

1143:50 whistles - loud ship noise, but  
 45:30 loud whistles - centered ~10-11 kHz

1146:40 great whistles & clicks

(1148 no monitor)

→ whistles seem to come in groups (fluctuate),  
 fair amount of clicking

1148 - whistles more faint

1149 - Kinda quiet - very faint whistles at 1149:30

1149:39 up sweep

1150:23 more variable whistles now (more sinusoidal)

1151:57 lots more whistles - some "trill"

1154 - some ok whistles

1157:40 - whistles - great frequency variation

1158:42 - cool trills again! (~15 kHz)

Saved some example whistles from between  
 spinner - ex. war

1143:50 -

1146:50

spinner 2 - ex. war

1152:25

1155:55

1200:42

↓ 1200 radio interference, whistles ok, still going  
 (lot of repetition of whistle types)

1202:15 whistles a little granger now

1204 whistles faint, noise

1209 Stop recording

10.20.99

S. longirostris #367

Ch 19 60 ft

10° 02.27' N

098° 47.31' W

TAPE 1B

1143 buoy deployed

- good reception

right channel = 7 bars

left channel = 7 bars

\* note that this day was a "busy" day.

Very good confidence that early vocals  
 are spinners (99.99%) - but, with time...

1209 - Bad noise, few faint dolphin  
 whistles  
 (very poor SNR)

1209 STOP RECORDING

brides & moans

- 9:33:50 LF sound? Ship noise still too loud, but some LF noise (very faint)
- 9:36:03 LF noise ~ 150 Hz (may be component of ship noise?)  
 07  
 12  
 17  
 20 etc ~ 130 } This seems to come in 'sets' - could be biological? new to me  
 (~100-200 Hz pulses, max energy ~ 150 Hz) 300 150 100
- 9:37:20 again, set of pulses → these sound biological! They pretty much keep going on ~ 9:39
- 9:53:17 LF moans (!!!)
- 9:53:40 ?? moan? in succession - several ~ 150 Hz  
 → 9:54:40
- 10:28 super super faint whistles, radio interference
- 10:31 increase noise
- 10:43:53 ratchety sound 700 Hz - 1700 Hz 7 odd
- 10:44:07 another one - faint whistle also heard
- 10:44:10 LF noise - faint, centered ~ 150 Hz (doesn't really sound like a moan though)
- 45:59 another ratchety sound
- 10:48:19 some LF sounds - moans(?) (also faint whistles)
- 49:40 old metallic knocks
- 10:49:57 knocking sound ~ 760 Hz (770-850)
- 50:10 another croak
- 50:35 good croak!
- 51:06 croak (still faint whistles)
- 51:44 "
- 51:58 faint croak
- 53:10 croak
- 55:57 possible faint moan? very faint ~ 150 Hz (faint whistles still around)
- 55:40 more craggy moans, croaks. → can 50:57:00
- 57:00 cool set of moans?

SIGHTING # 408 B. edeni  
 10.30.99 09:24:27 CH 54

Two animals slow traveling

09:24 ish - bony in water, good signal (but overloaded)  
 09:29 back to course & speed (09:27)

bony position: 08° 07.75' N; 103° 50.15' W  
 whale positions (at 1 time/location): 15° left, 300m

CARRIER SIGNAL right = 7 bars (8 defa signal heard)  
 left = 7 bars

1000 → right = 5-6 bars left = 6-7 bars  
 1041 → right = 4-5 bars left = 5-6 bars

(we had gone off course for another sighting, so not all died travel)

1100 right = 4 bars left = 4-5 bars  
 knocking faint whistles

1105 - stopped recording. Static getting bad, no brides. (but cool clicking)

- 10:58:20 faint croak
- 59:45 good croak (or ratchety a.?) } sounds very biological (what ever it is)
- 59:57 another
- 59:19 another moan
- 11:00:00 clicks -
- 00:15 clicks - loud
- 01:21 clicks, then ratchety croak  
 → these craggy, sandy contours  
 through the end of the tape (11:06)
- 11:07:57 good moan (11:05) → moans, etc.

~8:52 Great Vocals!

8:59 ship is going through the area again  
on its way back to course & speed

9:04 getting quiet now (occasional rare)

9:08 EDT, no more whales.

Sighting #432

11-06-99

*G. macrorhynchus*

CR19

07:52

08°23.44'N

60/90ft (?)

115°46.61'W

8:52 (?)

body in water, great reception

right = 7 bars, left = 7 bars

lots of vocals

\* I FORGOT TO CHANGE TIME ON  
DAT \* → Real Time is 1 hr earlier  
than Dat time)

9:08

right = 5-6 bars

left = 6 bars

(EDT, stopped recording,  
no more vocals)

S. longirostris Sighting # 435  
Ch 17 cat 09° 11.97' N  
Dud - bad buoy 116° 23.05' W

no signal, did  
not see antennae  
come up.

(1)

- 06:15 Great whistle, ship noise still a little loud
- 06:16 Clicks & whistles
- 06:18:20 strange "grackling" sound, barking sounds
- 06:21:00 whistle still around, occasional burst pulse
- 6:25 55 very loud whistles, great whistles, good SNR
- 6:30 still great whistles, but water noise is pretty loud.  
some faint "croak" sounds in background on occasion (there were diving masked boobies around, who knows?)
- 6:34:20 more of those silly grackles, Dolphin whistles still going good...
- 6:37:32 grackles - could be burst pulses? just sound odd
- 6:40 loud again! loud grack, too!
- 6:42 getting quiet now,  $\rightarrow$  1-2.5 kHz  
some occasional faint whistles
- 6:43 some good whistles again
- 6:46:55 grackles, some faint whistles
- 6:49:00 still pretty good whistles, but SNR  $\downarrow$   
(lots of water noise)
- 6:52 more grackles, still decent whistles w/ lots of water noise
- 6:53 static getting bad now, dolphin whistle more faint  $\rightarrow$  kill recording here.

tape #20

SONOBODY #

66

SIGHTING # 446

Tursiops Truncatus

Lat = 12°45.42'N

Long = 113°56.38'W

609-5817  
TR

$\rightarrow$  6:13pm - boy dropped - good response,

ADULT whistles

right = 7 bars, left = 7 bars

boy dropped w/in 0400m of  
de. group - animals had been  
hiding - spread out group.

706 stop recording right. 2-3 bars  
left = 3-4 bars

\*SORRY!! AGAIN, I HAVE FORGOTTEN TO CHANGE  
CLOCK. DAT TIME IS 1 HR GREATER THAN  
REAL TIME (START TIME REAL IS 5:13pm (173))

Beaufort 4. but water noise is pretty loud



# STENO

#67

12:16:05 possible whistle, but LOUD static

12:18 ship noise better, some dolphin clicks & faint whistles

19:35 some faint whistles

19:53 nice down-swept whistle (~5.5 kHz?)

20:41 whistle, then clicks

20:57 great whistles ~5.5 kHz

23:43 some clicks

26:21 faint bunnies/clicks (dolphin)

26:39 bunny (dolphin)

~~(12:32 stop monitoring but still recording)~~

34:45 good whistle (upsweeps ~7.5 kHz)

35:01 good whistle

35:04 dolphin buzzes

35:26 great (loud!) upsweeps

12:36:58 more

12:40:22 dolphin bunny

12:40:29 whistle (~7 kHz)

12:42 faint clicking & occasional buzzes (dolphin)

42:55 clicks getting louder (but static getting worse)

43:28 great loud whistles (horrible static)

45:09 whistle (~5.5 kHz)

(but static too bad)

12:45:30 - STOP RECORDING - static way too bad to use any whistles (i)

SIGHTING # 493

11-15-99

Steno bredanensis

tape #20

LAT 14° 09.99' N

LONG 105° 55.56' W

12:14 buoy tossed - loud static, but functional buoy! right = 7 bars; left = 7 bars (tossed ~300m or so from animals)

\* There was another sighting ~1 km from this one (may be lumped in as same sighting for purposes of data entry)

12:39 static getting bad

12:45 Stop recording - some occasional whistles, still present, but static is really bad

B. musculus

(#68)

SIGHTING #55

11/21/99

1402 = DAT TIME (SHIP TIME IS 1502!!)

1402 SONDBOY DEPLOYED, GOOD LOUD RECEPTION

1432 - NO VOCALS, STOP RECORDING NOW

SIGHTING #

515

B. musculus

11-21-99

#68

Lat: 18°56.95'N Long: 104°55.34'W Ch 60. - tape #21

1402 SONDBOY DEPLOYED

RIGHT = 7 BARS

LEFT = 7 BARS

\*Prey patches in area

at ~ 150-175m, whale poop seen

(also prey layer ~ 40m?)

One animal slow swimming - was not rising high out of water at all.

14:02

CLOCK

1422 right = 6-7 bars left = 7 bars

1432 right =

left =

1432 NO NOTHING - STOPPED RECORDING

→ Rewound tape to 14:15 (since no vocals)

B. edeni

11/22/99  
SIGHTING #520

1248 - buoy dropped

1302:27 LF Moan (?!) ~ 11 Hz

1302:36 (15 Hz) Moan

1302:49 (15 Hz) Moan

1302:52 (15 Hz) Moan

1308 - faint whistle heard (~1338 Hz?) > release!

13:08:39 possible sound at 7.5 Hz?

1311 43 - few whistles

1312 some radio interference (also some whistles)

1311:18 brief whistle

1312:40 possible and whistles

nothing else exciting

11/22/99

#520 B. edeni

LAT 18°04.87'N

LONG 108°03.87'N

#

69

Ch 63

905

Shus

12:44 (ish) - dropped buoy at ~ 12:48

Animal had been zig-zagging at the bow (but not seen in last 5 min before buoy deployed).

right = 7

left = 7

→ I think This is a bad buoy

(No monitor ~ 1250-1307) → came back & all is well (guess it's not a bad buoy after all; ok, went back & monitored it, all is well (& possible vocals!))

1350 - Still good reception < right = Ch 5-5  
but no vocals, so stop monitoring & stop recording  
left = Ch 5-6



(# 70)

~~1315:27 left - odd brief noise (~500 Hz)~~

~~→ No - more of it - probably radio interference~~

~~16:18 right - brief whistle~~

~~1317 left - really bad noise (static interference?)~~

~~1318:05 possible LF sound (murmur?) ~115 Hz  
(real bad static)~~

~~1318:32 again - LF sound! May be part of interference! Think~~

1320 Bouy deployed (left Ch 56)  
(right Channel is bouy #69)

nada

Ignore  
me here,  
I was  
confused

Sighting  
#520

B. edeni

11:22:99

13:21

Lat 18°03.95N #70

Long 108°04.98

~1321 Sonobouy deployed - Good bouy

tape #21

Reception: right - Ch 63 = 5-6 bars

left - Ch 56 = 7

This was dropped on a resight of the  
Bryde's whale (~2 mi or so from original  
sighting - fast swimming). Dropped w/in ~700m  
of whale (we think)

1331 still good reception, still no animals

right - Ch 63: 7 bars

left - Ch 56: 7 bars

1341 right - Ch 63 - 6 bars; left - Ch 56 = 6-7 bars

1350 Still Good reception, but no vocals, so

Stop recording / Stop monitoring

reception  $\left\{ \begin{array}{l} \text{right} = \text{Ch 63} = 5 \text{ bars} \\ \text{left} = \text{Ch 56} = 5-6 \text{ bars} \end{array} \right.$

SIGHTING #523

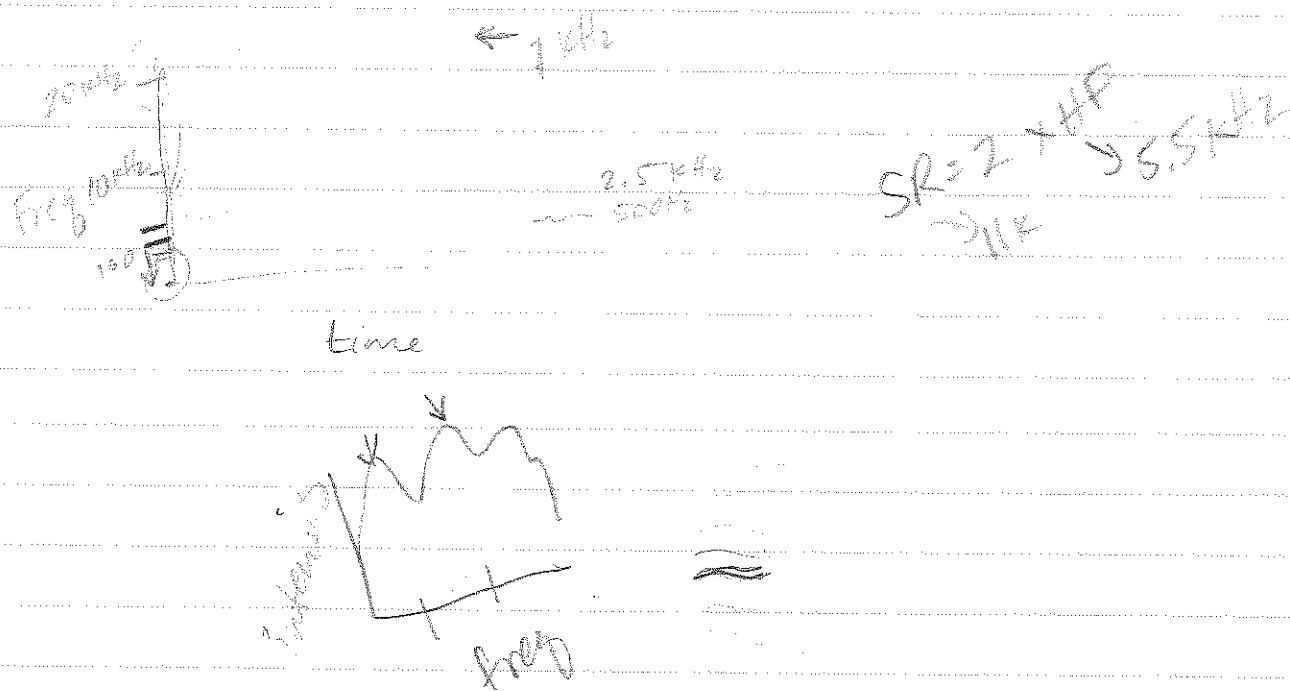
B. edeni

(#71)

11/23/99

1634 good reception

↓  
1704 nothing biological at all  
still no vocals or anything, so  
stopped monitoring / end of recording  
(cut recording)



SIGHTING #

523 B. edeni

#71

Ch 63

tape #22

11/23/99

Lat: 17°35.76' N

Long: 110°50.79' W

1634 - Bovy dropped, good bovy - Ch 63 (I think!)  
Good Reception on Ch 63 → window too fogged to see  
right = 7 left = 7  
Animal moving fast, quite a few  
black at surface. When bovy  
was dropped, we went back to  
course & speed

no vocals, ending at (30 min of radar)  
out recording 1704

1741 - STOPPED MONITORING / STOPPED  
RECORDING (NO SOUNDS AT ALL)  
still good reception, but with  
increasing interference  
right = 3-4 bars  
left = 4-5 bars

Sighting # 555  
G. macrorhynchus

(72)  
11-29-99

7:27 great whistles, but poor SNR  
(noise ~ 2 kHz)

7:29 great vocals still, ship noise a little  
better, lots of water noise, too (BF 3?)

7:31 buzzes too, good spreads

7:32:30 great buzz! ~ 1 kHz w/ lots of harmonics!

7:33:13 great whistles, a little louder (~ 2.5-3 kHz)

7:33:45 fabulous! great buzz again

7:34 → gone! Have to work! Listen later!

7:34:42 whistles & clicks

7:35:48 - several loud whistles (2k, 4k)

→ good whistles continue through 7:37

(continue past, but more faint)

7:37:30 (m) great buzz! (8 whistles continue) 7:38

7:38:30 faint whistles

7:38:50 loud whistles, moderate whistles (faint)

Continued through

7:39:34 loud whistle

7:40:00 loud whistle at 4.8k (high!)

7:40:34 Great whistles! Great! (noise ~ 2.7k)

7:41:38 Good whistles (2.7 & 4.6 kHz)

(good whistles keep going → on (still faint))

7:44:32 Whistle - possible dolphin??

Water noise very bad, static getting bad

→ more very good whistles

7:45:13 Great buzz! Still more great whistles

#72

tape # 22

11-29-99

07:26

SIGHTING # 555

G. macrorhynchus

Lat 19° 36.70' N

Long 117° 11.04' W

07:26 Start recording (sonobuoy deployed ~ 4 min ago). Very loud ship noise, but vocalizations also

good reception right = 7 bars

left = 7 bars

07:34 → 08:40 no monitor, at work.

08:00 bad static

right = 0 bars

left = 3-4 bars

real bad reception,

stop recording

7:46 possible other dolphin whistle,

but GM are quite distinct, so

still recording, still great GM vocals, but noise bad

7:48 whistles getting more faint, possible dolphin whistles

7:49 some of GM whistles - these are in series, different types in series

7:51 lots more GM whistles, again - overlapping! Crazy!

7:52 short whistles, a little more faint

7:54:50 more loud buzzes, whistles

7:56:55 great buzz! Whistles keep going (med - medly)

7:58 - fluttering whistles!!! quick succession

8:00 - STOP RECORDING → LOTS OF NOISE,

NEED TO CONSERVE TAPE

#73

SIGHTING #567 Feresa attenuata

12-02-99  
1641 pm

1647:20 faint HF whistle  
47:38 " "  
48:00 " (very faint)  
48:12 tonal whistle (5.5 kHz), then upsweep (6-7 kHz)  
48:20 whistle (8.9-10.3 kHz upsweep)  
48:38 good whistle  
(I hear some very LF rumblings, but I'm not going to really chase them out, could be component of ship noise?)

- WATER NOISE LOUD -> BEAUFORT 5, but deployed shallow

1651:05 sole whistle  
→ 3 good ones  
9.6 kHz  
6.8 kHz

1652:28 whistle - good  
1653:25 lots of good whistles (for a few sec)  
53:57 whistle  
54:21 few whistles  
55:15 whistle

1656 water noise very loud

1704:48 a few faint whistles

1706:14 very very faint whistle

1707:14 very very faint whistle

→ water noise is very bad  
poor SNR, whistles too faint

1709 STOP RECORDING - no more whistles, but water noise

type #22  
12-02-99  
1646 pm

#73

F. Attenuata

Lat: 23°14.96 N  
Long: 117°30.09 W

SIGHTING #567

1646 pm. Boat deployed for animal  
right = 7 bars  
left = 7 bars  
(animals are resighted at 0.1 nm, 0° (ahead of boat))  
1711 still good reception, lots of water noise  
right = 6-7 bars  
left = 7 bars

(1709 - stop recording - no more whistles, bad water noise)

M. Noviangliae

12/06/99  
SIGHTING #586

#74

- 1640:02 Knock sound (~800 Hz) - doesn't sound biological  
41:31 possible brief moan (~500-700 Hz) ??  
41:40 another possible very brief moan ??  
42:25 loud noise - doesn't sound like a vocalization  
42:40 strange sounds (500-700 Hz)  
43:15 - moe of them  
43:36 - crazy loud sounds - doesn't sound biological  
44:36 - faintish sound (vocal?) ~770 Hz  
1648:30 thud / knock sound - did not sound  
like a vocalization  
50:42 another thud - main energy ~200 Hz (broad <sup>some up</sup> band)  
51:45 strange noise (prime energy ~985 Hz), sounded  
like biological, but not like a whale  
52 - lots of interference  
1656 - LOUD!! we are just now passing  
The sonobouy on the right side N  
(gone to eat dinner, back when quieter)  
↓ TOO LOUD!! (bells ~1658)  
1700 - NO OTHER SOUNDS THROUGH -  
- END OF TAPE -

SIGHTING  
#586

M. noviangliae

#74

12/6/99

1640

Lat: 29°02.45'N

Ch 63

Long 117°50.66'W

tape #22

1640 Bouy deployed, good reception  
right = 7 bars  
left = 7 bars

Thumpback Whale off Guadalupe Island  
Stayed near surface, short interval  
between blows, no flukes.  
→ whale resight is 90°, 0.0 nm

1706 END OF RECORDING (END OF TAPE)