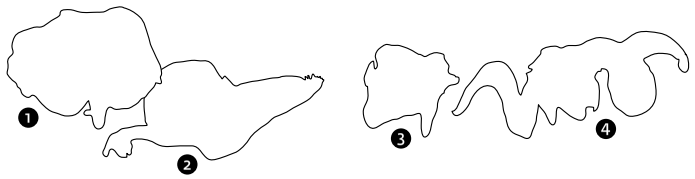
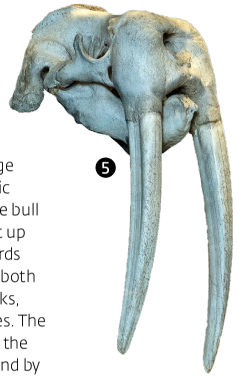
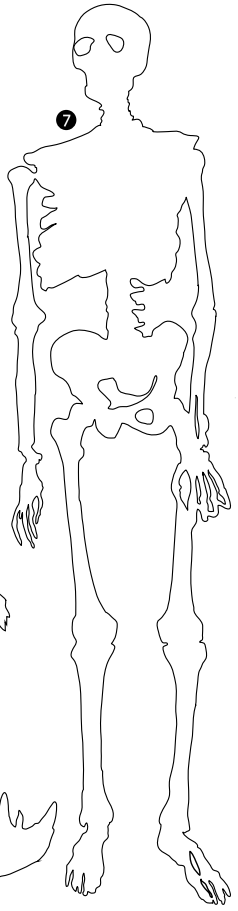
Left side of cabinet

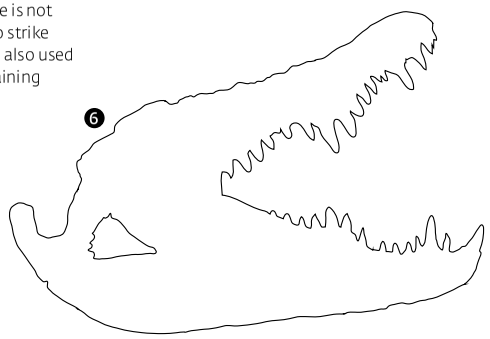


1	*Dugong dugon*	Dugong
2	*Tursiops truncatus*	Common Bottlenose Dolphin
3	*Sus scrofa*	Domestic Pig
4	*Ovis aries*	Domestic Sheep
5	*Odobenus rosmarus*	Walrus
6	*Crocodylus porosus*	Saltwater Crocodile
7	*Homo sapiens sapiens**	Human skeleton

* *indicates replica*



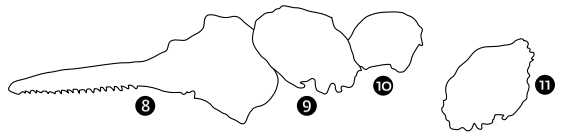


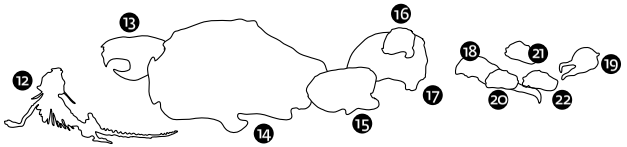


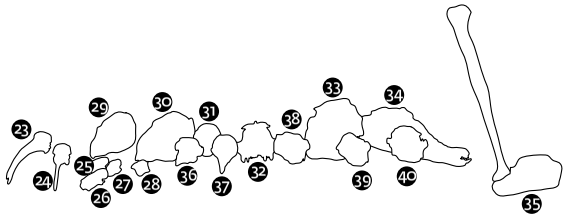
WALRUS

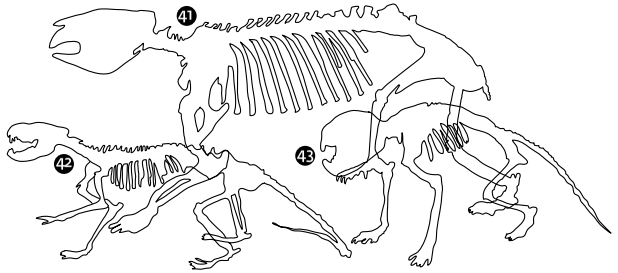
The *Odobenus rosmarus* Walrus 5 is a large species of seal that inhabits shallow arctic waters in the northern hemisphere. Large bull males can grow to 3.5 m long and weight up to 1,600 kg; females reach about two thirds the size of males. The defining feature of both males and females are the enormous tusks, which are actually enlarged upper canines. The tusks have a variety of uses, although for the most part they are used in self defence, and by males when posturing to establish dominance hierarchies. However, if display alone is not effective, males will use their tusk to strike and injure their opponent. Tusks are also used for breaking through ice and maintaining breathing holes, to hang from ice floes while the animal rests in the water, and to help the walrus drag its heavy body out of the water onto the ice. The tusks continue to grow through life; in males, tusks can grow to 100 cm long, and in females, 60 cm. Do you think our museum specimen is a male or female?

Middle of cabinet
Names on following page







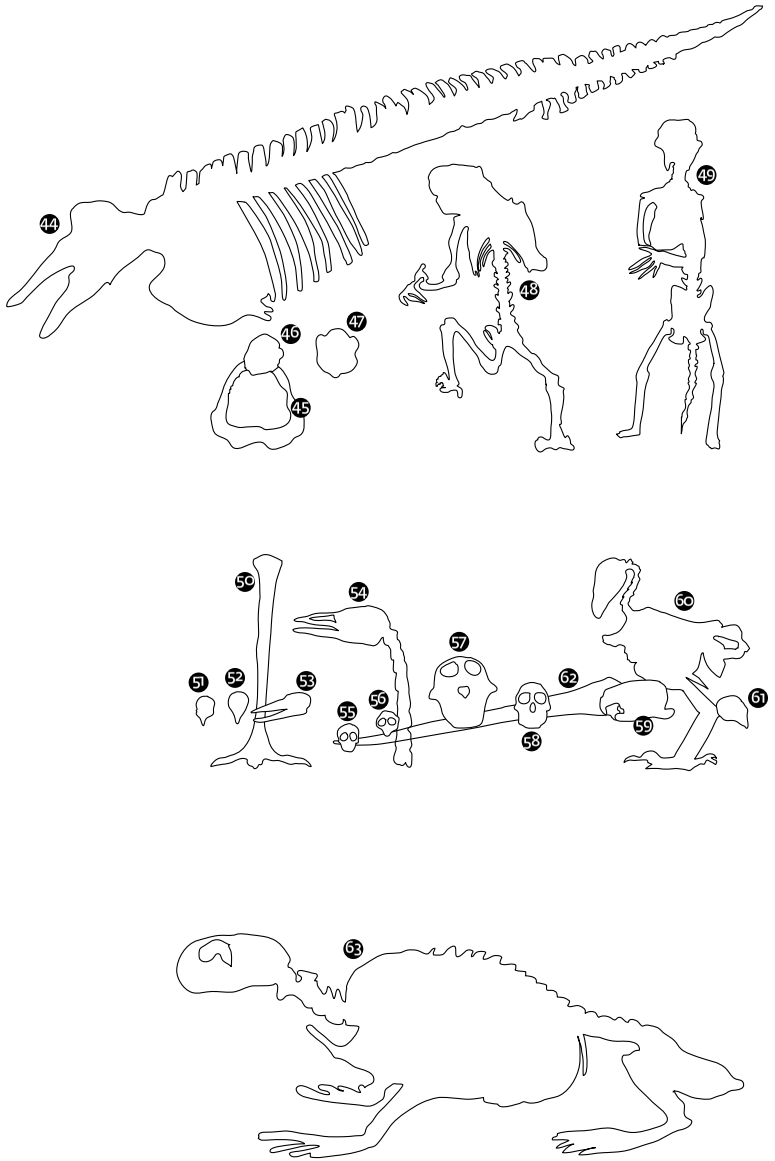


DID YOU KNOW...?

The *Crocodylus porosus* Saltwater Crocodile 6 is the largest species of crocodile and the largest living reptile in the world. Adult males are on average 5 m long and weigh more than 450 kg, whereas females are much smaller, generally around 3 m long and up to 150 kg. Although very rare, there are records of male Saltwater Crocodiles reaching more than 7 m in length and 1000 kg in weight!

SKELETONS & SKULLS

Right side of cabinet



8	*Tursiops truncatus*	Common Bottlenose Dolphin
9	*Panthera leo*	Lion (juvenile)
10	*Ursus americanus*	American Black Bear
11	*Ursus americanus*	American Black Bear
12	*Pogona barbata*	Eastern Bearded Dragon
13	*Castor canadensis*	American Beaver
14	*Panthera tigris tigris*	Bengal Tiger
15	*Amia calva*	Bowfin
16	*Iguana iguana*	Iguana
17	*Chelonia mydas*	Marine Turtle
18	*Diomedea sp.*	Albatross
19	*Phalacrocorax sp.*	Cormorant
20	*Pteropus poliocephalus*	Grey-headed Flying-fox
21	*Pteropus poliocephalus*	Grey-headed Flying-fox
22	*Pteropus poliocephalus*	Grey-headed Flying-fox
23	*Threskiornis sp.*	Ibis
24	*Threskiornis sp.*	Ibis
25	*Rattus sp.*	Rat
26	*Rattus sp.*	Rat
27	*Rattus sp.*	Rat
28	*Rattus sp.*	Rat
29	*Notamacropus rufogriseus*	Red-necked Wallaby
30	*Macropus giganteus*	Eastern Grey Kangaroo
31	*Macropus giganteus*	Eastern Grey Kangaroo (juvenile)
32	*Canis familiaris*	Dog
33	*Canis familiaris*	Dingo
34	*Crocodylus porosus*	Saltwater Crocodile
35	*Crocodylus johnstoni*	Freshwater Crocodile
36	*Corvus sp.*	Crow
37	*Corvus sp.*	Crow
38	*Dasyurus maculatus*	Spotted-tailed Quoll
39	*Dasyurus maculatus*	Spotted-tailed Quoll
40	*Urocyon cinereoargenteus*	Grey Fox
41	*Vombatus ursinus*	Bare-nosed Wombat skeleton
42	*Dasyurus maculatus*	Spotted-tailed Quoll skeleton
43	*Sarcophilus harrisii*	Tasmanian devil skeleton
44	*Phocoena phocoena*	Common Porpoise skeleton
45	*Carcharhinus obscurus*	Dusky Shark jaw
46	*Vulpes lagopus*	Arctic Fox
47	*Osphranter robutus*	Common Wallaroo
48	*Phascolarctos cinereus*	Koala skeleton
49	*Macaca fascicularis*	Crab-eating Macaque Skeleton
50	*Dromaius novaehollandiae*	Emu leg
51	*Gymnorhina tibicen*	Australian Magpie
52	*Strepera sp.*	Currawong
53	*Dacelo novaeguineae*	Laughing Kookaburra
54	*Dromaius novaehollandiae*	Emu
55	*Saimiri sp.*	Squirrel Monkey
56	*Loris tardigradus*	Red Slender Loris
57	*Papio papio*	Guinea Baboon
58	*Cercopithecus mona*	Mona Monkey
59	*Hydrochoerus hydrochaeris*	Capybara
60	*Aquila audax*	Wedge-tailed Eagle skeleton
61	*Tamandua tetradactyla*	Southern Tamandua
62	*Pelecanus conspicillatus*	Australian Pelican
63	*Arctocephalus pusillus doriferus*	Australian Fur Seal Skeleton

All skulls unless specified otherwise

FUNCTION, EVOLUTION AND ANATOMY RESEARCH

The UNE FEAR Lab's aim is to improve our understanding of relationships between shape and function in living and fossil animals. They use computer based 3D modelling (Finite Element Analysis) and geometric morphometrics to predict and analyse mechanical behaviour in skulls and other biological structures.

In addition to providing detailed information on how animals are adapted to particular behaviours and predictions for behaviour in fossil species, the FEAR Lab team apply these techniques to answer a wide range of biomedical questions. Other areas on which they have published and maintain an active interest in, include vertebrate palaeontology, extinction of the Australian megafauna and marsupial carnivore phylogeny and biogeography.

thefearlab.com