WHALE, DOLPHIN & SEAL WATCHING

People often inquire about 'whale-watching' trips. Of course we have be offering those types of fun and potentially awe-inspiring trips for more than two dozen years. These occasions are always great opportunities to enjoy a festive occasion with friends and family; celebrating anniversaries, birthdays and other special days or simply a way to get out on the water and have some fun!!.

We often try to e-mail these creatures, encouraging them to show up at a certain latitude and longitude location at a particular time. However, not all sea mammals open their electronic messages on a timely basis (this is just one of the reasons whales are doing fairly well, summering in the Gulf of Alaska and wintering in Mexico)! Thus you should plan on having an enjoyable day out on the water, away from the hustle and bustle of the city, regardless of whether we get the wonderful chance to observe some playful, sea - going creatures (other than ourselves, of course!)

Generally, we have a pretty good track record in spotting harbor seals virtually year round, with a smaller chance of seeing a pod of dolphins go flying by on our bow wave and a somewhat lesser chance of celebrating the seasonal but still rare and wondrous sight of a mighty whale spouting on the surface.

Please be advised that we take our responsibilities under the U.S. Marine Mammal Protection Act very seriously and try to ensure maximum precautions are observed to ensure that we do not disturb, harass or interfere in any way with or alter the natural behavior of marine mammal friends.

Listed below is some basic information regarding the three most common oceanic mammals that we sometimes are fortunate to observe:

Most Common	It Is Also Possible to See
Grey / Gray Whales	Blue & Humpback Whales
Common Long Beaked Dolphins	Short Beaked & Pacific White Sided Dolphins
Harbor Seals	Sea Lions

Gray / Grey Whale — Eschrichtius robustus — Mysticete (Baleen Whale)

Description: Mottled light to dark grey skin with numerous white, yellow or orange patches of barnacles and parasites around the blowhole, on top of the head, and on the fore part of the back. Like most of us, they typically put on more weight as they grow older.

Males	35 - 50 feet	28 - 40 tons	50,000 - 80,000 pounds
Females	38 - 50 feet	15 - 38 tons	30,000 - 68,000 pounds
Calves	12 - 17 feet	1/2 - 1 ton	1,500 - 2,000 pounds

There is no dorsal fin but rather a low hump with around 6 - 12 knuckles between the hump and the tail. Their flippers are small and paddle-shaped. Yankee whalers named them "devilfish" because they were so protective of their young when approached, often charging or attacking whalers. Today, they are better known for being not only one of the most active of the large whales but also one of the most inquisitive and friendly.

Field Identification:

Robust body	Narrow bowed head	Low V-shaped blow
Mottled gray in color	Bumps or "knuckles" from hump to fluke	
Large flukes thrown high into air	May approach boats	

Distribution: Open ocean to shallow coastal waters of the Bering, Chukchi and Beaufort Seas with small populations from Oregon to southeast Alaska. A typical group size is only 1 to 3 animals although there are larger groupings in some areas. There are more than 23,000 - 26,600 gray whales. Once nearly extinct in the early 1900s, they are now recovering after receiving protection in 1946.

Migration: Gray whales perform one of the world's longest migrations; traveling 20,000 km (12,400 mile) round trip between their southern breeding grounds off Baja California, Mexico and northern feeding grounds off Alaska and the Beaufort Sea. They move at an average speed of around 1 - 5 mph, with a maximum speed of 10 mph. 'Greys' usually can be viewed in Southern California migrating south between October - February and heading back North during December - April (although a few keep their own schedule and can occasionally be seen year round). Females generally migrate earlier than males, and older whales earlier than immature animals. Pregnant females set off earlier on the southbound journey from feeding grounds to the breeding waters, to maximize their chance of arriving in these warm waters before the birth of their calf. On the return journey north, newly pregnant females set off first, followed by other females, adult males and juveniles. Mothers and calves remain longer in the breeding areas, to allow the calves as much time as possible to feed and gain strength for the long swim ahead. Some years, migration may take place earlier or later due to a range of factors, which are still poorly understood, but may include availability of prey on the feeding grounds, and the effects of a major climactic event such as an El Nino year.

Gray / Grey Whale Eschrichtius robustus Mysticete (Baleen Whale)

Biology: They live up to 50 - 60 years (oldest was 77) and have a double blow hole.
Pectoral Flippers : 2 (Used for Steering) Teeth : 0 (Has Baleen)
Dorsal Fin : 0 (Has Ridges or Bumps , Sometimes Called Kunckles)
Parasites (found only on Gray Whale) : Whale Lice & Barnacles:
[may have 100 - 200kg of barnacles attached to their head and body]
Whales have to think about breathing. Thus they sleep by floating on the surface of the water and shutting down only half their brain at one time .

Diet / Food: This bottom feeding, filter feeder baleen whale (no teeth) has a unique technique. They hunt and eat creatures that live on the seabed by rolling over on one side and then swimming slowly along sucking up sediment and the little creatures that live in it. The water and silt is then sieved out through the baleen, trapping food behind and leaving great trenches plowed in the sea bed. Dives for food can be in water up to 120m deep, but they prefer much shallower depths. The scooped and filtered food consists of benthic amphipod (shrimp like) crustaceans from the mud along with other bottom-dwelling organisms such as mollusks, tube worms, fish & squid. This may explain why they are so comfortable in shallow coastal waters.

Most grey whales are "right-handed": they roll onto their right side to feed. As a result, the baleen plates on this side are worn down more quickly and are usually shorter than those on the left side. Feeding is usually not seen during migration and the whale can lose up to 1/3 of its body weight during this movement.

Reproduction: Grey whales reach sexual maturity at around 5years old, have a gestation period of 13 months and are believed to be on a 2year reproductive cycle with a single calf is born every other year. Newborn Gray Whales nurse for up to 7 months on their mother`s milk , which has a very high fat content of around 53% (compared to cows milk at4% & human milk at 2%) Babies grow rapidly, can gain weight at nearly 100 lbs a day and can reach a length of 28 ft in their first year.

Behavior: SNORKELING: whale will barely break the surface of the water when it comes up to breathe before making a long or deep dive
SOUNDING: whale will arch its back and put it`s flukes (tail) in the air.(never when you want to photograph). When it takes a long dive, it can stay down for up to 20 minutes before coming back up to the surface to breathe
SPYHOPPING: whale sticks its head vertically out of the water, as if to look around
BREACHING: whale will suddenly and without warning leap up out of the water. Why they do this is not known. If a Whale breaches and you don`t see it blow afterwards , it will usually will breach again and will keep on doing so until you see it blow. Typically the swimming pattern of a migrating Gray Whale is 3-4 short dives, lasting 1-3 minutes, followed by a longer dive of 5-15 minutes but many times whales just have their own sense of timing!

Common Dolphin

Delphinus delphis (short-beaked) Toothed Whale
Delphinus capensis (long-beaked)

Description: Easily recognized by the hourglass pattern and tan or yellowish patch on each side. They have a dark cape ranging from black to brown with a 'V'-shape under the dorsal fin. Their back is either black or dark brown and they have a white or cream-colored underside with occasional yellow streaks and a white tail stock. Flukes are dark on both sides, and their dorsal fins range from curved to triangular and can be black, greyish white or somewhere in-between. Eyes are encircled with black markings that extend to the beak. A dark line or streak stretches from the lower jaw to the flippers. The most distinctive feature is a crisscross pattern which runs across the dolphin's side. It resembles an hourglass and divides the top and bottom colors. This band is a buff tan in front and gray towards the tail.

The beak is sharply divided from the lower forehead by a deep groove. The jaws on each side of the beak are lined with 20 or more small, sharp, recurved teeth, perfect for catching slippery fish.

Male & Female	5 - 8 feet	155 - 295 pounds
Calves	30 -34 inches	25 - 35 pounds

(Only subtle differences between the sexes. Females are slightly smaller but males and females are difficult to tell apart by us, not them.)

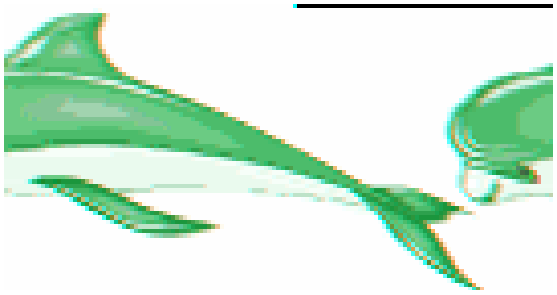
The short-beaked common dolphin is relatively heavier, and has a larger dorsal fin and flippers than the long-beaked common dolphin.

Field Identification: Streamlined body, long slender beak, single blowhole, pointed flippers, hourglass yellow tan pattern on sides just behind eye, dark flippers, tail and fin, dark 'v' shaped cape (area of the back around the dorsal fin), fast active swimmer.

Distribution: Many different populations in all oceans, including coastal waters. They are widely found in many enclosed seas and are rarely seen in waters less than 180m deep. Exact numbers are unknown but there are probably a few million. They normally travel at 5 to 7 miles per hour (although they are known to reach speeds of 29 miles per hour when pursuing food), and can move up to 150 to 200 miles in a 48 hour period. Herd movements correlate with the seasonal shifts in population of certain fish. The long-beaked common dolphin is found more in coastal waters; the short-beaked common dolphin is found in offshore waters

Biology: Average life span is 40 - 50 years. They do not sleep with both eyes closed but rather close one eye for 5 to 10 minutes and then the other eye. Each eye is closed for an average of 3 to 4 hours every 24 hours. These mammals cannot breathe underwater, relying on a blowhole on top of their heads. They surface several times a minute to breathe.

Dorsal Fin: triangular-to-falcate (curved); pointed and located near the middle of the back and is black-to-light gray in color with a black border.
Flippers: long and thin and slightly curved or pointed depending on geographical location.
Flukes: thin and pointed at the tips with a slight notch in the center.



Common Dolphin

Delphinus delphis (short-beaked)
Delphinus capensis (long-beaked)

Diet / Food: Prey on schooling fish (e.g. herring, pilchards, anchovies, sardines, hake, bonito), squid and octopus; eating up to 18 to 20 pounds of fish per day.. They adopt co-operative techniques when hunting (herding into a 'bait ball'), then each dolphin rushes to the center of the pursued school group and tries to seize as many fish as possible, which it swallows whole. They have also been known to dive below schools and drive them to the surface, pushing their prey completely out of the water and catching the fish in midair.

Reproduction: Sexual maturity is reached at 3 to 4 years of age with a gestation period of 10 to 12 months. Females normally give birth to one baby at a time (tail first), but have been found to carry twins or triplets. The calf feeds on milk which has 6 times more protein and is much more fattening than human milk. After six months, the baby occasionally takes solid food.

Behavior: Often found in large, socially active groups with school size based upon time of day and season. When they are frightened, they bunch tightly together. They are fast swimmers and enjoy acrobatics; lobtailing, flipper slaps, somersault and breaching. They are highly vocal and can be heard above the surface. Dives are typically short: 10 seconds to 2 minutes, although dives of 8 minutes have been recorded.

Very social organisms which are seldom alone. They travel together, eat together and even breathe together. The whole school can all be in the air at one time. Schools can contain as many as 100 to 2,000 individuals; although 10 - 500 is more ususal.

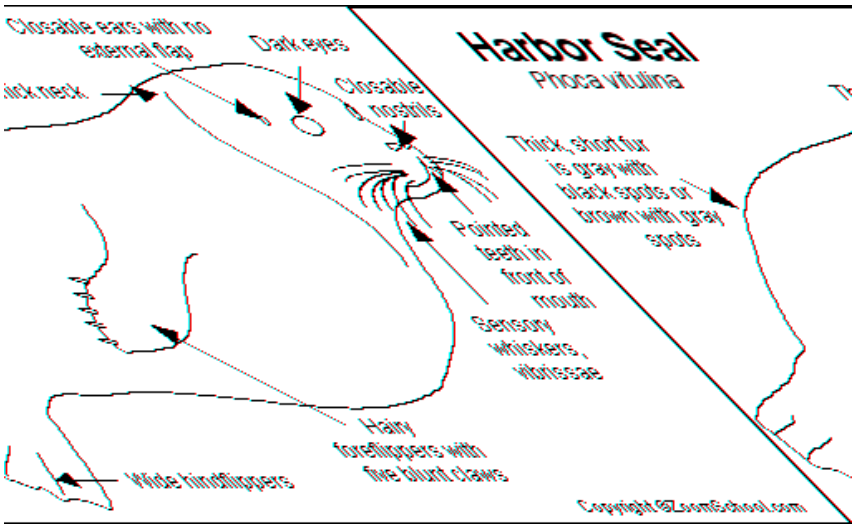
Dolphins are playful, active and boisterous, doing various flips and somersaults, completely out of the water. They play with one another in a somewhat rough fashion, rushing towards one another. A favorite activity is bow-riding ships, often staying with the vessel, jumping and playing, for a long period of time.

They are a very vocal species, communicating with each other using two voices (whistle-like pulse sounds); one being for navigation and location and the other for social communication. Variations in loudness, speed, and pitch convey different messages.

Harbor Seals

Phocua Vitulina

Pinniped



Description: A marine mammal with short, thick fur that spends most of its life in the sea, but also enjoys sunbathing on rocks or on the beach. To guard against cold water temperatures, seals maintain a thick layer of fat beneath their skin, giving them a thick sausage shape. They spend many hours during low tide hauled out on a favorite sandbar or rocky island soaking in the warm sunshine.

Males	2 - 6.5 feet	170 - 350 pounds
Females	2 - 5.5 feet	150 - 300 pounds
Pup	24 - 39 inches	20 - 26 pounds

The snout is blunt and because harbor seals spend so much time underwater their nostrils are naturally shut giving them a characteristic V-shapes. They must actually be pushed open when inhaling occurs. Multiple layers of blubber provide insulation, buoyancy, and energy reserves.

Fur covering is short and thick, consisting of coarse guard hairs and finer, denser under hairs. Its pattern is similar to a human's fingerprint; unique to the individual. The patterns range from light coats (white, silver, light gray) with dark rings or spots, to medium coats (beige, brown) with light or dark rings, or dark coats (dark gray, black) with light rings. Hair itself provides no insulation. Instead, glands in the skin secrete oils which protect the coat and thus they must molt annually. Molting occurs after every breeding season.

Distribution: Harbor seals can be found on off-shore islands, rocks, and bays and estuaries from the Pacific coast of Alaska to Baja, Mexico. Harbor seals spend their entire lives along the same stretch of coastline. An estimated 40,000 individuals inhabit California. They can usually be observed inhabiting shallow areas where sandbars, rocks and beaches are uncovered during low tides or otherwise easily accessible. Since harbor seals do not migrate, in many areas they are present year-round. Some short movements may be associated with seasonal availability of prey and with breeding. Although they assemble in groups of up to several hundred, they do not form breeding colonies.

Diet / Food: They are opportunistic feeders, eating what they can get, usually cod, and herring, flounder, perch, crustaceans, squid, clams and octopus (bottom dwelling & schooling prey). Seals don't chew their food but swallow it in large chunks. They can crush the shells of crustaceans and mollusks with their flat back teeth. They tend to hunt for fish, crabs, and shellfish during high tide.

Harbor Seals Phocua Vitulina Pinniped

Biology: Average lifespan of a harbor seal is from 25-30 years. The nostrils are closed in the resting state.

Whiskers	help the seal's sense of touch.
Hind Flippers	significantly webbed, used to swim with alternate back-and-forth movements
Fore Flippers	are not severely webbed, and therefore not used for propulsion.
Tail	not easily seen; short, flat tail located between hind flippers.

Harbor seals can remain submerged for up to 28 minutes and dive to depths of 90 m (295 ft.), however, they routinely forage in shallower waters.

Reproduction: Along the Pacific coast usually give birth to one pup between February and July after a pregnancy lasting nine to ten months. A pup nurses for four to six weeks. Its mother's milk, containing as much as 45% milk fat, enables the pup to more than double its weight by the time it's weaned.

Behavior: Harbor seals are generally solitary and rarely interact with one another; not highly communicative, but if threatened a seal may respond by snorting, growling, lunging, scratching, or other aggressive. They are often observed during the pre-mating and mating seasons slapping the water with their pectoral flippers as a form of communication. They may also perform this behavior to show aggression.

Hindflippers move in a side to side motion to propel their bodies. Foreflippers act as a rudder. They can swim up to 19 kph. They can dive to depths of 90 m and stay submerged for 15 to 28 minutes. Mean dive duration is directly proportional to seal size, with larger seals averaging longer dives. A harbor seal uses its sensitive whiskers to detect vibrations. These are thrust in a sweeping movement by pushing their mobile upper lip in and out. When vibrations are detected, a substantial nerve system transmits tactile information to the brain.

They often haul out onto land, during times when human disturbance is least. Spending much of their time on land, they can be observed on river banks, beaches, offshore reefs, rocky points and on manmade artifacts such as buoys and docks. Factors influencing haul-out behavior include season, time of day, tide, wave height or intensity, wind chill, and disturbance. Good visibility and quick access to deep water seem important features of a haul-out location. They rarely move from one location and, once hauled-out they remain alert and will scan the area frequently. They choose to rest where the tide is changing and let the water wash over them allowing themselves quick access to the water in case of a threat. Harbor seals hauled-out often assume banana shaped profile. They generally do not touch each other when hauled out. If other individuals come too close, they respond with growling, snorting, aggressive flipper-waving, head-butting, scratching, or biting.

Comparison	Harbor Seal	Sea Lion
External Ear Flaps	No, just small opening, visible when open	Yes
Flippers, Claws?	shorter, stouter front & back covered with fur; Yes	long, wing like; No
Color	varying coat patterns with rings & spots, generally silvery-black with either dark spots & light coloring or light spots & dark coloring	solid
Size (at same age)	smaller	larger
Movement (in water)	use hind flippers, undulate	use front flippers
Movement (on land)	caterpillar like	walk