

NECROPSY FORM

FIELD #: Ps 4	NECROPSY DATE: March 29 2017
SPECIES: PHOCOENA SINUS	STRAND DATE: n/a
AGE CLASS: ADULT	STRAND LOCATION: FLOATING IN VAQUITA REFUGE, BAJA CALIFORNIA, MX AT 31 15,689N 114 50,382
SEX: MALE WEIGHT: 36.7 KG	THAW DATE: NOT FROZEN, KEPT ON ICE
PROSECTOR(S): LRB, FMDG, KD, SM, RLB,	CARCASS CONDITION CODE: 4
TOTAL LENGTH: EST 135-140 CM (MISSING FLUKES, SEE MORPHOMETRIC SHEET)	TIME: 11.30 AM

Cause of Death: Trauma, acute death (stomach full). Fisheries bycatch

Samples collected:

Given to PROFEPA: Skin: 2 vials (ethanol & frozen); Muscle: 2 vials (ethanol & frozen), 1 frozen whirlpak Skeleton (whole) , teeth (2 bags, 3 teeth in each, front & mid left mandibular), reproductive tract (frozen, pelvic bones included)

Transported to NOAA/SWFSC: Stomach contents

Feces (handed to "Nieto" from CICESE, Ensenada, for biotoxin analyses)

STRANDING OR SAMPLING HISTORY: Found floating by Sea Shepherd, extensively scavenged and decomposed on left side, right side more intact, flukes attached, Sunday March 19 2017. Collected by PROFEPA. Brought to vet clinic in Tijuana by PROFEPA March 29. Flukes missing when arrived at clinic for necropsy.

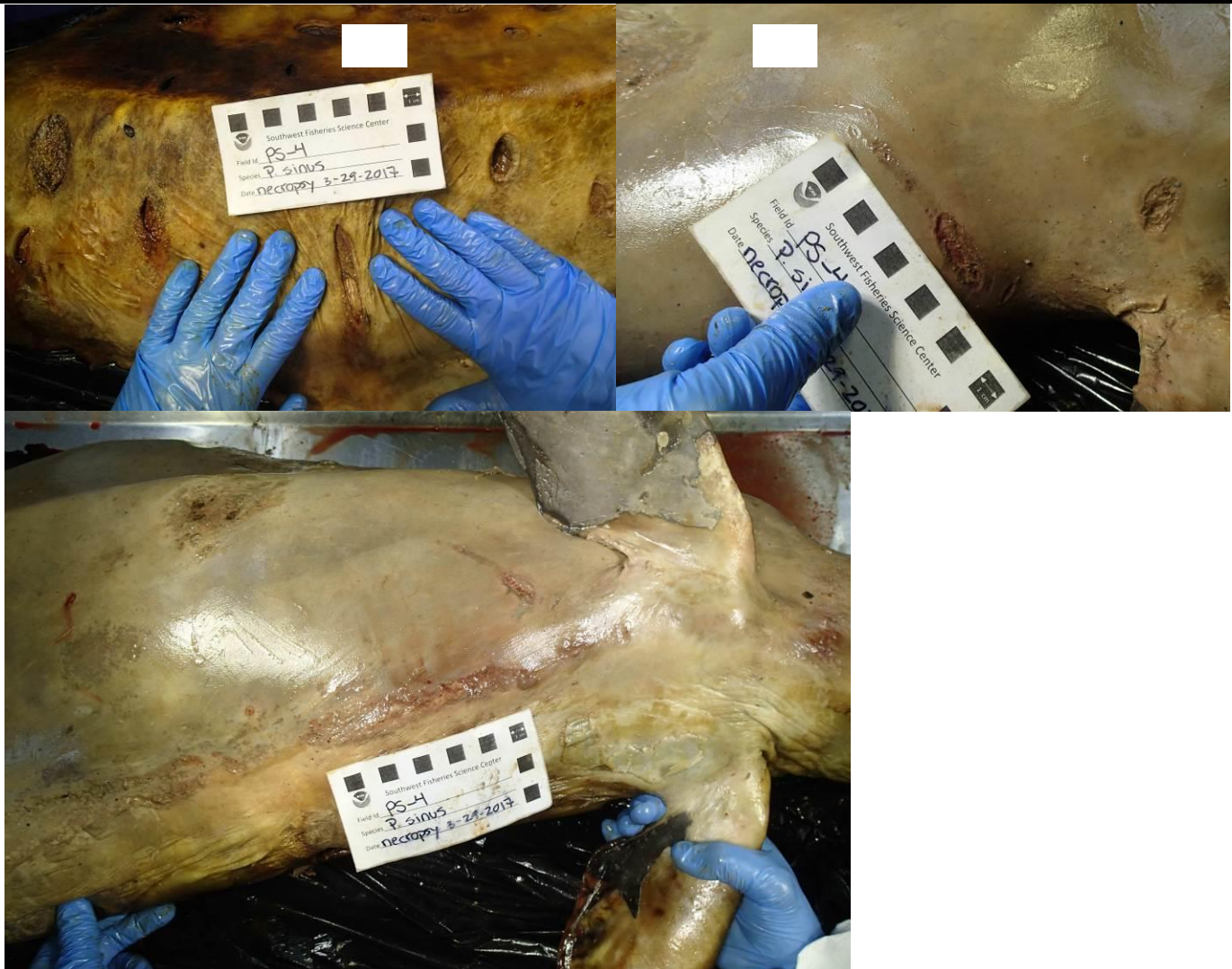


BODY CONDITION (EXTERIOR):

Robust nutritional condition (nuchal area convex), epithelium is mostly missing, blubber on left side is yellow, dried out, blubber on right side moist



SKIN / HUMAN INTERACTION: Multiple focal lacerations 2-5 cms in length, ovoid due to tissue dessication, clean edges to straight cuts over left side of body, suggestive of sharp blade cuts e.g., knife stabs. Superficial abrasion caudal to axilla right side, partial skin thickness, irregular in shape, similar shallow skin abrasion midline ventrum from axial to umbilical area. Notch in caudal margin dorsal fin. Peduncle severed, flukes missing.



DISCHARGES: ABSENT

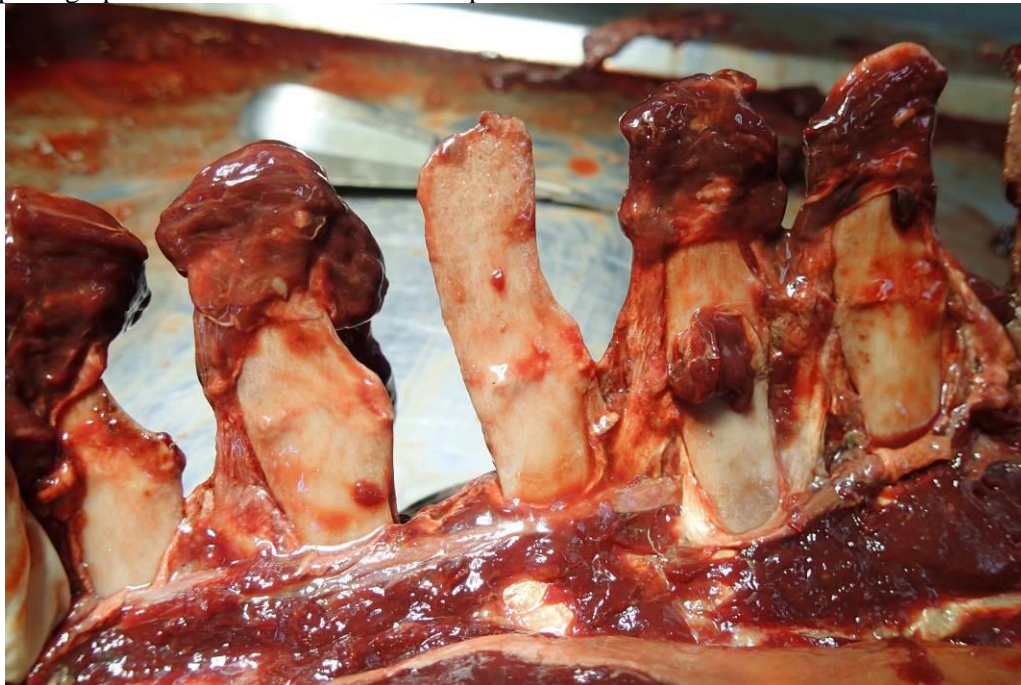
UMBILICUS: Healed

BLUBBER: Yellow, dried out on left side, right side moist. Liquefying with patches of green tissue. Edematous purple area around ventral neck, more marked on right side. Deep purple edema in right axillary area.



SKELETAL MUSCLE: Liquefying, deeper purple tissue in right axillary area.

SKELETON AND JOINTS: Fracture of third rib left side, comminuted with sharp edges. Possibly underlying area of stab wound in skin. No abnormalities of neck detected on X ray. Dorsal processes of lumbar vertebrae photographed to show characteristic shape.



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EYES: **Right:** intact, rotting **Left:** missing

ORAL CAVITY: Teeth fully erupted, multiple teeth missing, presumed due to post mortem loss.

THORACIC CAVITY: Liquefied contents **E**

ESOPHAGUS: Empty

THYROID: Smooth, deep red, 2 cms diameter

THYMUS: NE

TRACHEA / BRONCHI / LUNGS: No parasites detected, no froth in airways, lung parenchyma uniformly congested.

HEART / PULMONARY ARTERIES / AORTA : Fat present in cardiac groove, valves smooth

ABDOMEN

LIVER: Dark green/black, friable, shape normal **SPLEEN:** Liquefying **PANCREAS:** NE

STOMACH: Fore stomach distended with partially digested fish, 558 g with 7 whole fish, 5 pairs of otoliths and 19 additional otoliths, side unknown, one squid beak and crustacean parts. No parasites detected.

SMALL INTESTINE: Brown liquid contents. No parasites detected

LARGE INTESTINE: Contents light brown, firm.

ADRENAL GLAND: Right: NE

Left: NE

URINARY BLADDER: NE

KIDNEY: Right: NE Left: NE

MALE REPRODUCTIVE TRACT testes decomposing , right testis approx.. 20 cms long, penis no external lesions.

INSIDE SKULL:

NE

BRAIN: Cerebrum: NE

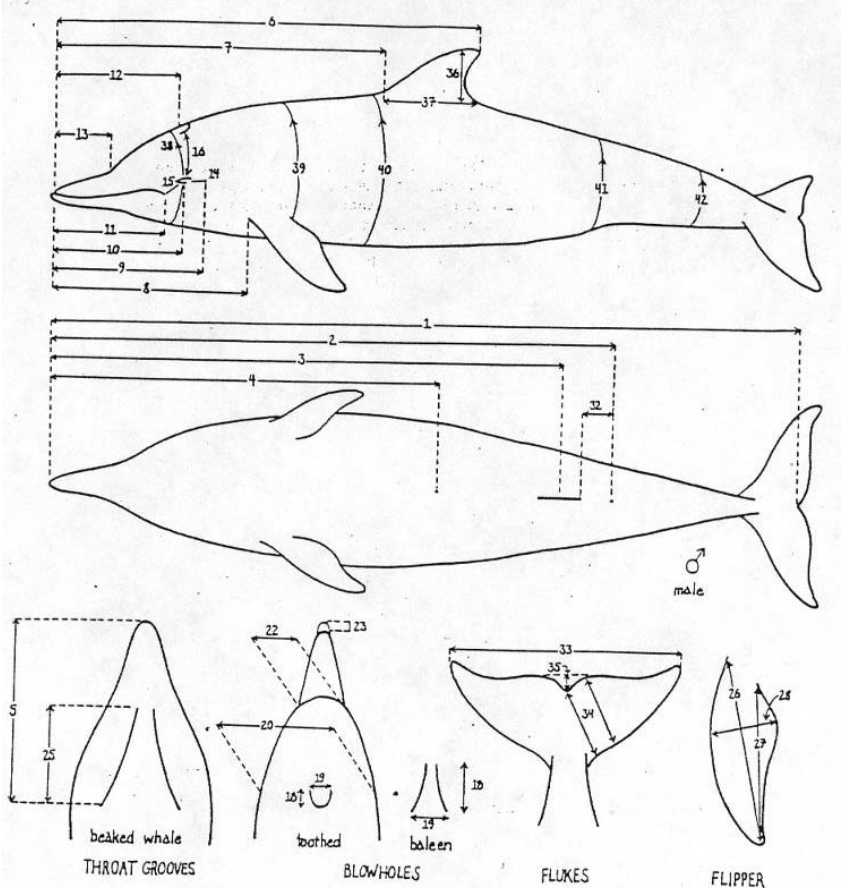
Cerebellum: NE Brain stem: NE

SPINAL CORD:

NE

MEASUREMENTS (specify units cm)

1. total length.....	<u>missing flukes to snout 123</u>	25. length of throat grooves.....	<u>n/a</u>
2. snout to anus.....	<u>99.6</u>	26. flipper length, anterior*.....	<u>29.4</u>
3. snout to genital slit.....	<u>76.1</u>	27. flipper length, posterior*.....	<u>22.6</u>
4. snout to umbilicus.....	<u>59.9</u>	28. flipper width, maximum*.....	<u>10.6</u>
5. snout to throat grooves.....	<u>N/a</u>	29. length mammary slits.....	R _____ L _____
6. snout to dorsal fin tip.....	<u>76.8</u>	30. number of mammary slits.....	_____
7. snout to anterior dorsal fin.....	<u>62.4</u>	31. length of genital slit <u>15.0</u> anal slit.....	<u>n/a</u>
8. snout to flipper.....	<u>25.4</u>	32. perineal length (males).....	<u>17.0</u>
9. snout to ear.....	<u>19.2</u>	33. fluke width*.....	<u>n/a</u>
10. snout to eye.....	<u>14.5</u>	34. fluke depth*..... lobe _____ notch.....	<u>n/a</u>
11. snout to gape.....	<u>7.6</u>	35. fluke notch depth*.....	<u>n/a</u>
12. snout to blowhole.....	<u>n/a</u>	36. dorsal fin height*.....	<u>20cm</u>
13. snout to melon apex.....	_____	37. dorsal fin base length.....	<u>18cm</u>
14. center of eye to ear*.....	_____	38. girth at eye*.....	_____
15. center of eye to gape*.....	_____	39. girth at axilla*.....	_____
16. center eye to blowhole edge, L*.....	_____	40. girth, maximum*.....	_____
17. center eye to blowhole edge, R*.....	_____	41. girth at anus*.....	_____
18. blowhole.....length _____width*.....	_____	42. girth midway anus to notch*.....	_____
19. diameter ear opening.....	_____	43. height same place*.....	_____
20. head diameter at eyes*.....	_____	44. thickness same place*.....	_____
21. length of eye opening.....	_____	45. blubber thickness, dorsal*.....	_____
22. rostral width, melon apex*.....	_____	46. blubber thickness, lateral*.....	_____
23. projection upper/lower jaw.....	_____	47. blubber thickness, ventral*.....	_____
24. number of throat grooves.....	_____	48. blubber thickness, cervical*.....	_____



Estimated total length is 135 cm -140cm. This is based on measure comparisons to a male Vaquita, total length 134.5 cm, specimen 85-0313-04-24 (Brownell et al 1987). The measurement used for comparison were snout to tip of dorsal fin, snout to umbilicus, snout to genital slit of specimen.

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S# 1898

SPECIMEN NO. PS-4 DATE EXAMINED 3/30/2017

EXAMINED BY K. Sherman, R. Brownell

FORESTOMACH

Nine otoliths collected from five almost whole fish and remains of two more plus 19 additional otoliths

SQUID WEIGHT (g)

FISH WEIGHT (g) 367.2

WEIGHT BEFORE EXAM (g) 558.2

WEIGHT AFTER EXAM (g) 0

WEIGHT OF CONTENTS (g) 558.2

CONTENTS

Number of:

	Uppers	Lowers	Undeter.	Pairs
Beaks				

	Rights	Lefts	Undeter.	Pairs
Otoliths				

Beak Vials: 1

Otolith Vials: 2

# Crustaceans	1	# Nematodes	<u>0</u>	# Isopods	<u>0</u>	<u> </u>
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Foreign Objects

MAIN STOMACH - No weight taken

BEAKS PRESENT: OTOLITHS

PRESENT:

0	0	0	1
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0	0	19	5
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NOTES Weight is from after contents were removed from stomach. Miscellaneous vertebral columns measure out to ~35cm. Fish A: 80.2g, 23.2cm; Fish B: 27.8g, 15.9cm; Fish C: 41.6g, 17.8cm; Fish D: 39.0g, 15.6cm (minimum- hypural plate to brain case); Fish E: 53.8g, 17.4cm; Fish F: 32.7g, 16.8cm (minimum- no hypural plate); Fish G: 32.6g, 18.0cm. Fish F and G had no otoliths, Fish E was the most intact and only the left otolith was removed to keep the right side of the fish intact for possible identification. Crab legs saved in ETOH, unidentified shells saved in ETOH (1 large

