

# Stingray

- The California Stingray or Round Stingray is one of six rays found in California waters which have a stinger on the tail. It can be distinguished from the others since it is the only one with a true tail fin. The others have either a whip-like tail or very short tail with no fin membrane.
- **Habitat:**  
This species, the California Stingray or Round Stingray, occurs from Panama to Humboldt Bay, California, including the Gulf of California. California Stingrays or Round Stingrays are most abundant off southern California and northern Baja California at depths up to 70 feet. They like shallow, sandy areas.
- **Foods:**  
In the wild they obtain much of their food by burrowing in the substrate. Their diet includes worms, crabs, snails, clams and small fishes.



# CALIFORNIA STINGRAY

- The **round stingray** or **Haller's round ray**, *Urobatis halleri*, is a species of [round ray](#), family [Urolophidae](#), found in the coastal waters of the eastern [Pacific Ocean](#). It is a small, common ray that feeds mostly on [benthic invertebrates](#). On the [beaches](#) of southern [California](#), it is responsible for numerous injuries to bathers, who are stung when they accidentally step on the fish. The wound caused by its [venomous](#) spine can be painful, but is non-fatal.



# STRINGRAY CALIFORNIA

- Every year, hundreds of beachgoers are accidentally stung by round stingrays along the coast of southern California. The sting is not fatal, though it is quite painful. The so-called "Ray Bay" at the northern end of [Seal Beach](#), used as a nursery ground by round stingrays, is the most notorious location for these incidents. At least 474 people were stung at that beach between April and November 1952, and over 500 people were stung over a ten-week period in 1962. During the 1990s, an average of 226 bathers were stung per year on Seal Beach, with the number of incidents rising during warmer [El Niño](#) years.[2] Recently, local authorities and scientists have begun tagging the stingrays and clipping their spines in an effort to reduce the number of injuries. However, there is little evidence that this program has been successful, likely due to the large population of the rays, their itinerant nature around the region, and their annual spine replacement.[5]



# CALIFORNIA STINGRAY

- **Danger to Humans**

Stingrays are aptly named for the venomous serrated spine located on the tail, with the round stingray being no different. Although stingrays do not attack people, the tail spines can cause painful wounds if stepped upon or handled without caution. The round stingray has a spine that is located halfway down the length of the tail, allowing for a powerful stinging reflex. Due to the increased human population along the coast of California, the numbers of stingray-related injuries is on the rise as reported from Orange County, California. People can shuffle their feet while walking in shallow water at the beach and avoid handling live stingrays to reduce chances of injury from stingrays. Although wounds are not life threatening, they can be very painful.

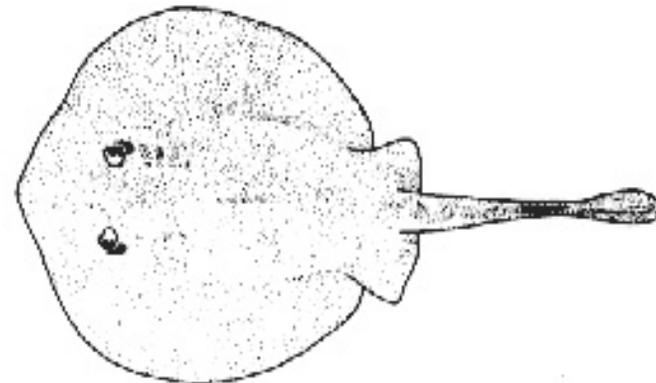


- A round stingray at Laguna Beach. This species injures hundreds of people each year off California.

# Stingray injuries

## A stingray's stinger

- Depending on the size of the stingray, humans are usually stung in the foot region. It is less likely to be stung by brushing against the stinger. Surfers and those who enter waters with large populations of stingrays have learned to slide their feet through the sand rather than stepping, as the rays detect this and swim away. Stamping hard on the bottom as one treads through murky water will also cause them to swim away. Humans who harass stingrays have been known to be stung elsewhere, sometimes leading to fatalities. The stinger usually breaks off in the wound. This is not fatal to the stingray as it will be regrown at a rate close to that of human fingernails (about .5-.75 inches per month). Contact with the stinger causes local trauma (from the cut itself), pain and swelling from the venom, and possible later infection from bacteria. Immediate injuries to humans include, but are not limited to: [poisoning](#), punctures, severed [arteries](#), and possibly death. Fatal stings are very rare, but can happen, famously including [Steve Irwin](#).
- Treatment for stings includes application of near-scalding water, which helps ease pain by denaturing the complex venom protein, and [antibiotics](#). Immediate injection of a [local anesthetic](#) in and around the wound is very helpful, as is the use of [opiates](#) such as intramuscular [pethidine](#). Local anesthetic brings almost instant relief for several hours. Any warm to hot fluid, including urine, may provide some relief. Vinegar and [papain](#) are ineffective. Pain normally lasts up to 48 hours, but is most severe in the first 30–60 minutes and may be accompanied by nausea, fatigue, headaches, fever, and chills. All stingray injuries should be medically assessed; the wound needs to be thoroughly cleaned, and surgical exploration is often required to remove any barb fragments remaining in the wound.



# STRINGRAY

- This species is [endemic](#) to the eastern [North Pacific Ocean](#), from [Humboldt Bay](#) in northern [California](#) south to [Panama](#). It is most common around southern California and the [Baja Peninsula](#). They inhabit [tropical](#) to warm-[temperate](#) waters close to shore, usually less than 15 m deep, although they have been reported to a depth of at least 91 m. This species favors soft-bottomed habitats such as [mud](#) or [sand](#), often with abundant [eelgrass](#), which they use for [camouflage](#).<sup>[2][3]</sup> They also occur around rocky [reefs](#).<sup>[3]</sup>
- Round stingrays prefer temperatures above 50 degrees [Fahrenheit](#); the adults are more tolerant of temperature changes than juveniles. They are most abundant in the coastal and bay waters of southern [California](#) from [spring](#) to [fall](#). In winter, they move to deeper water where the temperature is more stable.<sup>[2]</sup> Round stingrays have been observed congregating near the warm [seawater effluent](#) released by coastal [electric generators](#), which may replicate the conditions of [estuary](#) environments



# CALIFORNIA STINGRAY

- *Food Habits*
- Adult round stingrays feed primarily on benthic invertebrates such as stomatopods, amphipods, shrimp, and portunid crabs, and to a smaller extent, on polychaete worms and small fishes. They rely on olfaction and vision in the search for prey items. This ray has been observed to scoop out large holes in the muddy or sandy bottom by "waving" its pectoral fins and rostrum. This action serves to expose any buried worms, crabs or small fish. Feeding occurs continuously throughout daylight hours. Juvenile round stingrays feed on polychaetes, crustaceans, and nemerteans.



- *Predators*
- Predators of the round stingray in its northern range include the northern elephant seal (*Mirounga angustirostris*) and the black sea bass (*Stereolepis gigas*). Other potential predators of this ray include large carnivorous fishes including sharks.

