## Hammerhead shark meat an ancient Hawaii treat

AMMERHEAD shark.
Those two words conjure up a vivid image.
Add to that a beached
female hammerhead giving birth
in the sand, as happened recently
in Ewa Beach, and the picture is
even more striking.

Hammerheads are not your average fish. Besides that weirdshaped head, members of this shark family have a sophisticated method of reproduction not seen

in most fish.

This method, called viviparity, involves giving birth to live young that were nourished inside the mother via an umbilical cord.

Sound familiar? Humans are viviparous too, as are nearly all other mammals, many reptiles and several other fish.

The big difference between mammals and other viviparous animals is the feeding of milk to the young after birth.

The resemblance of hammerheads to mammals stops with the umbilical cord and birthing.

Neither these sharks, nor any others, feed their young after birth.

But hammerheads do give their babies, up to 30 per litter, a bit of a head start by delivering them in the protection of shallow bays and inlets.

Kaneohe Bay is such a place. Female hammerheads come into the bay each spring and summer to have their pups.

The youngsters, about 2 feet long, live the early part of their lives in schools in the turbid shallows of the bay where they forage along the bottom, mostly at night. As they grow, they migrate to deeper waters of the outer reef.

HAMMERHEADS mostly eat live fish, occasionally dining on members of their own kind. They also eat invertebrates such as crabs, shrimp and octopus.

And what's the deal with that weird head? The fish bear one eye and one nostril on each side of





OCEAN WATCH By Susan Scott 9/5/94

their mallet-shaped heads.

Researchers believe the widely separate eyes increase depth perception; the separate nostrils are probably useful in locating diluted smells.

Also, small pits on the underside of the head are sensitive to electric fields. This helps the shark find living creatures, such as rays, hidden in the sand.

Still another theory holds that the flat head shape provides some lift as the fish swims forward.

Hammerhead sharks live in all warm waters of the world, preferring water 75 degrees Fahrenheit and above.

Two kinds of hammerheads are found here: the scalloped hammerhead and the common, or smooth, hammerhead.

Both names describe the front edge of the head, and both are known as mano kihikihi (angular shark) in Hawaiian.

N ancient Hawaii, people commonly ate hammerhead sharks. Since Hawaiians did not eat sharks that attacked humans, hammerheads apparently were not considered a threat.

Not everyone in old Hawaii ate hammerheads, as they were forbidden people whose aumakua, or family god, was that species.

To those who could eat them, the catching of a hammerhead was a joyous occasion.

After skinning the fish, the meat was dried, then broiled or cooked. No one in ancient Hawaii ate shark meat raw.

Although ancient Hawaiians adidn't consider hammerheads vicious, there have been occasional incidents in modern times. At least athree nonfatal attacks on swimmers in Hawaii have been blamed on hammerheads over the years.

In the French Pacific, local spear fishermen stop spearing, but remain in the water, when hammerheads are in the vicinity. After the sharks have passed they resume fishing.

Susan Scott is a marine science writer and author of three books about Hawaii's environment. Her Ocean Watch column appears Monday in the Star-Bulletin.