

TABLE 4. MARINE MAMMAL SAMPLING REQUIREMENTS BY SPECIES

SPECIES	WHOLE +	DNA SAMP (FINCLIP/ SKIN)	STD MEAS	HEAD/ JAW	STOM	BLUB	MUSC	REPR TRACT	FETUS	LIVER	HEART	KIDNY	ADD MEAS
Porpoise, Harbor	1	1	1	1	1	1	1	1	1	2	-	-	-
Dolphin, Bottlenose	1	1	1	1	1	1	1	1	1	1	1	3	1
Dolphin, White-sided	1	1	1	1	1	1	-	-	-	-	-	-	-
Dolphin, Common	1	1	1	1	1	1	1	1	1	-	-	-	-
Whale, Pilot, NK	1	1	1	1	1	1	1	1	-	1	2	2	-
Dolphin, Spotted, NK	1	1	1	1	1	1	1	-	1	-	-	-	-
Dolphin, Striped	-	1	1	1	1	1	-	-	-	-	-	-	-
Dolphin, Risso's (Grampus)	-	1	1	1	1	1	2	3	-	-	-	-	-
Seal, Gray	1	1	1	1	1	1	1	-	-	-	-	-	-
Seal, Harbor	1	1	1	1	1	1	1	-	-	-	-	-	-
Seal, Harp	1	1	1	1	1	1	1	-	-	-	-	-	-
Seal, Hooded	1	1	1	1	1	1	1	-	-	-	-	-	-
Whale, Beaked, NK	1	1	1	1	1	1	1	1	1	1	1	-	-

** Please note that species are in order of priority from top to bottom and samples are in order of priority from left to right.

+ If whole animals cannot be retained, collect head after performing minimum sampling requirements.

+ If whole animal is retained, minimum sampling requirements should still be completed.

MINIMUM REQUIREMENTS

Live animals: Photograph and return to the water.

- Dead animals:
- 1 DNA sample
 - 2 Tag
 - 3 Identify, noting immediate observable characteristics
 - 4 Photograph
 - 5 Body Measurements: 7 for cetaceans, 4 for pinnipeds
 - 6 Body Temperature
 - 7 Sex Determination
 - 8 Describe any new and/or healed wounds



Figure 28. Marine mammal carcass tag

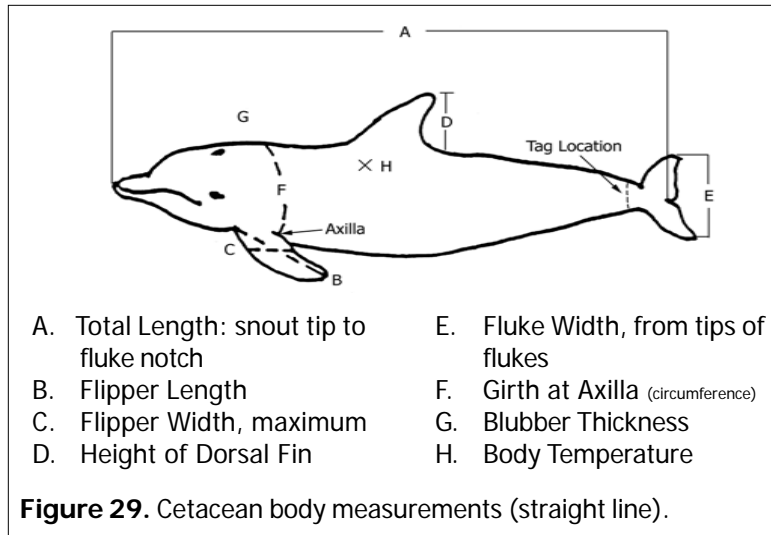


Figure 29. Cetacean body measurements (straight line).

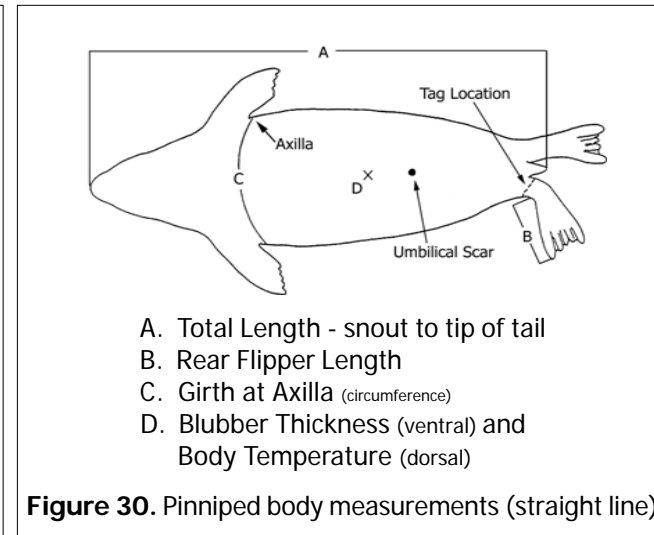
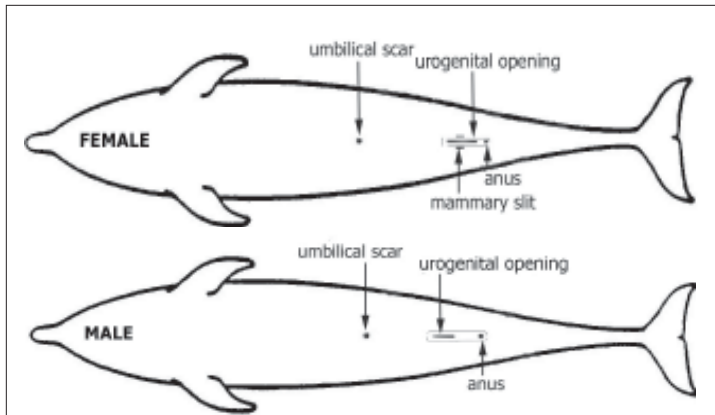


Figure 30. Pinniped body measurements (straight line).

MARINE MAMMAL MINIMUM SAMPLING PROTOCOLS



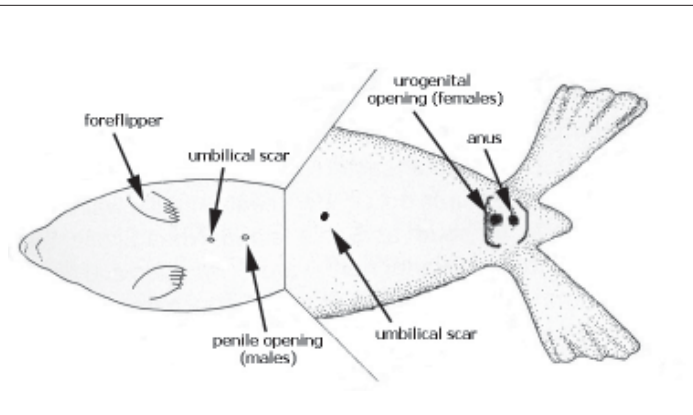
Dead Cetaceans:

Probing the urogenital opening: female = direction of the opening will be forward; males = direction of the opening will be toward the back (fluke).

Live Cetaceans:

Presence of mammary slits on both sides of the urogenital = females; lack of mammary slits is not indicative of males, as animals may be immature and not yet developed mammary slits. The urogenital opening itself is closer to the anus in females, relative to the distance from the anus to urogenital opening of a male, of a species.

Figure 31. External sex characteristics of cetaceans.



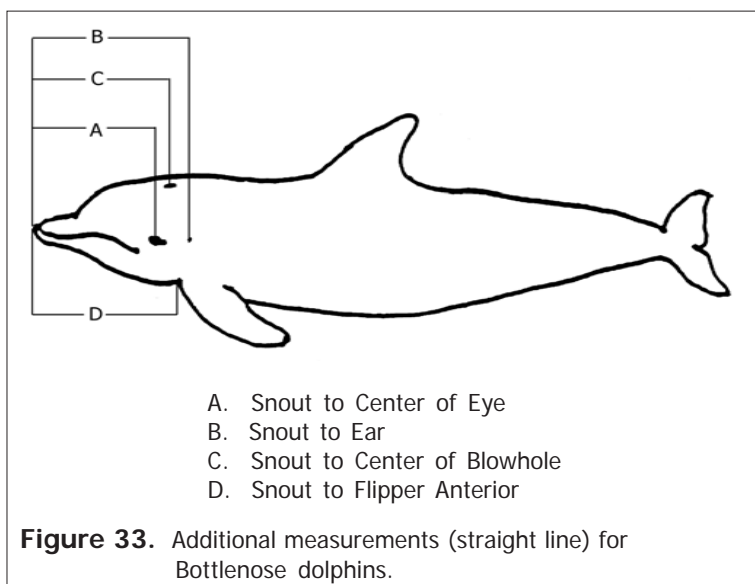
Pinnipeds (live or dead):

Examine the urogenital opening by spreading the rear flippers at the base of the tail: females = two distinct openings (anal opening and vaginal opening); males = only an anal opening. Penile opening in males is along the ventral midline between the umbilical scar and the anus. Mammary teats (two) are posterior to the umbilical scar in females. However, it is often very difficult, to locate either the penile opening or the teats on an animal.

Figure 32. External sex characteristics of pinnipeds.

Marine Mammal Additional Sampling Protocols

After sampling of the catch according to Tables 1a-h and Table 3 is completed, additional marine mammal measurements (Bottlenose dolphins only) and sampling should occur as outlined in Table 4. Be sure to fill out separate tags for each sample collected (Figure 34).



NMFS FISHERIES OBSERVER PROGRAM

Obs/Trip ID Z90001- Haul # 6

Tag# D0911 PSID 02 Date 1/1/00

Species Harbor seal Stat Area 513

Fishery 050 Length 130cm Disp _____

SAMPLE TYPE:

BLUBBER	<input type="checkbox"/>	JAW	<input checked="" type="checkbox"/>	REP. ORGAN	<input type="checkbox"/>
FETUS	<input type="checkbox"/>	KIDNEY	<input type="checkbox"/>	STOMACH	<input type="checkbox"/>
HEAD	<input type="checkbox"/>	LIVER	<input type="checkbox"/>	VERTEBRA	<input type="checkbox"/>
HEART	<input type="checkbox"/>	MUSCLE	<input type="checkbox"/>	WHOLE	<input type="checkbox"/>

OTHER _____

DNA	<input type="checkbox"/>
FINCLIP	<input type="checkbox"/>
FLIPPER	<input type="checkbox"/>
BIOPSY	<input type="checkbox"/>
SKIN	<input type="checkbox"/>

Figure 34. Properly filled out white Tyvek sample tag.

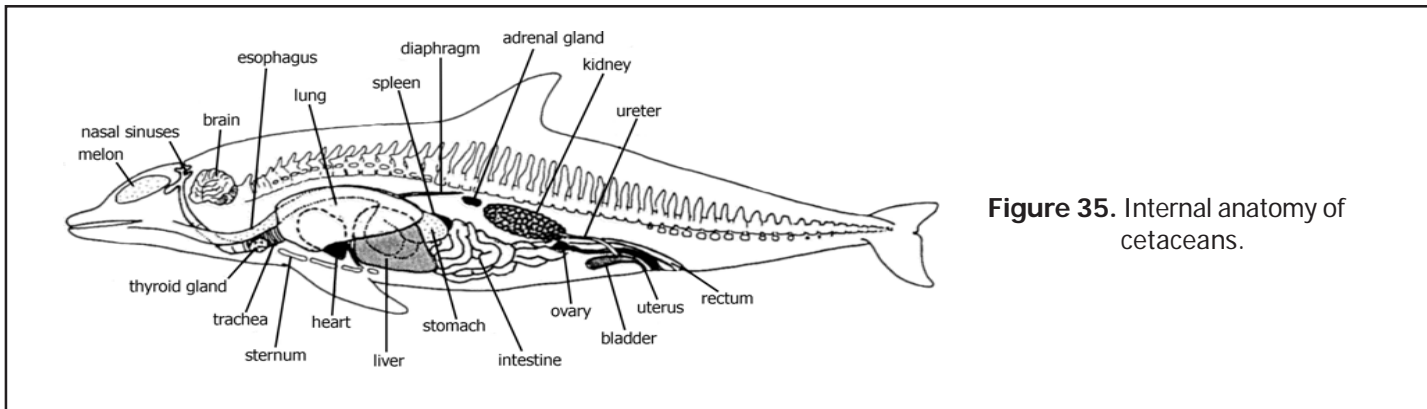


Figure 35. Internal anatomy of cetaceans.

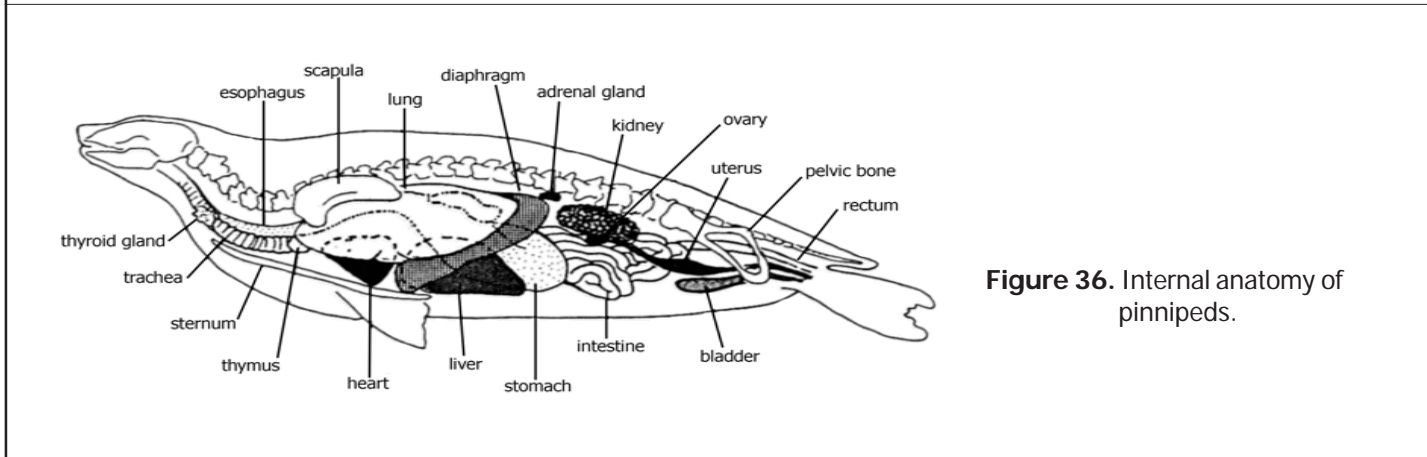


Figure 36. Internal anatomy of pinnipeds.