9 MB	Edits:  9/12/1986 (n=20), 9/16/1986 (n=8), 1989 NOSC flights (n=1571) - GMT_Minus8_DateTime: added 8 hours to time  ID153207 - inserted an initial deadhead row and renumbered Events  ID153209, 153213 - inserted a start transect row and renumbered Events  ID153208, 153210, 153211, 153212, 153214 - inserted an end transect row and renumbered Events  ID57116, 57166, 57805 - Entry: chgd to start transect
1.12	4/28/2010 3:33 PM	Cynthia Christman	53.9 MB	Edits:  ID153205 - inserted record; initial deadhead for flt; flt started at Event 32 so made inserted record Event 31; not sure why previous Events are missing  DateTime - updated all records in 1982 (n=4370); added 8hrs to time
1.11	4/27/2010 3:48 PM	Cynthia Christman	53.9 MB	Edits:  Added Event numbers to 1997 data ID60305/60395/60405/61651/32362/6196 - Entry/Flttype chgd to "p on transect" and 2 ID65969 - Entry/Flttype chgd to "p on search" and 4 ID153200/153201/153202 - inserted record for final deadhead ID4246 - Entry chgd to "start transect" ID11249 - Entry/Flttype chgd to "s on search" and 4 ID676-679 - Event reordered based on time ID153203 - inserted record for initial deadhead and renumbered Event
1.10	4/26/2010 3:47 PM	Cynthia Christman	53.9 MB	Edits:  Added Event numbers to 1995, 1996 and 1997. See v1.3 comments.
1.9	4/23/2010 3:48 PM	Cynthia Christman	53.9 MB	Edits:  Icepercent & Ictype - numerous records; started reconciling entries that do not coincide (see if/then examples below); need to look at individual flights to c  if Icepercent=0, then Ictype=no ice, n/a, -1, "", lead(?) if Icepercent>0, then Ictype<>no ice
1.8	4/22/2010 3:51 PM	Cynthia Christman	53.9 MB	Edits:  Added Event numbers to 1995. See v1.3 comments.
1.7	4/21/2010 4:47 PM	Cynthia Christman	53.9 MB	Edits:  ID 3183,3484,6447,27855,69655,74143 - Entry: chgd flight aborted to deadhead 274 records in 2008/2007 - Entry: chgd start deadhead to deadhead ID 98055,98064 - Entry: chgd end search to p on search 173 records in 2008/2007 - Entry: chgd start search to search ID 98062 - Entry: chgd resume search to p on search 3645 records - Species: chgd beluga whale to beluga 1512 records - Habitat: chgd on ice to on ice (near lead or on floe) 144 records - Habitat: chgd on land to on land (barrier island or beach) 64 records - Habitat: chgd open ocean seaward of all land to open water 4156 records - Aerial_Survey: chgd COMIDA1/2/3 and Comida 3 to COMIDA ID 5748-5782 deleted records; flt 30 10/19/1990 BWASP was a duplicate of NOSC flt 13 multiple records - Ictype: chgd broken floe to no ice ID 34390 - Icepercent: chgd blank to 0 ID 34488 - Icepercent: chgd 80 to 0 ID 42922 - Icepercent: chgd 1 to 0 ID 42929,43436 - Icepercent: chgd 0 to -1
1.6	4/19/2010 3:39 PM	Cynthia Christman	53.9 MB	Finished adding Event numbers to 1993 and 1994. See v1.3 comments.
1.5	3/24/2010 3:25 PM	Cynthia Christman	53.9 MB	Edits:  Added Event numbers to the BWASP survey team flights in 1991, 1992, and part of 1993 (see v1.3 comments).
1.4	3/23/2010 3:42 PM	Cynthia Christman	53.9 MB	Edits:  Continued adding Event numbers (see v1.3 comments). Finished 1989 and 1990. Reviewed 1987-1990 BWASP surveys where Event numbers were added,
1.3	3/22/2010 3:44 PM	Cynthia Christman	53.9 MB	Edits:  The MMS/BWASP survey team did not record Event numbers from 1987-1997. Started adding Event numbers where they are missing. Added Event number
1.2	3/18/2010 10:40 AM	Cynthia Christman	53.9 MB	used update query to move totalno values to final_group where final_group was NULL (i.e. -1)  starting in 2009, final_group field will be used for group size information
1.1	2/9/2010 3:32 PM	Cynthia Christman	53.9 MB	lut_FlightType - reset the autonumber ID field;  no other changes; used mdb to look at values in each field
1.0	2/8/2010 3:46 PM	Cynthia Christman	53.9 MB	FlightInfo - added new fields Aerial_Survey; GMT_Minus8_DateTime; BackupDrive;  SummaryInfo - added new fields Bowhead_Cow_calf_Pairs; Bowhead_Cow_calf_Pairs_on_transect; CirclingMin; CirclingKilo; TransAndCircMin; TransAndCircKi  lut tables - added Behavior_1 thru 5; EntTag; Observer; Pilot; ReasonForEntry tables from 2009 database;  lut_Pilot - chgd Monsour to Mansour;

### Version History

lut\_FlightType - added circling;

Appended FlightInfo; SummaryInfo; and FlightData from BWASP\_COMIDA\_2009\_Final.mdb. Did not append autonumber ID and OBJECTID fields.

0.2	2/2/2010 2:45 PM	Cynthia Christman	36.1 MB	Added new fields XofWhale; YoFWWhale; ObsFourth; PhotoTaken; LatTemp; LongTemp; Final_group; Low_estimate; High_estimate; Transect_id; Calf_on_cir chgd ID data type indexed option from "Yes (Duplicates OK)" to "Yes (No Duplicates)"
0.1	2/1/2010 9:43 AM	Cynthia Christman	29.8 MB	File identified as most recent and up-to-date aerial master database. 2009 data will be appended to this file, and historical data editing will be performed or