Common Visible Behaviours and Terms

FLUKING—when a whale raises its tail before a dive; may be preceeded by a distinct raising of its back near the dorsal fin.

BREACH—leaping into the air, rotating, and landing on its back or side, or forward in a *head-lunge*.

BLOW — a visible exhale at the surface; also called a *spout*.

SPY HOP—raising the head above the surface to expose the eyes, supposedly for taking a look around.

TAIL SWIPE— flinging the tail and flukes sideways out of the water.

HEADRISE—raising the rostrum vertically out of the water, but short of exposing the eyes.

TAIL SLAP—slapping flukes on the surface.

TAIL LOB—lobbing the flukes in the air.

PEC SLAP—lying on its side or back, hitting the surface with one or both pectoral fins.

ROOSTER TAIL—a splash caused by water over the back of a fast surfacing dolphin.

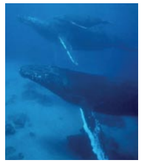
BOWRIDING—some dolphins ride the pressure wave formed by the bow or stern of a boat.

FEEDING BEHAVIOURS — migrating whales travel to the tropical Pacific for calving. However, feeding may occur opportunistically. Foraging behaviours include *skimming* and *lunging*. *Feeding lunges* can be mistaken for *breaching*. *Skimming* can be upright, or on one side, also called a *lateral lunge*.

MATING — Although mating occurs underwater, associated surface behaviours may include *breaching, tail throws, pec slaps, bubble streams*, and male whales filling their mouths with water while lunging at a rival. Time of year and context can help determine if the surface behaviour is mating or feeding.

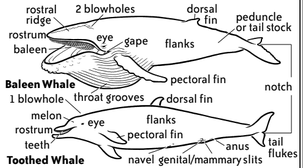
GAZE—a whale or dolphin at or near the surface taking a look at something.

ESCORT — during the calving/mating season, male humpback whales fight rivals in hopes of gaining the position of escort to a mother and calf, with the potential chance to mate.



LOGGING—Describes resting behaviour. After long dives, whales may lie at the surface breathing for a time, looking somewhat like a large log.

SURFING—some dolphins "play" or "surf" in the forces of breaking waves.

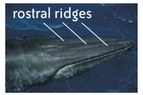


Responsible Whale Watching

- Observing whales in the wild positively impacts public opinion regarding conservation issues. However, whale watching can have a negative impact on cetaceans if protective guidelines and regulations are not strictly observed.
- Guidelines and regulations are designed to encourage safe, enjoyable, and educational experiences whilst minimising disturbance to wildlife.
- Guidelines and regulations minimise harmful impacts on cetacean populations by ensuring that their normal patterns of daily and seasonal activity are not interrupted.
- It is particularly important to allow the animals to control the quality and duration of the interaction.
- Show extreme caution when observing cetaceans involved in the following behaviours: feeding, resting or breeding; or when mother and calf pairs are present because they are particularly sensitive to disturbance and may be vulnerable to collision.
- Reduce speeds in areas where cetaceans may be sighted.
- Approach and leave cetaceans cautiously and slowly from the side.
- Never approach cetaceans head-on or from directly behind.
- Never pursue, overtake, head-off or encircle cetaceans or cause groups to separate.
- Avoid sudden changes in noise level (i.e. rapid gear shifts) and never reverse.
- Everyone can take part in shore-based whale watching, which is the most non-invasive way to observe cetaceans in their natural habitat.
- IFAW recommends that wherever you are whale watching, follow local or national rules or guidelines in addition to the above general principles.
- The diagram (right) illustrates an example of local guidelines adopted in Australia.

Identification Tips — What to look for

- Dorsal fin: present or absent? Note the fin's size, shape, and position relative to the mid-back.
- Flukes: some large cetaceans display flukes when diving. A whale may be identified by its flukes.
- Beaked whales: look for the teeth and mouth line of adult males; it is difficult to identify *Mesoplodon* beaked whales based on a female or juvenile alone, as they have no exposed teeth.
- Rorqual whales: *Minke* — short, pointed rostrum; white band on pectoral fin. *Bryde's* — three rostral ridges; dorsal fin inserts at a 45° angle or more. *Sei* — one ridge; both lower jaws dark gray; dorsal fin angle 45° or more. *Fin* — right lower jaw is white, left is dark gray; dorsal fin angle less than 45°.



IFAW works to improve the welfare of both wild and domestic animals throughout the world by reducing commercial exploitation, protecting wildlife habitats, and assisting animals in distress. IFAW seeks to motivate the public to prevent cruelty to animals and to promote animal welfare and conservation policies that advance the well-being of both animals and people. For more information about how you can help, visit the IFAW website at www.ifaw.org. The Secretariat of the Pacific Regional Environment Programme (SPREP) is an organisation established by the governments and administrations of the Pacific Islands Region to protect and improve its environment for present and future generations. IFAW acknowledges the participation of Whales Alive in this publication.

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A HIGHER PORPOISE

Marine Mammals and Marine Turtles of the Pacific Islands Region

A concise and comprehensive waterproof guide

IFAW

The Pacific Islands Region is a globally significant area that supports a wide range of marine turtles and marine mammals including cetaceans (whales and dolphins) and sirenians (dugongs). The diversity of these marine creatures is recognised as an important element of the Pacific Islands' culture and heritage. Whaling during the last century resulted in dramatic collapses of most populations of great whales in the region. Cetaceans, dugongs and marine turtles are magnificent creatures that have evolved for 50 million (cetaceans and dugongs) to 100 million (turtles) years. These marine creatures are respected as an important element of Pacific Island people's culture and heritage and as such a regional agreement has been developed for their conservation under the Convention on Migratory Species (CMS). The continued protection and recovery of marine mammal and turtle populations is vital to marine biodiversity in the region.

WHALES & DOLPHINS

There are 83 known species of cetaceans in the world, of which, about half are found in the region. These creatures are not fish but air breathing, warm blooded, marine mammals that possess similar characteristics to land mammals in that they give birth to live offspring, and possess mammary glands to suckle their young. They are well adapted to their marine environment with strong, streamlined bodies and a layer of blubber to keep them warm.

There are two main types of whales: toothed whales (Odontocetes) such as sperm whales and dolphins; and baleen whales (Mysticetes) such as humpback and blue whales.

Feeding — The growth of phytoplankton (small marine plants) begins the great food chain of the oceans, feeding microscopic animals, which are eaten by schooling fish and squid. These organisms are in turn, eaten by penguins, seals, dolphins and even toothed whales such as sperm whales. Humpback whales are baleen whales that have no teeth to forage on such large prey. Instead they have hundreds of rows of fibrous bristle-like baleen plates suspended from their upper jaw that are made of keratin (which is the same material as our fingernails). This unique structure acts like a giant sieve that allows water to pass through but traps small (4 to 8cm) shrimp-like crustaceans known as krill. This food source is abundant in the summer months in Antarctic waters, and humpbacks consume up to 2 tonne a day.

Migration — The changing seasons drive some marine mammals, particularly large baleen whales such as humpback whales, to migrate between their feeding and breeding grounds. During summer months, populations in the southern hemisphere spend their time in Antarctic waters feeding until late autumn, when they migrate 5000km north to winter breeding and calving grounds in the warm tropical waters of the Pacific Islands Region. Between June and October, humpback whales are the most visible in the region. They return south in the spring. Dolphins tend to stay in a home range year round.

MARINE TURTLES

Six of the seven species of marine turtles worldwide utilise this region for feeding, breeding and nesting, and migrate long distances between their feeding grounds and nesting sites. These are the green, loggerhead, hawksbill, leatherback, flatback and olive ridley turtles. Marine turtles are reptiles that have lungs for breathing and have a large shell called a carapace for protection. They have four strong, paddle-like flippers that are used for propulsion in the water, and by females who also use them to haul themselves onto beaches to excavate their nests and lay their eggs. This makes them vulnerable to unsustainable harvesting for their meat, eggs, shell and oil. Habitat degradation of breeding and nesting sites also affect populations. Both of these factors are mainly due to human activities and have resulted in catastrophic population declines across all species in the region over the past few centuries. This resulted in marine turtles being listed as vulnerable to critically endangered on the Red List of the World Conservation Union (IUCN). In the last 15 years, concern for turtle conservation has grown in the region with an increasing number of initiatives being undertaken at local, national and regional levels.

DUGONGS

Dugongs are herbivorous marine mammals that forage on seagrass and are found in warm shallow coastal waters. Several factors including habitat degradation have resulted in this species being listed as vulnerable by the IUCN. Their home ranges in the Pacific Islands Region include the waters off Palau, Papua New Guinea, Solomon Islands, Vanuatu and New Caledonia.

Large & Medium-sized Cetaceans

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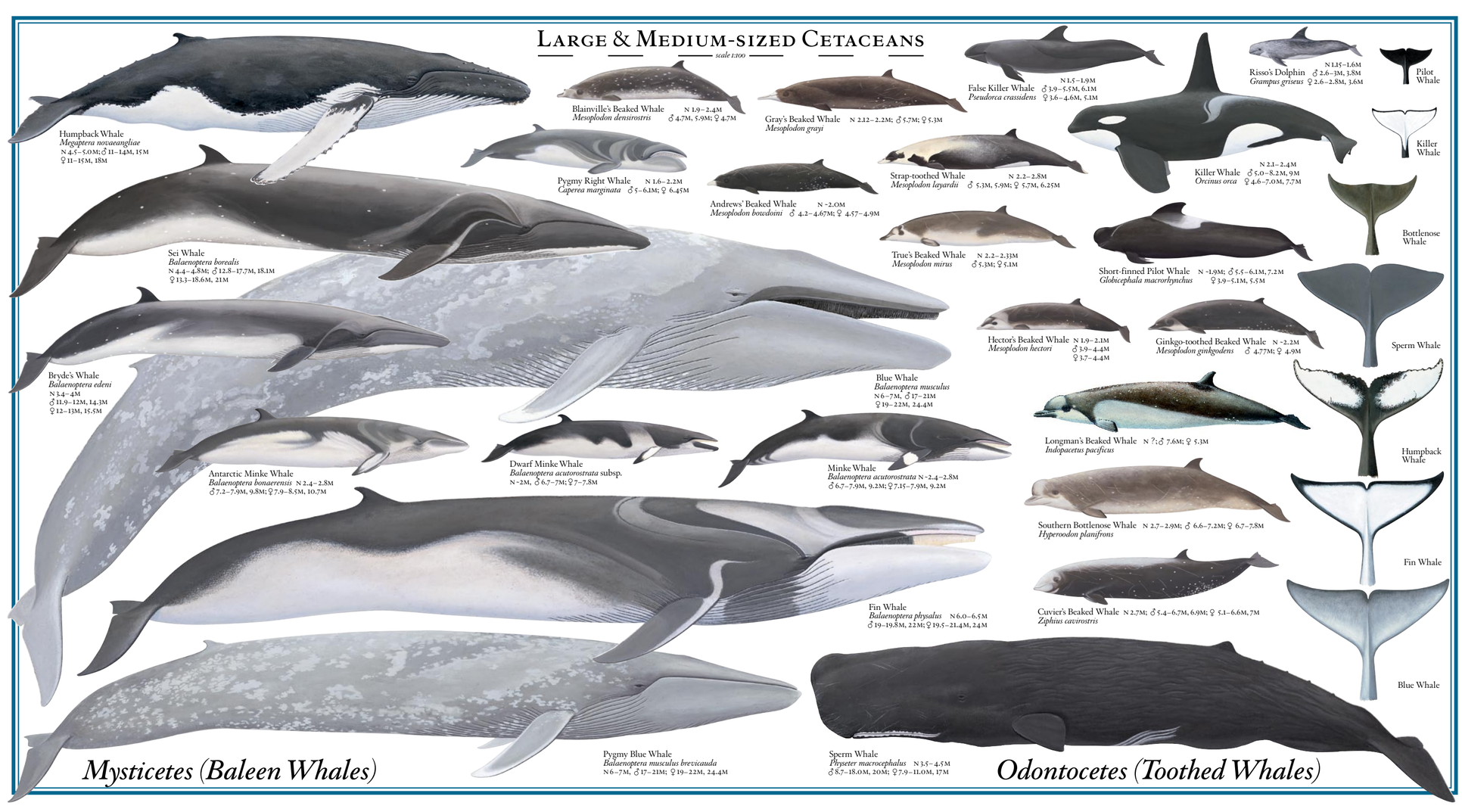

Small Cetaceans

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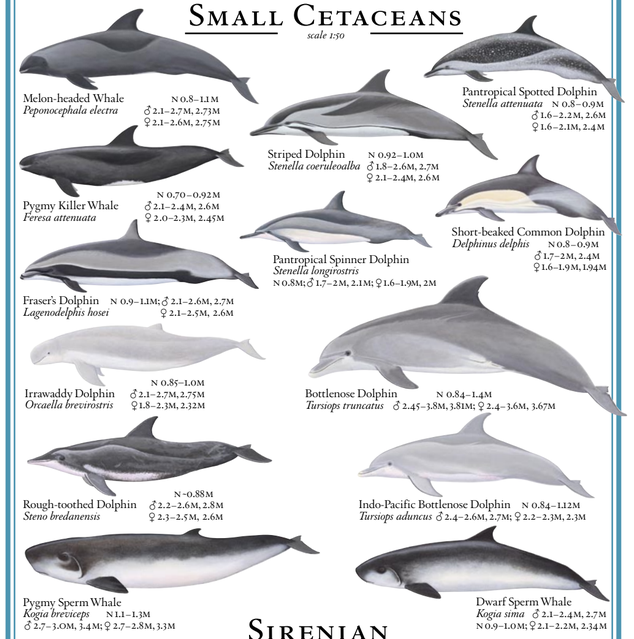

Sirenian

scale 1:50

Marine Turtles

scale 1:50

size is carapace length