

# **Whale Watch Tour**



## **Presenter Packet**

Prepared by Dr. Jenny, July 2013

## Checklist for pre-WWT prep at AOP & Dock 2

- Plan to be at Dock 2 **at least 10-15min before** departure (8:45am for 9am, 11:45am for 12pm, 3:15pm for 3:30pm)

### **For the First WWT of the day (9am or 12pm)**

- locate the WWT bag in the Pentagon
- take out the blue binder, record the date, tour time (9am or 12pm), & name of the AOP Staff that's doing the tour
- check the current marine weather conditions at <http://forecast.weather.gov/MapClick.php?lat=33.568861182555565&lon=-118.24310302734375>
- record the current weather conditions in the binder
- check the monthly calendar to see if anyone else is training during that time slot (& if so find them)
- check to see if any volunteers are signed up (see Calendar on the Wall behind Jane's desk)
- grab a radio OR make sure that you have a cell phone & that ED 1 has your phone number (note the number for the Arc is **562- 951-1723**)
- fill your water bottles & grab a jacket
- take the WWT bag out to Dock #2 , board & put the bag in the wheelhouse

### **For 2<sup>nd</sup> or 3<sup>rd</sup> WWT of the Day (12pm or 3:30pm)**

- Record weather on a notepad
- check to see if anyone else is signed up for that tour (i.e. staff in training or volunteers)
- head to Dock #2, when given approval board the boat, find the binder in the bag, & update log with your name, tour time, & updated weather

### **After last WWT returns**

- email the total marine life counts for the day to [Anitza@gmail.com](mailto:Anitza@gmail.com) using 140 characters or less

## On Board Checklist

- as the guests board walk around & introduce yourself
- get the names of the WWT interns who are onboard
- ask the Captain what the planned route is  
(i.e. exit by Port of Long Beach or Port of LA, etc)

*soon after the boat gets underway the Captain will do a safety briefing & then he'll turn the mic over to you*

- Introduce yourself & any other AOP staff or volunteers
- Introduce the AOP **Photo ID Specialist** interns by name & talk about how they're collecting data on the whales
- Explain that we need everyone's help watching for whales, & to yell out or come find us if they see anything
- Explain that Directions on the boat are like a Clock

### **Talk about the following in more detail**

*At the beginning...*

- Rainbow Harbor
- Breakwall / Breakwater
- types of marine life we might see & how to sight them

*Throughout the trip..*

- more detailed info about the animals that are seen

*Towards the end...*

- walk around with bio-facts
- Wildlife Concerns & Conservation
- the Aquarium & how it's a non-profit organization
- you hope they've enjoyed their voyage
- we appreciate their feedback & that you'll be by the exit with comment cards for anyone that wants them...

## The 'Queen Mary'



- At **1,019 feet long**, she's longer than the Titanic & taller than the Eiffel Tower (which is 984 feet)
- Once the **grandest ocean liner** in the world
- her maiden voyage in **1936** & she retired in **1967**
- in her 31 years of service, made >1000 transatlantic trips
- during **WWII** she was **painted gray** (the **Gray Ghost**) & carried troops across the Atlantic (~16,000 troops/voyage)
- **Hitler** put a **bounty** on the ship, offering to **award** the '**Iron Cross**' to any submarine captain who could **sink her**
- Cruising at **30 knots**, she was **too fast** for any submarine
- she's permanently docked here in Long Beach where she is now a **floating hotel & museum** (owned by the city)



## The 'Spruce Goose' Dome



- the dome is **13 stories tall** in the center & is one of the largest geodesic domes in the world
- dome was originally built in **1980** to house **Howard Hughes' Spruce Goose**, which was the largest plane ever flown
- the Spruce Goose was intended to transport troops & supplies across the Atlantic but was not completed until after the WWII ended
- It flew briefly in Long Beach in **1947** for about 1 mile with Hughes at the controls before it was permanently retired
- Spruce Goose was moved to Oregon in the 1990s



- the dome then became a Hollywood soundstage
- in 2003 it was converted to a passenger terminal for Carnival Cruises, & serves over 250,000 passengers/year

## Breakwall / Breakwater

- It is the largest man-made breakwater in the world.
- It is over 8 miles long, with two openings:  
**Queen's Gate** in Long Beach & **Angel's Gate** in LA
- Construction started in **1899** & finished in **1949**
- All three sections were built up from a depth of about 75 feet.
- Many of our uses can have both positive & negative impacts
  - **Positive** impacts
    - ↳ protects our ports, oil islands & coastal developments from coastal erosion by creating a calm harbor
    - ↳ increases biodiversity by creating rocky reefs in the middle of mudflats
  - **Negative** impacts:
    - ↳ traps & pollutants & decreases water quality
- Efforts are being made to reduce the negative impacts while preserving the benefits of the breakwater

## Long Beach Oil Islands

- The Islands are really oil islands
- They're named after astronauts that have died during training (White, Grisham, Freeman, and Chafee)
- Each island is ~10 acres & is designed by Disney to look like floating hotels
- The islands are for five oil companies, T.H.U.M.S. (Texaco, Humble, Union, Mobil, Shell)
- The THUMS Oil Islands also pump water back into the ground to prevent Long Beach from sinking.
- There have been no major spills thus far.
- They are conscientious of the environment and have won awards for their conservation efforts
- These oil islands tap into the 3<sup>rd</sup> largest Oil reserve in the US

## Ports of Long Beach & Los Angeles

- the Port of Los Angeles & the Port of Long Beach are the 1<sup>st</sup> and 2<sup>nd</sup> busiest container ports in the United States
- Combined, they're the 5<sup>th</sup> busiest port facility in the world.
- Over 90% of all freight travels by sea because ships are the most efficient mode of transportation on a cost per ton per mile basis, making them the backbone of our global economy and making the Ports of Los Angeles and Long Beach a global gateway.
- Ships—in spite of their environmental burden—have the smallest environmental footprint of any mode of transport.
- The ports handled everything from clothes, furniture, sports equipment, and TVs, to food, cosmetics & medical supplies
- Only relatively small, high-value goods like cell phones and cameras, and perishable goods like flowers are worth transporting by air.
- The reach of the Ports of Los Angeles and Long Beach extends far beyond Southern California to the nation and indeed to the world.
- If you look at the tag in your shoes, jacket, purses, wallets, if it doesn't say "Made in the USA", chances are it passed through one of these 2 ports.
- The two ports account for almost 40% of all the imports and exports shipped into and from the U.S.
- Only about half of the imported goods stay in Southern CA
- The other half are transferred to trains and trucks and distributed across much of the country.
- Shipping via train to the rest of the country is more efficient than using the Panama Canal.
- **COSCO** = "China Ocean Shipping Company"
  - ↳ Owned by the People's Republic of China
  - ↳ Has >130 ships which visit >100 ports worldwide

## Animals to Watch for...

### • Baleen Whales

- **Blue** Whales (July- September, sometimes into October)
- **Gray** Whales (Oct- April, sometimes into May)
- **Humpback** Whales (spring, & occasionally summer)
- **Fin** Whales (year round, high sightings in winter & spring)
- **Minke** Whales (year round)

### • Toothed Whales

- **Sperm** Whale (very rare, sighted once in summer)
- **Orca** Whales (rare, usually sited in winter months)
- **Common** Dolphins (year round)
- **Risso's** Dolphin (year round)
- **Bottlenose** Dolphin (year round)
- **Pacific White-sided D.** (less common, winter & spring)

### • Pinnipeds

- **California Sea Lion**
- **Harbor Seal**
- **Elephant Seal** (rare)

### • Reptiles

- **Leatherback Sea Turtle** (sighted once in summer '08)

### • Sharks

- **Hammerhead Shark**
- **Mako Shark**

### • Bony Fish

- **Mola Mola**

### • Birds

- **Gulls**
- **Brown Pelican**
- **Phalaropes**
- **Terns**
- **Cormorants**
- **Grebes**

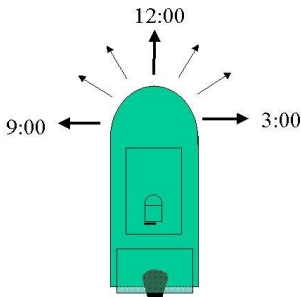


## How to Spot these Animals

- Lots of splashing could indicate dolphins
- Lots of birds could indicate fish → dolphins or whales
- Cloud or plume of mist could be the Blow or spout of a whale
- Light colored & square shaped could be a Mola Mola
- Brown heads at surface are likely sea lions

## Directions On-board

- During the trip it is important that everyone keeps an eye out for any signs of life
- If you see a whale (or any wildlife of interest), make sure to point it out
- It is important that everyone keeps an eye out because it is a big ocean, and you can help make this a great trip
- Describe its position using the **boat as a clock**  
the **front** of the boat (**bow**) is **12 o'clock**  
the **back** of the boat (**stern**) 6 o'clock  
the **right** (**starboard**) side is 3 o'clock  
the **left** (**port**) is 9 o'clock



## Geography & Oceanography

- The unique geography and oceanography of Southern California is the main reason the area is able to sustain such a wide variety of uses with relatively little conflict.
- The underwater topography and currents generally pull pollutants away from the coast and trap them close to the ocean bottom, however sometimes these pollutants can be brought back to the coast.
- ...

## Catalina Island

- located 22 miles southwest of Los Angeles.
- the island is 22 miles long and 8 miles at its widest
- formed by tectonic plates
- 400 species of native plants
- 5 native mammal species, including the **Island Fox**.
- **Bald Eagles** are being re-introduced to the island
- **American Bison** roam the island after being introduced in the early **1920's** (for a **silent movie**). The herd (150-200 individuals) is managed by the Island Conservancy.
- **Kelp forests** thrive around the island, providing a rare ecosystem right off Southern California's coast.
- The **sea otter population** that existed in the kelp forests around the island was **entirely wiped out** by the **fur trade**
- Archeological evidence shows **Native American villagers** residing on the island **7,000 year ago**.
- The Tongva tribe lived on the island and would travel to the mainland to trade goods. They were well known for mining and working with soapstone.
- **Santa Catalina Island Conservancy** was established in **1975**, purchasing **88% of the Island**

## Cetaceans

- Whales, Dolphins & Porpoises are all part of a mammal group known as Cetaceans.
- within the Cetacean group there are **baleen whales** (Mysticetes) & **toothed whales** (Odontocetes)
- here's a few characteristics to help distinguish between them

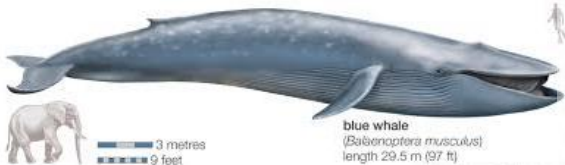
### Baleen Whales (Mysticetes)

- there are **11** known species, including the largest animal to ever live on the planet, the **Blue Whale**
- the principal characteristic of the Mysticetes is **baleen**
- Baleen is a **fibrous plate** made of **keratin** (like in fingernails & hair) that hangs down from the whale's upper jaw
- hundreds of these plates hang side by side to filter out small food or even mud (gray whales) from the water
- besides baleen, these whales are known for **2 blow holes**
- to help facilitate feeding, some baleen whales have expandable ventral pleats (groves) they vary in number
  - ↳ the **Gray whale** has 3-7 ventral pleats
  - ↳ the **Blue whale** has **55-68** pleats to take in about **17,000 gallons** of water at a time

### Toothed Whales (Odontocetes)

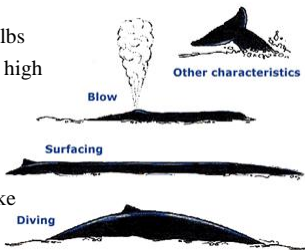
- there are **70** known species of toothed whales
- Dolphins & Porpoises are considered toothed whales
  - ↳ Dolphins have cone-shaped teeth (some have blunt heads)
  - ↳ Porpoises have spade-shaped teeth, & blunt heads
- All dolphins are whales, but not all whales are dolphins
- Odontocetes can be identified by two primary characteristics, their **teeth** & a **single blowhole**
- also known for their use of **echolocation** to find prey

## Blue Whale (*Balaenoptera musculus*)



### Visual ID

- 80-110 ft. long, 350, 000 lbs
- Spout can reach ~ 20 feet high
- Dark Grayish/ Blue color
- apparent dorsal ridge
- Small dorsal fin
- thick peduncle before fluke



## Blue Whale (continued...)

### Migration Patterns

- we get about 2,000 that pass our coast every July – Sep.

### Background Info

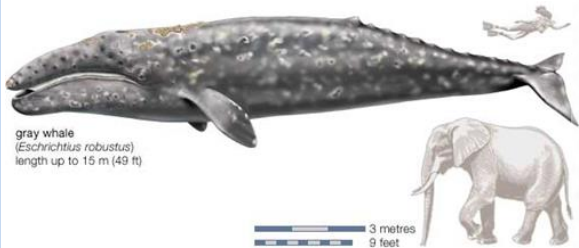
- Population: 5 - 10,000 southern hemisphere  
3 - 4,000 northern hemisphere
- Loudest animals on earth, even louder than a jet plane
- Rorqual whale, with 55-68 ventral pleats
- layer of blubber may be up to 14 inches thick
- believed to live 35-90 yrs
- Gestation is 11 months, young leave mother at 6-8 months

### Fun Factoids

- Largest animal to ever exist (~ length of to 3 school buses)
- Fastest growing organism in the animal and plant kingdom  
(calf gain 9 pounds per hour)
- Eats 4-8 tons of krill per day



## Gray Whale (*Eschrichtius robustus*)



### Visual ID

- Long streamline body
- 35-50ft in length, and weigh 30-40 tons
- Note the lack of dorsal fin & presence of knuckles
- Point out barnacles & lice (have them note the orange color)
- Point out footprints (fluke prints) on the surface of the water
- Dive pattern of the gray whale tends to be: About 3-5 blows at about 30 second intervals, and then a deeper dive which will last about 5 minutes.
- Travel in small numbers, from one to possibly 5 whales.
- The best indicator of a gray whale is a **heart shaped blow**.  
The two blowholes create the distinctive blow.



## Gray Whale (continued...)

### Migration Patterns

- Their migration takes them from **Alaska** to **Baja** and back again every year **to give birth**.
- During this migration they can be seen along our coast
- Southbound migration from Oct-Feb
- Northbound migration from Feb-Apr
- Gray whales make a 6,000 mile trek from the rich feeding grounds of the Bering Sea to the warm lagoons of Baja Mexico to breed and have their calves
- travel up to 100 mi/day, using stores of blubber as they go

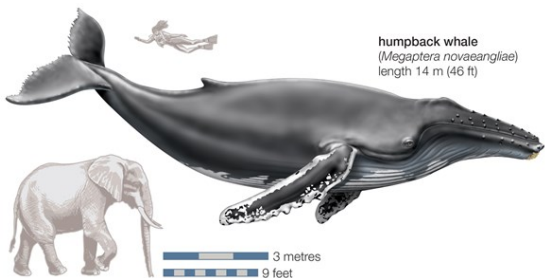
### Background Info

- Population: ~ 20,000 worldwide
- Give birth in warm water lagoons of Baja
- Gestation is 12-13 months, born 15ft long (1100-1500 lbs), and calves nurse for 7-8 months

### Fun Factoids

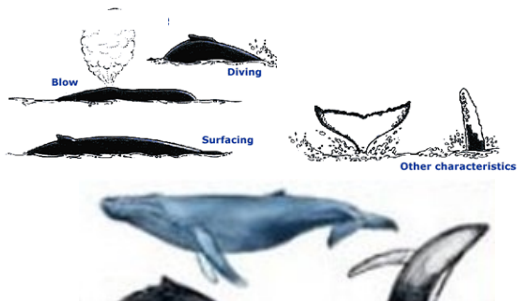
- Can have up to 1 ton of barnacles on them
- Grays are almost always covered with **white scars** often the result of **barnacles** being **eaten off** by **whale lice**. There are 3 different species of lice, 2 of which are only found on the gray whale.
- Grays eat by digging up sediment and filtering out animals from the mud. When feeding they will roll over onto their side to suck up the mud, often preferring one side to the other. This results in shorter and more worn down baleen on one side of their mouth.
- This feeding method creates “pits” in the ocean floor and results in clouds of mud that can be seen from the surface

## Humpback Whale (*Megaptera novaeangliae*)



### Visual ID

- Dark body with white pectoral flippers
- Identified by long pectoral flippers (~1/3 of body length)
- Tubercles on head & lower Jaw
- Adult Humpbacks can reach 52-56 ft (females longer), & weigh 25-40 tons
- famous for their acrobatic breaching abilities, & surface behaviors (spy hopping, rolling, & pectoral slapping)
- Social relationships seems to be ever changing, but humpbacks are generally found alone or in small groups

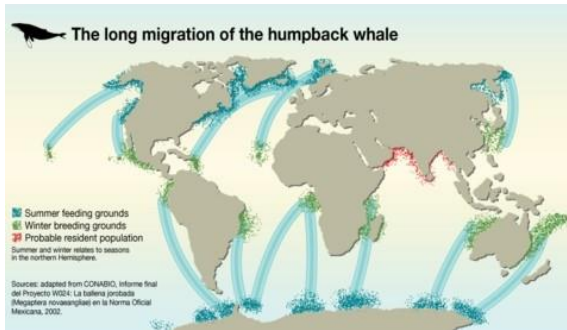




## Humpback Whale (continued...)

### Migration Patterns

- They are here seasonally in the Spring
- Highly migratory from cold northern waters to tropical
- Unique population in the Arabian Sea that remains year round



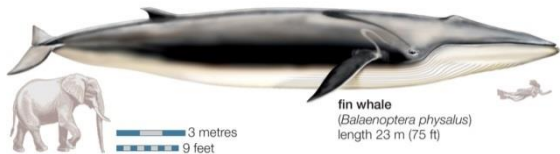
### Background Info

- Population: ~ 30 - 40,000 worldwide
- Life span about 50 yrs
- At birth calf is 13-14 ft, and weighs 1,500 lbs.
- The use of bubble netting and bubble clouds are common
- Eats up to 1 1/2 tons of food per day
- Known for their “songs” which lasts for 10-20 min, & can be repeated for hours at a time

### Fun Factoids

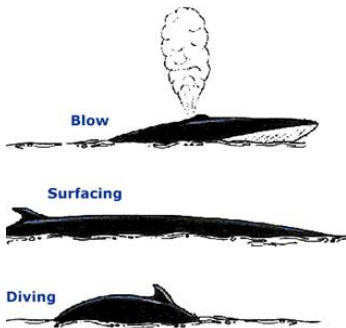
- well documented case of a Humpback-Blue whale hybrid from the South Pacific

## Fin Whale (*Balaenoptera physalus*)



### Visual ID

- Long streamline body
- Bi-colored baleen: right side is off white & the left black
- Small curved dorsal fin (larger than Blue whale)
- Prominent ridge that extends from the blowhole to the rostrum
- Head is a V-shape and flat
- Adult fin whales can reach 78-88 ft, & weigh 50-70 tons



## Fin Whale (continued...)

### Migration Patterns

- Can be seen year round, but here more in winter & spring
- then migrate to colder waters in the summer months

### Background Info

- Population: ~ 40,000 in the Northern Hemisphere  
15-20,000 in the Southern Hemisphere
- One of the fastest of the larger whales, speeding up to 23 mph
- Calving is every 3-4 yrs, and calves are 14-20 ft when born
- Nursing for 6-8 months before being weaned at 30-40 ft long
- 5-8 blows before deep dive (reported to about 1800ft)
- Can consume up to 2 tons of food daily

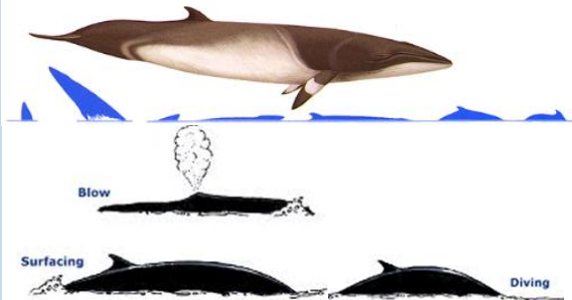


## Minke Whale (*Balaenoptera acutorostrata*)



### Visual ID

- The minke whale is a black/gray color.
- Common minke whales are distinguished from other whales by a white band on each flipper
- body is usually black or dark-gray above & white underneath
- most of the length of the back, including dorsal fin & blow-holes, appears at once when the whale surfaces to breathe



### Background Info

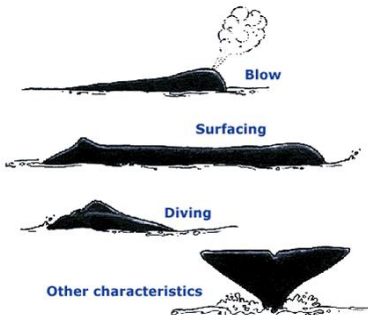
- Minke whales have between 240 and 360 baleen plates on each side of their mouths.
- Minke whales typically live for 30–50 years; in some cases they may live for up to 60 years.

## Sperm Whale (*Physeter catodon*)



### Visual ID

- The Sperm Whale is the largest living toothed animal.
- the head can represent up to one-third of the animal's length.



### Background Info

- The species feeds on squid and fish, diving as deep as 3 km (9,800 ft), which makes it the deepest diving mammal.
- Its diet includes giant squid and colossal squid.
- The sperm whale's clicking vocalization is the loudest sound produced by any animal, but its functions are uncertain.
- It has a cosmopolitan distribution across the oceans
- These whales live in groups called Pods.
- Pods of females & their young live separately from males

## Orca Whale (*Orcinus orca*)

killer whale, or orca  
(*Orcinus orca*)  
length 8 m (26 ft)

1 metre  
3 feet



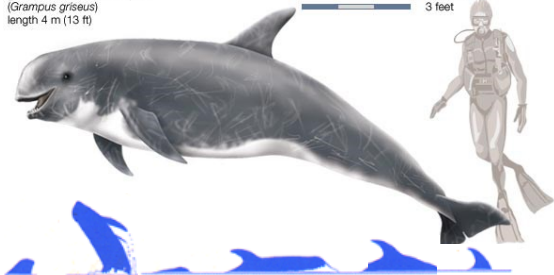
### Visual ID



## Risso's Dolphin (*Grampus griseus*)

grampus, or Risso's dolphin  
(*Grampus griseus*)  
length 4 m (13 ft)

1 metre  
3 feet



### Visual ID

- Their length is usually ~10 ft. but can reach up to 12.5 ft
- Weight is around 650 lbs. but may weigh up to 1,100 lbs.
- Males tend to be larger than females.
- Tall dorsal fin, & Scarring is very apparent.

### Background Info

- Have a very complicated social structure.
- Their scarring is usually caused by others in the pod.
- Have 7 or fewer pairs of teeth in the front, lower jaw.  
Typically none on the upper jaw!
- Feed primarily on squid but some fish as well. Known to eat squid that can reach up to 12 ft. in length!
- Travel in groups of 3-30 animals but some super pods of up to several thousand have been found.

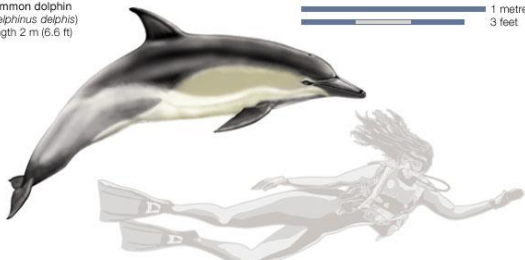


### Fun Factoids

- Came to the area during an el nino year and chased the once local short finned pilot whales from the area. The pilot whales never returned
- seen traveling with other dolphin species
- hybrids of Risso's & bottlenose have been discovered

## Common Dolphin (*Delphinus delphis*)

common dolphin  
(*Delphinus delphis*)  
length 2 m (6.6 ft)



### Visual ID

- Can weigh up to 300 lbs, range in length from 7.5 to 8.5 ft
- **Dorsal fin is dark** compared to Pacific White sided dolphin.
- Rostrum is darker. “M” shaped white marks on sides.
- seen in the hundreds commonly, and even thousands.
- highly active & fast moving, seen jumping high into the air



### Migration Patterns

- Found in all tropical & warm temperate waters worldwide

### Background Info

- Feed on small schooling fish and squid.
- Will use bubble netting to corral prey

### Fun Factoids

- Recently it has been suggested that there are two distinct species of common dolphins (short-beaked & long-beaked)





## Bottlenose Dolphin (*Tursiops truncatus*)



### Visual ID

- Solid grayish color
- Range in weight from around 300 to 1,400 lbs.
- about 10-13 ft. in length,
- the males normally larger than the females.



### Migration Patterns

- Found in temperate & tropical latitudes of the world's oceans
- Season: Year Round
- smaller "near shore" bottlenose often spotted inside harbor

### Background Info

- Eat fish and squid, but sometimes the coastal populations eat invertebrates
- Social animals that hunt and live together in pods.
- These are the ones most commonly seen close to shore and have been known to "surf" alongside surfers. There are also open ocean populations.
- Life expectancy is about 20 years, but some have been known to live more than 40 years.



# Pacific White-sided Dolphin

(*Lagenorhynchus obliquidens*)

## Visual ID

- Grow to be 7-8 ft. long and weigh about 300 lbs.
- White on Dorsal. Stripes more apparent along dorsal side.
- Pectoral flippers tend to be white.
- Very acrobatic species that will bow ride with ships for great distances
- Often seen leaping high into the air and doing summersaults



## Migration Patterns

- Inhabit temperate coastal waters of the northern Pacific.
- Season: Year round, mostly Winter and Spring

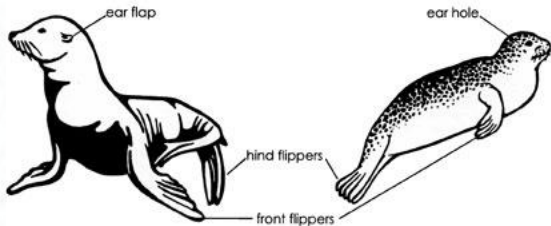


## Background Info

- Travel in groups of 10-50 or even 90-100, but also seen in super pods of thousands.
- feed largely at night, on small schooling fish and squid.

## Pinnipeds

- **Pinniped** is a Latin word meaning “**fin-footed**” & refers to the modification of limbs to flippers
- In this case we are referring to seals and sea lions
- In Southern California, we tend to observe only 2 of the pinnipeds, the **California Sea Lion** & the **Spotted Harbor Seal**
- Pinnipeds are mammals like us, so they are **warm blooded**
- This means they have to maintain the same internal body temperature to stay healthy.
- Our ocean can get quite cold, so marine mammals have to find ways to stay warm
- *ask guests how they think these seals & sea lions stay warm*
- Blubber, a specialized fat, help insulate them from the cold
- Another way Pinnipeds stay warm, is by **thermoregulation**
- They will haul out onto buoys, rocks, or even just stick out their flippers to let the sun warm them up.
- Sea lions can hold their breath up to 9 minutes, while harbor seals can hold their breath for a half hour!
- Pinnipeds have **specialized whiskers** called **vibrissae**.
- These vibrissae act like another sense for seals and sea lions when the water is murky.



## California Sea Lion (*Zalophus californianus*)



### Visual ID

- External ear flaps
- Long front and rear flippers
- Move like dog on land with all flippers
- Bark
- Can be seen laying out in groups or swimming at sea



### Background Info

- Sexual dimorphism present
- Male reaches up to 7'10" and 860 lbs.
- Female reaches up to 6'7" and 240 lbs.
- Males have a sagittal crest (hump on head) that is a sign of sexual maturity. Starts to develop around 3 years old
- Brown coat, uniform color
- Longest dive recorded was 1,760ft.
- Hold their breath for around 4 min.
- Longest was 17 min.
- **Season: All Year**



## Harbor Seal (*Phoca vitulina*)

### Visual ID

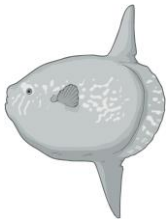
- Small front and rear flippers
- No ear flaps
- Spotted fur
- Waddles on land, doesn't maneuver easily.
- Dive 30-500ft. Longest 1,500ft off of So. Cal.
- Hold breath for around 4-5 min. Longest was 31 min.
- **Season: All year**

### Background Info

- **No** sexual dimorphism
- Males 6'3" and 370 lbs.
- Females 5'7" and 290lbs.
- Pups will ride on mother's back, but can swim a few minutes after birth



## Mola Mola

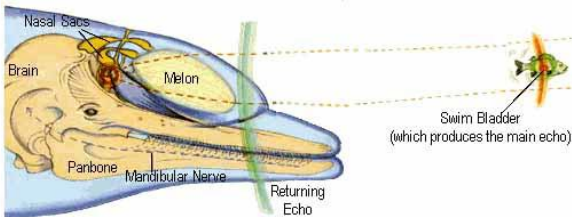


- Largest boney fish
- Eat jellies
- AKA Ocean Sunfish
- Mola Molas can be the size of 2 people stacked at 11 feet, 5,070 lbs
- They have scaleless elastic skin so they drift along in the water
- These guys are the heaviest bony fish at 5,070
- lay the most eggs, 3 million at a time
- They will lie on their sides at the surface of the ocean and let seagulls land on them, allowing them to pick the parasites off of their bodies

## Additional Notes

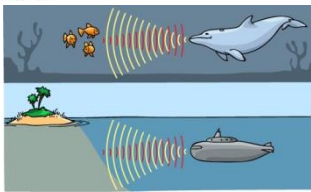
### Echolocation in Toothed Whales

- Whales are very vocal marine mammals.
- Especially dolphins and porpoises, which use a variety of **clicks** and **whistles** which are made by **expanding** and **contracting their blowhole**
- **Toothed whales** use **echolocation**, this **adaptation** helps them **locate** and **size up their prey**.
- With the use of a **melon**, fatty tissue situated on the rostrum or nose, they can project sound in a very direct way
- These **sound waves** will **bounce off** the prey and will be **received in the lower jaw** (pan bone) **as vibrations**
- These vibrations give detailed information, such as **size**, **shape**, and **distance**.
- *You can show guests the pan bone, as part of the dolphin lower jaw. Point out that it's hollow*
- For example, sperm whales use echolocation to find giant squid thousands of feet deep where it is very dark



■ Sonar

■ Returning Sound Waves



## Common Marine Birds

BROWN PELICAN



ROYAL TERN



WESTERN GREBE

RING-BILLED GULL



DOUBLE-  
CRESTED  
CORMORANT

PIED-BILLED GREBE



WESTERN GULL



HEERMANN'S  
GULL

SURF SCOTER





## Common Shore Birds

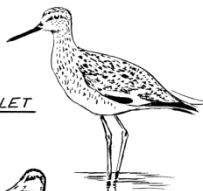
AMERICAN COOT



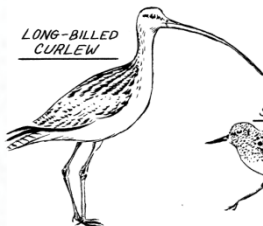
LEAST SANDPIPER



WILLET



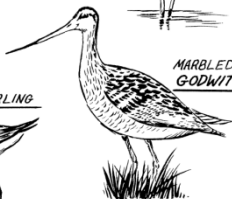
LONG-BILLED CURLEW



SANDERLING



MARBLED GODWIT



SNOWY EGRET



GREAT BLUE HERON



GREAT EGRET



## Additional Notes

## Additional Notes

## Additional Notes

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## Aquarium of the Pacific Boat Programs

Different boat programs are offered throughout year by the Aquarium in conjunction with **Harbor Breeze Cruises**

- **Wildlife and Whale Cruise**

- **Blue Whale Watch trip** (July-Sept, 3-3½ hours long)
- **Gray Whale Watch trip** (Dec-April, 2-2½ hours long)

- **Dolphin and Sea Life Cruise**

- offered in between the Gray & Blue Whale seasons
- duration is 2 - 2 ½ long
- you see Cetaceans & Pinnipeds that live here year round

- **Harbor Tours**

- offered most of the year, several times a day
- fully narrated 45 minute cruise of Rainbow Harbor

- **Urban Ocean: World Port and Sealife Cruise**

- offered weekends, 2-2 ½ hours long
- narrated cruise into the Ports of Long Beach & Los Angeles to look at the variety of ways humans & sea life depend on the ocean

# Map of the Area

