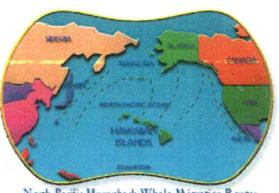
# Humpback Whales of Hawai'i -

Hawaiian name: Kohola

#### > About Humpback Whales

North Pacific humpback whales are a conservation success story. During the last twenty years, the north Pacific humpback whale population has grown from approximately 2,000 to more than 21,000 whales.

During the winter breeding season, more than 12,000 humpback whales visit Hawaiian waters.



North Pacific Humpback Whale Migration Routes

People and humpbacks are increasing their shared use of the same marine habitats.

#### > Breaching

One of the most thrilling behaviors to observe is the breach. With just a few strokes of their flukes, humpbacks can gain enough momentum to hurl their 30 ton, 45 foot bodies into the air, then crash back down with a thunderous splash! Theories abound as to why whales breach, from acoustic signaling to removal of barnacles to joyous play.



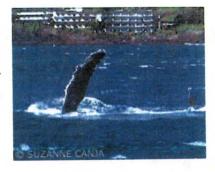
#### > Tail Slapping

A powerful action often used in aggressive encounters, the tail slap occurs when the whale's flukes are lifted clear out of the water and then brought down on the surface with a great resounding "crack!" Whales have been seen tail slapping repeatedly, more than 40 times! The width of their flukes can reach 15 feet and the underside is a distinctive as our own fingerprints.



#### > Pectoral Slapping

Humpbacks have the longest pectoral fins of all whales, stretching up to 15 feet in length. These fins may be used to help maneuver the whale or signaling. A pectoral slap is created when a whale rolls on its side, raises its pectoral fin out of the water and forcefully slaps in down. At times a whale will turn completely on its back and slap both fins on the waters



surface.

#### > Courting

Dynamic displays of humpbacks performing courtship behaviors can be seen in the waters off the Hawaiian Islands. Males engage in competitive activities with each other for access to receptive females. Sometimes whales lunge aggressively at each other trying to displace one another resulting in superficial abrasions.



#### > Nurturing

Mothers and claves are always seen close together: there is a powerful bond between them. Mothers often use their pectoral fins to caress and cradle their young and have been seen assisting their babies to the surface. Newborns are 12 to 15 feet long and can weigh 2 tons. Calves typically nurse for 8 to 12 months and can consume 80 gallons in a day! They can double their size in one year.



#### > Singing

Although it may sound like groaning, screeching or creaking to us, humpbacks can produce sounds that are classified as true songs.

Songs are produced on the breeding grounds, and to date, singers observed have been identified as males. Researchers speculate that singing may play a role in attracting a mate, establishing a territory, or advertising availability.

Humpbacks in Hawai'i all sing virtually the same song. Their song is identical to that of the humpbacks breeding off the coasts of Mexico and Japan. The song changes every year, and it changes across the Pacific basin at virtually the same time! The song of the humpback is a mystery and a marvel: its purpose may be more complex than we can imagine.

#### > Feeding

The humpbacks don't eat during their six months in the Hawaiian Islands. Hawai'i doesn't offer their food, krill and herring. But, since the whales spent the winter in the north, doing nothing but eating, they carry their summer food supply in their fat.

#### Sleeping

Humpbacks sleep with half their brain at a time. Then they switch sides, and put the other half to sleep. The side that remains awake acts as a sentinel to protect the whale from threats, including sharks and boats.

#### > Migrating

Humpbacks take about 39 days to travel the 3,200 miles from Alaska. They cruise an estimated 3 to 4 miles per hour, and are believed to swim 24 hours a day.

# Hawaiian Dolphins - Hawaiian name: Nai'a



#### > About Hawai'i's Dolphins

Three species of dolphins are commonly seen in Hawaii's near shore waters: spinner, bottlenose and spotted.

#### Spinner Dolphins

Spinner dolphins (Stenella longirostris) are the species most commonly enjoyed by visitors because they frequent regular near shore areas during the daytime to rest after nocturnal forages in deeper water for food. This small, long-beaked dolphin can "spin" or revolve around its longitudinal axis as many as six times on one leap out of the water. They are found in resident pods around all of the main islands, resting in shallow bays in the day and hunting at night for small schooling fish.

#### · Spotted Dolphins

Spotted dolphins (Stenella attenuataare) easily confused with spinners; they are closely related and look very similar. However, the end of the rostrum or "beak" is white-tipped and mature animals have a spotted color pattern on the body. Spotted dolphins are usually seen in the channels between the islands and do not rest near shore. Both spotted and spinner dolphins travel in schools from small numbers up to hundreds, and they are the two species caught in tuna nets in the eastern Pacific.

#### Bottlenose Dolphins

Bottlenose dolphins (*Tursiops truncatus*) are distinguishable from spotted and spinner dolphins by their much larger size, their uniformly gray coloration and their thicker, blunter rostrum. They are usually seen in smaller pods or groups of less than 10 individuals. Intelligent and high up on the oceanic food chain, dolphins are found to engage in playful activities including bow riding where they surf in front of a boat or even a whale's bow wave.

## Do's and Don'ts when encountering a dolphin:

- Never feed dolphins, this encourages them to accept foreign and potentially dangerous objects.
- Observe dolphins from a distance, never chase them.
- Help keep the ocean clean, and pick up floating trash.
- Under the Marine Mammal Protection Act, it is an offence to disturb or harass any marine mammal.

# **Hawaiian Monk Seals** - Hawaiian name: '*Ilio-holo-i-kauaua* (Dog that runs in the Sea)



#### > About Hawaiian Monk Seals

The Hawaiian monk seal (*Monachus schauinslandi*) is the only truly tropical seal in the world and it is critically endangered. There are fewer than 1100 monk seals remaining in the entire Hawaiian Archipelago. Monk seals are mostly nocturnal feeders with a very diverse diet including eels, octopus, lobsters and fish. They come up onto land to rest, and to give birth and nurse their young. They are very sensitive to human disturbance at their haul-out sites. Mother monk seals nurse their pups on the beach for approximately 6 weeks and must not be disturbed. Although their total numbers are decreasing every year in the Northwestern Hawaiian Islands, those monk seals born in the Main Hawaiian Islands are surviving better and need our continued vigilant protection.

### When encountering a seal....

- Under the Marine Mammal Protection Act, it is an offence to disturb or harass any marine mammal.
- Do not approach the seals, touch them, feed them or harass them.
- If you encounter a monk seal on the beach, contact the hotline 808-292-2372. State, Country or marine officials will section off an area around the seal with caution tape so the seal can rest without being disturbed.

# Hawaiian Sea Turtles - Hawksbill sea turtle Hawaiian name: Honu'ea or 'Ea,

Green sea turtle Hawaiian name: Honu



#### > About Hawai'i's Sea Turtles

Hawai'i is the home to five species of sea turtles (see column at right). Olive ridleys, loggerheads and leatherbacks are usually only encountered in deep offshore waters. But it's common for snorkelers and divers on all the islands to see the *honu* (green sea turtle) in near shore waters. Green sea turtles, however, nests in the Northwestern Hawaiian Islands, a remote, protected area where they thrive.

Unfortunately, honu (greens) are suffering from a disease called fibropapillomatosis. This herpes-family virus causes the growth of white to blackish, cauliflower-like tumors. These grow on the soft tissues of the turtle's body, internally and externally, and inhibit foraging, breathing, mobility and digestion. It is unclear what causes this disease, but research is ongoing worldwide to find a cure.



To some, the Hawaiian name for hawksbill sea turtles is 'ea, but for others they are known as honu'ea. Hawaiian hawksbill turtles nest on the main Hawaiian islands, predominately on the Big Island of Hawai'i. However, a few hawksbills and green sea turtles also nest on Maui each year. Due to their rarity, hawksbills are watched over very carefully and are a primary subject for HWF's research projects.



In 1993 and 1996, two egg-laden hawksbills and numerous hatchlings were killed by cars while trying to cross North Kihei Road from the adjacent nesting beach. In response, HWF was formed. Volunteers patrolled the beaches nightly, and in 1998 constructed a sand fence to help keep turtles off the road. This began the first systematic monitoring and research of this species on Maui. Since

then, much has been learned about hawksbills' nesting, hatching and foraging behaviors.

#### When encountering a turtle....

"Basking" (resting) behavior is becoming more common all around Hawai'i and is an exciting way to watch green sea turtles, but it is important that people or dogs don't scare the turtles back into the ocean. The presence of people doesn't allow for turtles to rest (imagine if someone was standing next to you when you were trying to sleep!). Hawaii Wildlife Fund recommends staying 20 feet (6 meters) away and don't block their access either to or from the ocean. Please avoid making loud noises and please do not use flash photography. If you can't get the photo you really want, Hawaii Wildlife Fund would



be glad to send you one of theirs that they have taken with research cameras with zoom lenses.

Mahalo for sharing the beach by being respectful of these animals' survival needs!

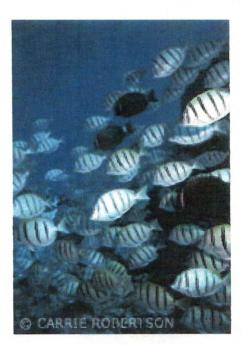
# Hawaiian Coral Reefs - Hawaiian name: Ko'a

#### > About Hawai'i's Coral Reefs

Coral reefs exist in only two percent of the world's oceans. The diversity of life in a coral reef is second only to that of the tropical rainforest.

Coral animals are ant-sized relatives of jellyfish that produce protective limestone habitat for multiple species of fish and other organisms.

The world's coral reefs are being greatly impacted by environmental degradation and human misuse. Coral bleaching, overfishing, abusive fishing techniques, anchor damage, algae blooms, global warming and fish feeding are some of the problems affecting the natural balance of our reef systems today.



## Proper "reef etiquette"...

- No fish feeding.
- · Respect sea turtles and other marine life.
- Take only pictures, leave only bubbles.

# **Birds of Maui**

The best forest bird locality on Maui is Hosmer Grove, in Haleakala National Park. In addition, the National Park Service offers guided hikes approximately two times a week into the neighboring Waikamoi Preserve of the Nature Conservancy. `I`iwi, `Apapane, `Amakihi and Maui Creeper are virtually certain, while `Akohekohe (Crested Honeycreeper) is less common, and Maui Parrotbills are seen on these hikes two or three times per year. The Conservancy also offers guided hikes into Waikamoi at certain times, and the Sierra Club has work trips in the area.

For water birds, Kanaha Pond and Kealia National Wildlife Refuge should both be checked. They are in the central isthmus portion of the island.

The endangered Hawaiian Dark-rumped Petrel nests near the summit of Haleakala, and can be heard and sometimes seen returning to its burrows at night in the spring and summer. Look for Pueo as well in the open uplands on the volcano's slopes.



Java Sparrow



Female Northern Cardinal



Nene



Red Crested Cardinal



Japanese White Eye



Cattle Egret



Male Northern Cardinal

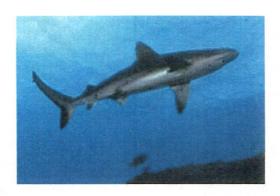


Pacific Golden Plover



Myna Bird

# LIVING simple shark dos and don'ts



- 1. Swim, surf or dive with other people, and don't move too far away from assistance.
- 2. Stay out of the water at dawn, dusk and night, when some species of sharks may move inshore to feed. But realize that sharks, especially tiger sharks, have been known to bite people any time of the day or night.
- 3. Do not enter the water if you have open wounds or are bleeding in any way. Sharks can detect blood and body fluids in extremely small concentrations.
- 4. Avoid murky waters, harbor entrances and areas near stream mouths (especially after heavy rains), channels or steep drop-offs. These types of waters are known to be frequented by sharks.
- 5. Do not wear high-contrast clothing or shiny jewelry. Sharks see contrast very well.
- 6. Refrain from excessive splashing; keep pets, which swim erratically, out of the water. Sharks are known to be attracted to such activity.
- 7. Do not enter the water if sharks are known to be present. Leave the water quickly and calmly if one is sighted. Do not provoke or harass a shark, even a small one.
- 8. If fish or turtles start to behave erratically, leave the water. Avoid swimming near dolphins, as they are prey for some large sharks.
- 9. Remove speared fish from the water or tow them a safe distance behind you. Do not swim near people fishing or spear fishing. Stay away from dead animals in the water.
- 10. Swim or surf at beaches patrolled by lifeguards and follow their advice.