

- 24i. White areas in head and neck area; 2 large flattened tusks at top of arch in lower jaw of adult males (protruding above upper jaw when mouth closed); known only from North Pacific Ocean, apparently most common in subarctic waters of Alaska (females and subadults require museum preparation for identification) **Stejneger's beaked whale (*Mesoplodon stejnegeri*) p. 114**
- 24j. Adult males with white jaws and tusks on slightly raised prominences in middle of jaw; known only from Australia, New Zealand, and Kerguelen Island (females and subadults require museum preparation for identification) **Andrews' beaked whale (*Mesoplodon bowdoini*) p. 110**
- 24k. Complex pattern of black, white, and grey; adult males with pair of tusks that grow outside of mouth from lower jaw, and wrap around upper jaw, preventing it from opening more than a few centimetres; known only from Southern Hemisphere (females and subadults require museum preparation for identification) **Strap-toothed whale (*Mesoplodon layardii*) p. 108**
- 24l. Grey with lighter sides and belly; teeth of adult males protrude outside mouth in middle of lower jaw; vestigial teeth sometimes present in both jaws; known only from the temperate and subarctic North Atlantic (females and subadults require museum preparation for identification) **Sowerby's beaked whale (*Mesoplodon bidens*) p. 102**
- 24m. Black with white swathe running from head down sides, or brown in colour; head flat; moderately long beak; trailing edge of dorsal fin nearly straight; known only from eastern tropical Pacific. ***Mesoplodon* sp. "A" (unidentified) p. 116**

- 25a. Teeth blunt with expanded crowns, laterally compressed, and relatively small; beak extremely short or nonexistent (Fig. 52) **(Porpoise) → 26**
- 25b. Teeth conical and sharply pointed, unless heavily worn (in cross-section, circular or oval); beak usually present (Fig. 53) **(Dolphin or small toothed whale) → 31**

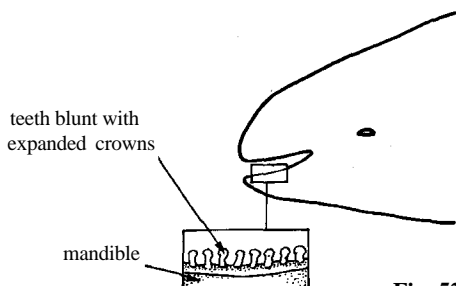


Fig. 52 Porpoise

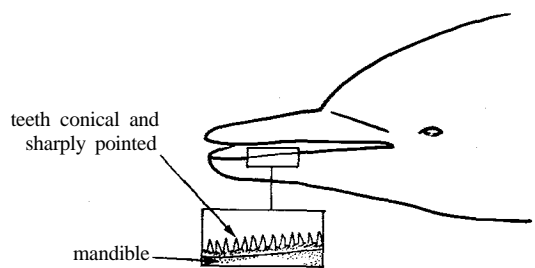


Fig. 53 Dolphin

- 26a. No dorsal fin; narrow dorsal ridge; body dark grey or black, with lighter belly; 13 to 22 teeth in each tooth row; maximum size to 2 m; distribution limited to the Indo-Pacific area (Fig. 54). **Finless porpoise (*Neophocaena phocaenoides*) p. 192**
- 26b. Dorsal fin present (Fig. 55) → 27

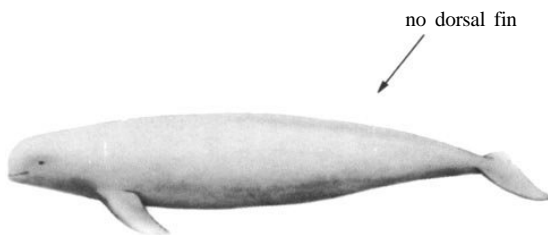


Fig. 54 *Neophocaena phocaenoides*

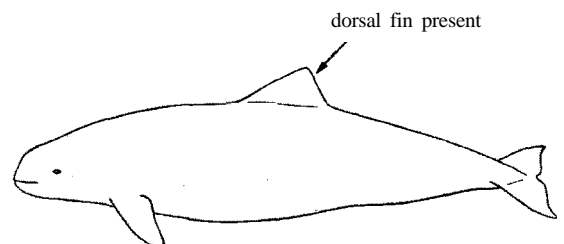


Fig. 55 Porpoise

27a. Dorsal fin set far back on body, rising at a shallow angle from back, with long leading edge and convex trailing edge; body dark charcoal grey to black; 11 to 16 pairs of teeth in upper jaw, 16 to 19 in lower; maximum size to 2 m; distribution limited to coastal South America (Fig. 56). **Burmeister's porpoise (*Phocoena spinipinnis*) p. 188**

27b. Dorsal fin upright and set near middle of back → **28**

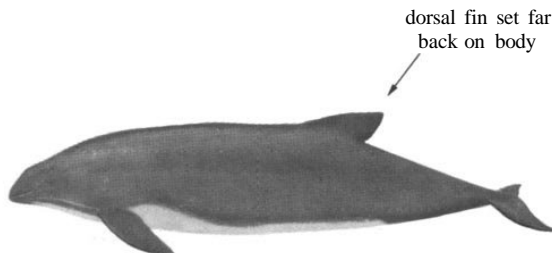


Fig. 56 *Phocoena spinipinnis*

28a. Dorsal fin tall and slightly falcate; body grey to brownish grey, with light belly, dark lip patches, and eye rings; flippers large; 16 to 22 teeth per side of each jaw; maximum size 1.7 m; distribution limited to the Gulf of California, Mexico (Fig. 57). **Vaquita (*Phocoena sinus*) p. 190**

28b. Triangular dorsal fin; found outside the Gulf of California → **29**

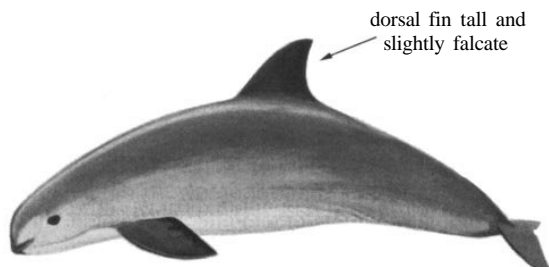


Fig. 57 *Phocoena sinus*

29a. Body dark grey on back to white below; dark stripe from gape to flipper; short, triangular, wide-based dorsal fin; 22 to 28 pairs of teeth in upper jaw, 21 to 25 in lower; maximum size to about 2 m; Northern Hemisphere distribution only (Fig. 58) **Harbour porpoise (*Phocoena phocoena*) p. 186**

29b. Colour pattern sharply demarcated black and white → **30**

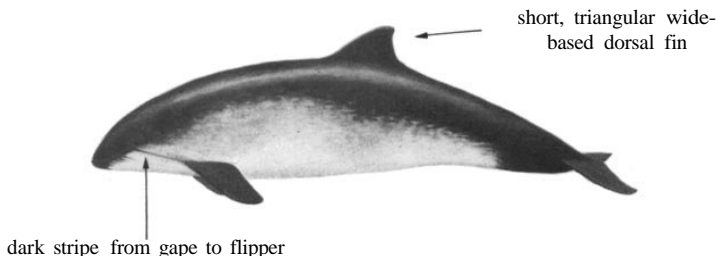


Fig. 58 *Phocoena phocoena*

- 30a. Black body with striking large white patch on sides and belly; extremely robust, with small head and appendages; deepened caudal peduncle; dorsal fin triangular, with recutved tip; white or light grey trim on dorsal fin and flukes; 23 to 28 pairs of extremely small teeth per jaw; maximum size to 2.4 m; North Pacific distribution only (Fig. 59) **Dall's porpoise (*Phocoenoides dalli*)** p. 182
- 30b. Body bicoloured, black on dorsal half and white on ventral half; black lips; white "spectacle" surrounding eye; dorsal fin triangular; 17 to 23 pairs of teeth in upper jaw, 16 to 20 in lower; maximum size to about 2.2 m; distributed oniy around southern South America and offshore islands of the Southern Hemisphere (Fig. 60) **Spectacled porpoise (*Australophocaena dioptrica*)** p. 184

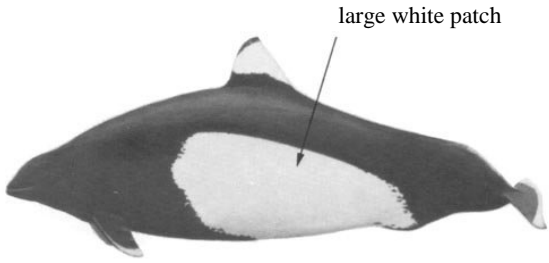


Fig. 59 *Phocoenoides dalli*

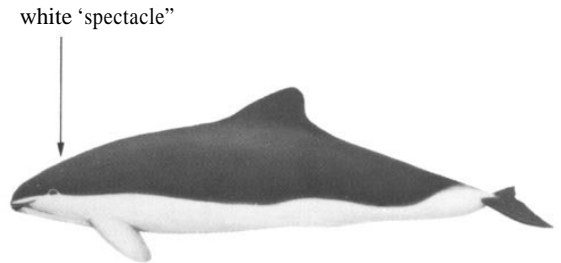


Fig. 60 *Australophocaena dioptrica*

- 31a. No dorsal fin or prominent dorsal ridge (there may be a slight dorsal ridge) (Figs 61 and 62) 32
- 31b. Dorsal fin or prominent dorsal ridge present (Figs 67 and 68) → 35
- 32a. Slight dorsal ridge present, sometimes marked with nicks or cuts; body robust; jaws short and wide; forehead high and globose; fiippers short, broad, and rounded; distribution limited to arctic and subarctic areas (Fig. 61) **(Monodontid)** → 33
- 32b. No dorsal ridge present; body extremely slender; small fiippers and flukes; beak short but distinct (Fig. 62) **(Right whale dolphin)** → 34

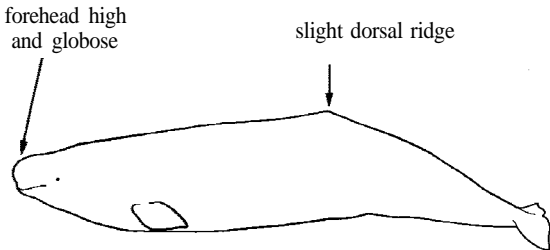


Fig. 61 Monodontid

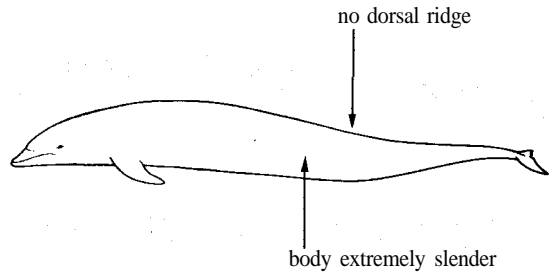


Fig. 62 Right whale dolphin

33a. Body grey to brownish grey, mottled; short flippers often upturned at tips; flukes with more or less convex trailing edge; only 2 teeth in upper jaw, unerupted except in adult males, in which the left tooth develops into a left-spiraled tusk up to 3 m long; maximum size up to 5 m (excluding tusk); distribution limited to high Arctic (Fig. 63)
 **Narwhal (*Monodon monoceros*)** p. 74

33b. Body white to dark grey; extremely stocky; melon bulbous; beak short; head and appendages small; "meck" often visible; 9 pairs of teeth in upper jaw, 8 in lower; maximum size 5.5 m (Fig. 64) **White whale (*Delphinapterus leucas*)** p. 76

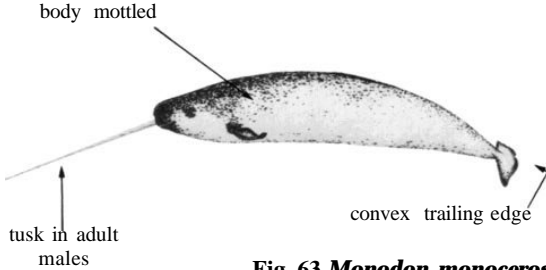


Fig. 63 *Monodon monoceros*

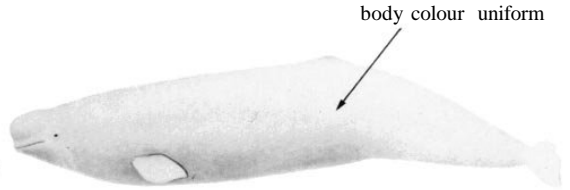


Fig. 64 *Delphinapterus leucas*

34a. Body black with white lanceolate pattern on belly; 37 to 54 fine pointed teeth per side of each jaw; maximum body length 3.1 m; North Pacific distribution only (Fig. 65)
 **Northern right whale dolphin (*Lissodelphis borealis*)** p. 170

34b. Body black above and white below; flippers, beak, and forehead mostly white; 44 to 49 teeth in each tooth row; maximum size to 3 m; Southern Hemisphere distribution only (Fig. 66). **Southern right whale dolphin (*Lissodelphis peronii*)** p. 172



Fig. 65 *Lissodelphis borealis*



Fig. 66 *Lissodelphis peronii*

35a. Jaws extremely long; flippers broad and more or less triangular; eyes small; low, broad-based dorsal fin or dorsal ridge; distributed in rivers and lakes, only rarely in estuaries (Fig. 67) **(River dolphin)** → 36

35b. Prominent dorsal fin; distribution estuarine or marine (Fig. 68) → 39

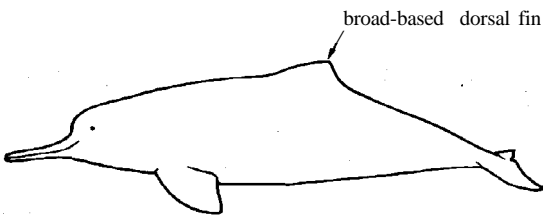


Fig. 67 River dolphin

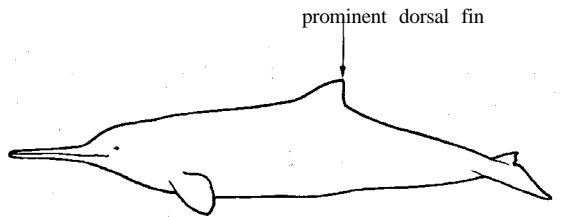


Fig. 68

36a. Blowhole transverse and crescentic; body grey with pinkish cast; dorsal hump low and set two-thirds of the way from the snout tip; forehead steep; 23 to 35 teeth per tooth row; maximum size to 2.6 m; distribution limited to Amazon and Orinoco drainage basins of Brazil, Bolivia, Peru, Colombia, Ecuador, Guyana, and Venezuela (Fig. 69).
 **Boto (*Inia geoffrensis*)** p. 198

36b. Blowhole longitudinal (Figs 70 and 71) → 37

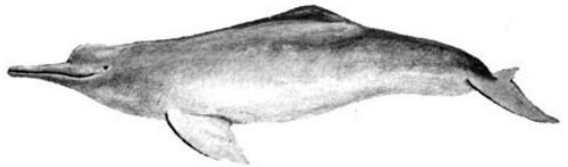
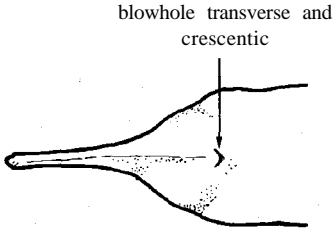


Fig. 69 *Inia geoffrensis*

37a. Body bluish grey above and white below; blowhole oval; beak upturned at tip; dorsal fin triangular with blunt tip; 31 to 38 teeth per tooth row; maximum size to 2.6 m; distribution limited to the Yangtze River of China (Fig. 70) **Baiji (*Lipotes vexillifer*)** p. 200

37b. Body grey with lighter or pinkish belly; blowhole slit-like; eyes extremely small; beak long, narrow when viewed from above, with interlocking teeth protruding outside closed mouth at front half; low dorsal ridge; 26 to 39 teeth in each row; maximum size to 2.5 m (Fig. 71) **(*Platanista* sp.)** → 38

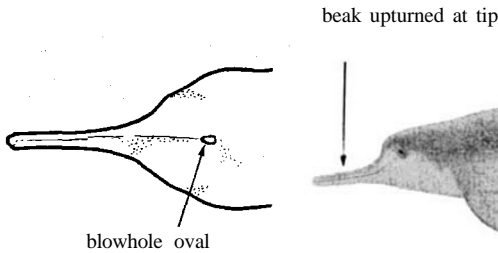


Fig. 70 *Lipotes vexillifer*

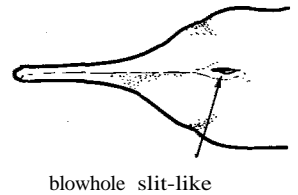


Fig. 71 *Platanista* sp.

38a. Distribution limited to the Ganges and Brahmaputra River systems of India, Nepal, Bangladesh, and Bhutan (Fig. 72) **Ganges River dolphin (*Platanista gangetica*)** p. 194

38b. Distribution limited to the Indus River system of Pakistan **Indus River dolphin (*Platanista minor*)** p. 196



Fig. 72 *Platanista gangetica*

- 39a. Body dark grey with lighter belly; prominent triangular dorsal fin with rounded tip; flippers broad with curved leading edge and serrated trailing edge; eyes small; 51 to 58 teeth per tooth row; maximum size to 1.8 m; distribution limited to coastal and estuarine waters of Argentina, Uruguay, and Brazil (Fig. 73) **Franciscana. (*Pontoporia blainvillei*)** p. 202
- 39b. Flippers without serrated trailing edge; eyes not particularly small → 40



Fig. 73 *Pontoporia blainvillei*

- 40a. Head blunt with no prominent beak (Fig. 74) → 41
- 40b. Head with prominent beak (Fig. 75) → 52



Fig. 74

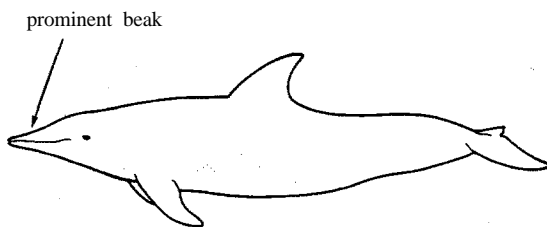


Fig. 75

- 41a. Two to 7 pairs of teeth at front of lower jaw only (rarely 1 to 2 pairs in upper jaw), but teeth may be absent or extensively worn; forehead blunt with vertical crease; dorsal fin tall and dark; body grey to white, covered with scratches and splotches in adults; flippers long and sickle-shaped; maximum body length 4 m (Fig. 76) . **Risso's dolphin (*Grampus griseus*)** p. 152
- 41b. Teeth (7 or more pairs) in both upper and lower jaws; forehead without vertical median crease (Fig.77) → 42

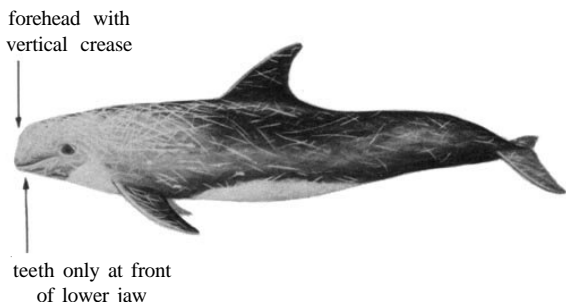


Fig. 76 *Grampus griseus*

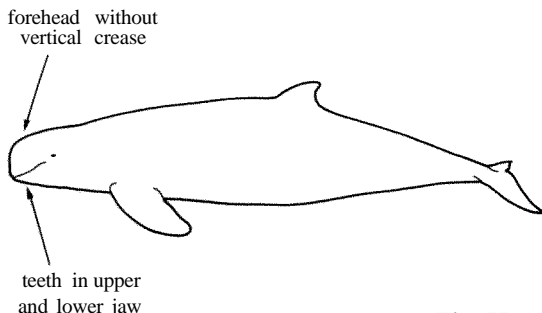


Fig. 77

- 42a. Flippers broad and paddle-shaped with rounded tips (Fig. 78) → 43
- 42b. Flippers long and slender with pointed or blunt tips (Fig. 79) → 48

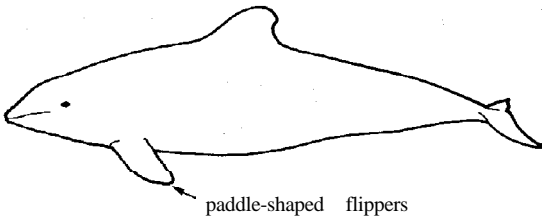


Fig. 78

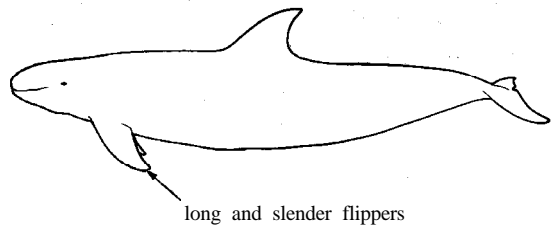


Fig. 79

- 43a. Flippers large and paddle-shaped; dorsal fin tall and erect (up to 0.9 m in females and 1.8 m in males); striking black and white coloration, with white post-ocular patches, white lower jaw, white ventrolateral field, and light grey saddle patch behind dorsal fin; 10 to 12 large (to 2.5 cm in diameter) oval teeth in each tooth row; maximum body length 10 m (Fig.80). **Killer whale (*Orcinus orca*)** p. 120
- 43b. Dorsal fin low and rounded or triangular: adults less than 3 m; greater than 12 teeth per toothrow. → 44

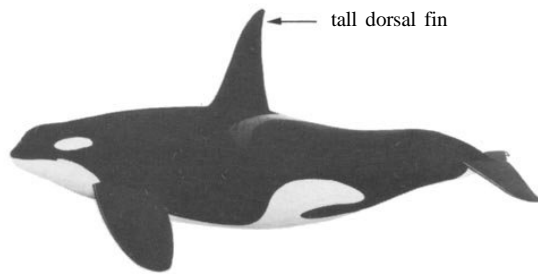


Fig. 80 *Orcinus orca*

- 44a. Body grey with lighter belly: dorsal fin small and slightly falcate; neck crease present; forehead bluff: 15 to 20 teeth per row; maximum size 2.8 m; distribution limited to coastal areas and rivers of southeast Asia and northern Australia (Fig. 81) **Irrawaddy dolphin (*Orcaella brevirostris*)** p. 118
- 44b. More than 22 teeth per tooth row (***Cephalorhynchus*** sp.) → 45

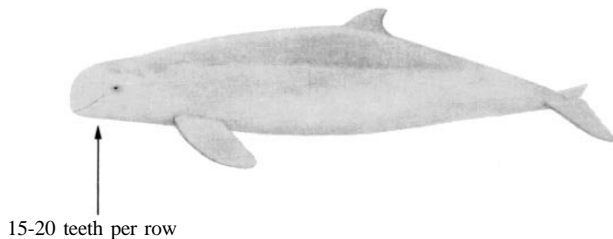


Fig. 81 *Orcaella brevirostris*

- 45a. Sides light grey; dark grey cape (very narrow just behind blowhole area); belly white, with arms that surround the urogenital area and extend up both sides; white throat patch; white axillary patches; dorsal fin moderately tall and triangular; 22 to 28 teeth in each row; maximum size 1.7 m; distribution limited to southwest coast of Africa (Fig. 82) **Heaviside's dolphin (*Cephalorhynchus heavisidii*)** p. 176
- 45b. Dorsal fin rounded (Fig. 83). → 46

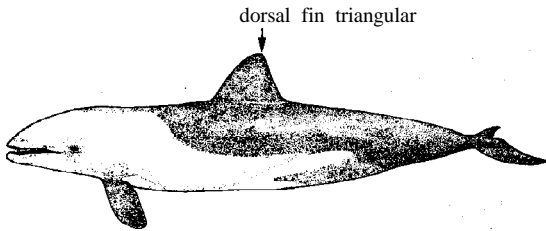


Fig. 82 *Cephalorhynchus heavisidii*

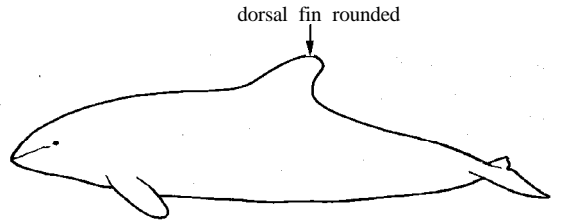


Fig. 83

- 46a. Distinct black and white colour pattern, with black head and flippers, and black from the dorsal fin to the flukes; white chin patch; black genital patch; 28 to 34 teeth per row; maximum size 1.8 m; distribution limited to coastal and inshore waters of southeast South America and the Kerguelen Islands (Fig. 84) **Commerson's dolphin (*Cephalorhynchus commersonii*)** p. 174
- 46b. Colour pattern largely various shades of grey. → 47

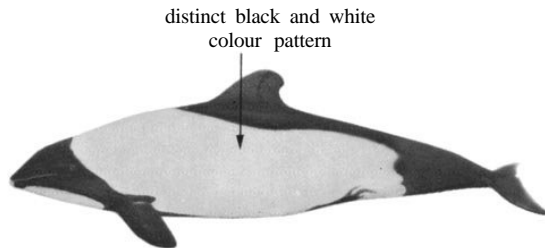


Fig. 84 *Cephalorhynchus commersonii*

- 47a. Body mostly grey, with white belly and "arms" that extend up the sides on the tail stock (clearly demarcated by a dark grey line), and black dorsal fin, flippers, flukes, face, beak tip, and blowhole area; 26 to 32 teeth per row; maximum size to 1.7 m; distribution limited to coast of New Zealand (Fig. 85) **Hector's dolphin (*Cephalorhynchus hectori*)** p. 178
- 47b. Body grey with clearly demarcated white belly and chin; dark band between the flippers; white spots in axillae; 29 to 34 teeth in each row; maximum size to 1.7 m; distribution limited to west coast of South America, especially protected inshore waters of southern Chile (Fig. 86) **Black dolphin (*Cephalorhynchus eutropia*)** p. 180

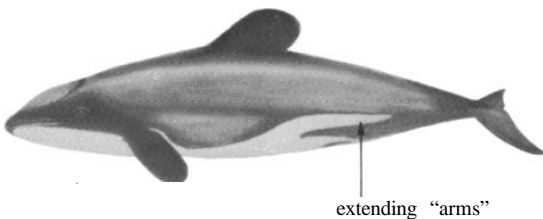


Fig. 85 *Cephalorhynchus hectori*

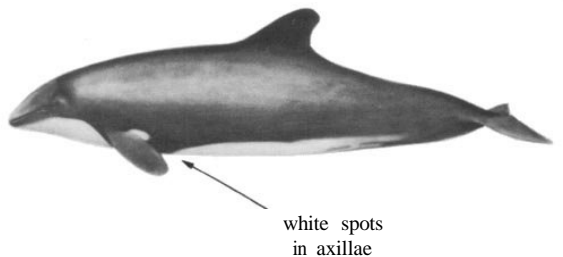


Fig. 86 *Cephalorhynchus eutropia*

48a. Dorsal fin low and broad-based, located on forward third of back; head bulbous; body black to dark grey with light anchor-shaped patch on belly and often light grey saddle behind dorsal fin; often a light streak above and behind each eye; deepened tail stock; long sickle-shaped flippers; 7 to 13 pairs of teeth in front half only of each jaw (Fig. 87) **(Pilot whale) → 49**

48b. Dorsal fin near middle of back (Fig. 88). → 50

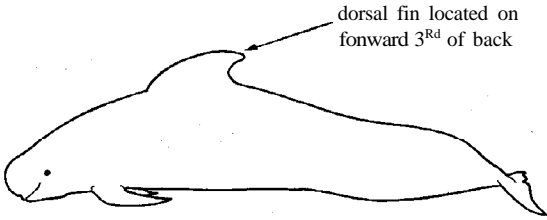


Fig. 87 Pilot whale

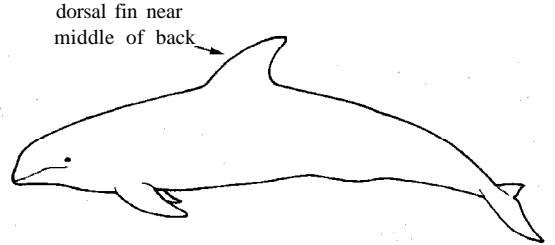


Fig. 88

49a. Flipper length 18 to 27% of body length, with prominent “elbow”; 8 to 13 teeth in each tooth row; maximum size to 6.3 m; distribution limited mostly to cold temperate regions of North Atlantic and Southern Hemisphere (Fig. 89). **Long-finned pilot whale (*Globicephala melas*) p. 122**

49b. Flipper length 16 to 22% of body length; 7 to 9 pairs of teeth in each tooth row; maximum body length 6.1 m; distribution limited to tropical and warm temperate waters (Fig. 90) **Short-finned pilot whale (*Globicephala macrorhynchus*) p. 124**

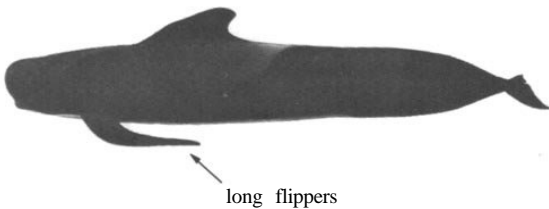


Fig. 89 *Globicephala melas*

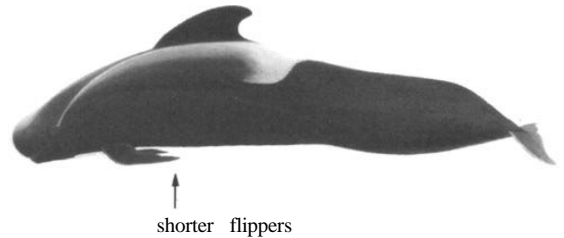


Fig. 90 *Globicephala macrorhynchus*

50a. Flipper with distinct hump on leading edge; body predominantly black; no beak; 7 to 12 large teeth in each half of both jaws, circular in cross-section; maximum body length 6 m (Fig. 91) **False killer whale (*Pseudorca crassidens*) p. 126**

50b. Body black or dark grey with white lips; white to light grey patch on belly; flipper lacks hump on leading edge; 8 to 25 teeth in each tooth row (Fig. 92) → 51

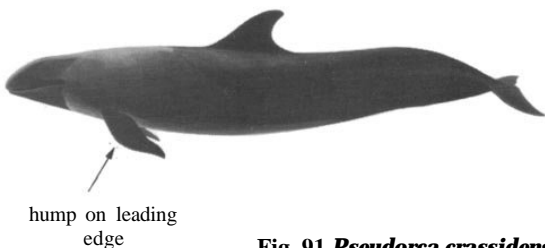


Fig. 91 *Pseudorca crassidens*

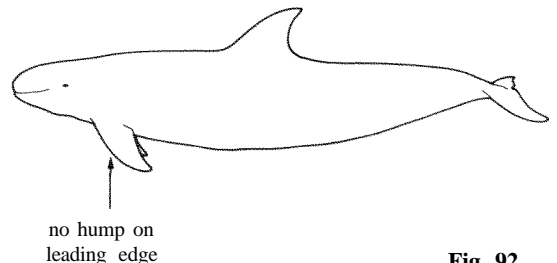


Fig. 92