



2015 Master Datasheet and Vessel Tracking Log, with Entry Guides



Looking west from Counter Point across oil from Refugio State Beach Oil Spill

part of 2015 Gray Whales Count, Survey Report © Gray Whales Count, 2016,
prepared by Michael H Smith, Project Coordinator, Gray Whales Count, Santa Barbara, California, USA.

2015 Guide to Codes for Master Datasheet

Weather + Sea Conditions

Quality

E	Excellent • Minimum Visibility 3 nm
G	Good • Minimum Visibility 2 nm
F	Fair • Minimum Visibility 1.7 nm
P	Poor

Note: Just because you can see 3 nm does not make it Excellent, etc.

Beaufort Scale

0	Sea like a mirror; glossy, no sparkles in sun path; sometimes sea looks like ice (less than 1 knot)
1	Ripples with the appearance of scales are formed; like sand paper; matte, darker vs. zero-Beaufort gloss, lighter; sparkles in sun (1 - 3 knots)
2	Small wavelets are becoming more articulated. Crests have a glassy appearance: no whitecaps. (4 - 6 knots)
3	First whitecaps, large wavelets; foam crests begin to appear, but are widely scattered. Mostly dots. (7 - 10 knots)
4	Small waves with more frequent whitecaps - always apparent - but waves settle instead of breaking; foam along top edge; dots + dashes, waves random, not yet organized (11 - 16 knots)
5	Moderate waves begin to break with more whitecaps. Becoming organized, lining up (17 - 21 knots)
6	Many whitecaps all around with larger waves forming and breaking. Much foam along lines of waves. (22 - 27 knots)

Horizon - Clarity

S	Sharp, distinct, very clear (usually, Visibility 3 nm)
F	Fuzzy; haze, (typical marine condition; Vis up to 3 nm)
In	Indeterminate — VERY Fuzzy — haze, heat waves, distortions
NV	Not Visible: rain, fog, or heavy haze in this condition, not able to use reticle scale

Visibility - Distance in nautical miles (nm)

3	Equal to or greater than 3 nm (<.1 reticles)
2	Just beyond Holly: Between 2 and 3 nm (.2 to .1 reticles)
1.7	At Holly or Campus Point (.25 reticles)
1.5	Just inside Holly (Horizon Clarity In or NV)
1	Estimate (Horizon Clarity In or NV)
<1	Estimate (Horizon Clarity In or NV)

Animal + Vessel Sightings

Code

B	Begin Count
W	Weather + Sea condition update
S	Sighting (Er) only
SW	Sighting all other Whales, including Er (southbound)
SD	Sighting all Dolphin species
SO	Sighting Sea Otters
SP	Sighting Pinnipeds, rarely California Sea lion (Zc)
V	Sighting vessels
>	Continues sighting (same number)
TO	Time Out: Suspend survey effort
TI	Time In: Resume survey effort
T	Terminate: End of survey for day

Cue Tip

A	Passerby	1	Blow
B	Boat	2	Body
C	Call	3	Leap (dolphin)
D	Birds (often diving)	4	Splash
E	Surface disturbance		
		6	Breach (whale)
O	other	O	other

Saw

Direction of Travel

N	North ↓ (towards mainland)
S	South ↑ (towards islands)
E	East ← (towards Santa Barbara)
W	West → (towards Pt Conception)
O	Circling
00	Still

(Er) route past Holly

I	Inside (between shore + Holly)
O	Outside (beyond Holly)
nd	not determined

(Er) route past Stick

I	Inside (between shore + Stick)
O	Outside (beyond Stick)
nd	not determined



Behaviors

Behaviors + Attributes + Place

Whales		Dolphins		Sea otters		Pinnipeds	
1	Speed slow	21	Speed slow	41	swimming	61	Slow speed
2	Speed moderate	22	Speed moderate	42	Diving	62	Moderate speed
3	Speed fast	23	Speed fast	43	Interacting (explain)	63	Fast speed
4	Traveling	24	Traveling	44	Grooming	64	Diving
5	Foraging	25	Foraging	45	on back, feeding (what?)	65	Foraging
6	Breach	26	Leap	46	on back, resting	66	in large group
7	Fluke	27	Chorus line	47	in kelp	67	in kelp
8	Bubbles blast	28	Parade line	48	in open water	68	in open water
9	Pec slap	29	Tail slap	49	in surf zone	69	in surf zone
10	Tail lob	30	Bowriding	50	with tags (note color + foot)	70	on sand
11	Spyhop	31	in kelp	51	with gull(s)	71	Resting, Vertical
12	Rolling	32	in surf zone			72	Resting, Horizontal
13	Sharking	33	with (Er)			73	with (Er)
						74	Rescue Attempt
O	Circling	O	Circling	O	Circling	O	Circling
00	Still	00	Still	00	Still	00	Still

Species

Whales

(Er)	Gray whale (northbound)	<i>Eschrichtius robustus</i> , p 204
Er	Gray whale (southbound)	<i>Eschrichtius robustus</i> , p 204
Mn	Humpback whale	<i>Megaptera novaeangliae</i> , p 208
Bm	Blue whale	<i>Balaenoptera musculus</i> , p 234
ULW	unidentified large whale	

Dolphins

Tt	Bottlenose dolphin	<i>Tursiops truncatus</i> , p 358
D sp	Common dolphin species	<i>Delphinus</i> species not determined
Lo	Pacific White-sided dolphin (Lag)	<i>Lagenorhynchus obliquidens</i> , p 402
Oo	Killer whale (Orca)	<i>Orcinus orca</i> , p 436
UD	unidentified dolphin	

Sea otters

EI	Sea otter	<i>Enhydra lutris</i> p 42
----	-----------	----------------------------

Pinnipeds

Pv	Harbor seal	<i>Phoca vitulina</i> , p 118
Ma	Northern Elephant seal	<i>Mirounga angustirostris</i> , p 162
Zc	California Sea lion	<i>Zalophus Californianus</i> , p 90
UP	unidentified pinniped	

Page numbers refer to *Marine Mammals of the World*. Consult for rarer species.

Vessel Classifications on back of clipboard

NC	QUAL	CL CVR	B	HORIZ CLAR	VIS	CODE	SIGHT NUMB	TIME	CUE TIP	SAW	SIGHT POS BRNG	RTCL	DIR	BEHAVIORS	SP	TOTAL NUMB	CALF NUMB	TIME	SAW	TRACK POS BRNG	RTCL	DIR	BEHAVIORS	TIME	SAW	TRACK POS BRNG	RTCL	DIR	BEHAVIORS	TIME	SAW	TRACK POS BRNG	RTCL	DIR	BEHAVIORS	HOLLY	STCK	>
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					
COMMENTS						IMAGES											COMMENTS																					

9	MD	VS	AL	AL	O	O	11	MD	VS	AL	AL	O	O	1	MD	VS	AL	AL	O	O	3	
10							12							2								4

COMMENTS

TIME COUNTING
: : - -

MASTER SHEETS		VESSEL SHEETS		CALF SHEETS	
INDIVIDUAL HARBOR SEALS		INDIVIDUAL SEA OTTERS		PINNIPEDS ON SAND	
(Er) NUMBER OF SIGHTINGS	(Er) START	(Er) CALF START	(Er) TODAY	(Er) CALF TODAY	(Er) TOTAL
	(Er) CALF TOTAL				

2015 Guide to Codes for Vessel Tracking Log

Vessel Classifications

Category	Sub Category	Type	Inst-Org-Agency
		40 Cruise liner	60 UCSB
1 Oil Services	11 Crew boat	41 RHIB	61 Coast Guard
2 Touring	12 Tug + Barge	42 Boston Whaler	62 Sheriff / County
3 Kelp Harvester	13 Tug	43 Kayak/canoe	63 Harbor Patrol
4 Fish Commercial	14	44 Jet-ski	64 Military
5 Private	15 Work boat	45	65 USGS
6 Research	16 Oil-spill recovery	46 Stand-up paddler	66 CA Fish + Wildlife
7 Vessel Assist	17 Whale watching	47 Kiteboard/Windsurfer	67 US Fish + Wildlife
8 Enforcement	18	48 Sailboat	68 CINMS
9 Warship	19 Sportfishing	49 Sailboat motoring	69 ChannelKeeper
10 Airship	20 Diving	50 Airplane	70
99 other	21 Cruising	51 Helicopter	71
	22	52 Blimp	72
	23	53	
	24	54	
	25 Lobster/Crab	55	
	26 Urchin diving	56	
	27 Net	57	
	28 Squid	58	
	29 Line	59	

Places / Action

In MPA ?	Environment	Speed	Take
✓ Yes (default)	OO in Open Ocean	1 Slow	X No (default)
X No	K in Kelp	2 Moderate	FL Fishing Line
	W in Waves	3 Fast	FT Fishin Trap
	A Above Ocean	00 Stopped	FN Fishing Net
			FS Fishing Spear
			CK Cutting Kelp
			CA Contact Animal
			HA Hovering over Animal

Vessel / Animal Interaction

Animal Sighting Number <i>— must be filled in —</i>	Vessel Action to Animal	Animal Reaction to Vessel
0	No apparent interaction (no animals near vessel)	21 Avoidance of boat
~	Enter Sighting Number of affected animal(s)	22 Approach boat
	1 Change course to view animal	23 Alteration of normal activities
	2 Change course to avoid animal	24 Quick dive
	3 Approach head on	25 Long downtime
	4 Approach from rear	26 Breach
	5 Approach at side	27 Fluke
	6 Approach parallel	28 Spyhop
	7 Approach inside 100 m	29 Change direction
	8 Travel over submerged animal	30 Bowriding
	9 Positioned in path of animal	30 Pec slap
	10 Crossing path of animal	31 Tail lob
	11 Hovering above	32 Disappear
	12 Flying below 30 meters	33 Contact boat
	13 Contact animal	nd not determined

Airship sighting position always at Bearing of 160°

Estimate Distance from Counter Point in meters

Estimate Altitude above ocean in meters, below In Comments: < 30 30 - 50 > 50



