

## Perspective Card

# Shellfish Fisherman

My income depends on the success of my shellfish harvests. Humans have harvested shellfish for thousands of years and we have strict regulations on commercial fishing. In fact, our commercial fishing laws are some of the most tightly regulated in the world! For example, we have a limited area in which to fish.

Sea otters eat a lot of shellfish. One hundred sea otters can consume one-half to one million pounds of abalone, sea urchin, crab and lobster per year. California has more than 2,000 sea otters right now, that is over 10 to 20 million pounds of shellfish that sea otters are eating per year! We may know how to regulate commercial fishing but sea otters do not. They will keep reproducing and depleting this precious food source.

To protect California's fisheries, an "otter free" management zone was established. The U.S. Fish and Wildlife Service (FWS) was mandated by law to capture all sea otters venturing into the management zone and to relocate them back to their parent range. But now that FWS has discovered translocation efforts can be fatal to some sea otters, they are refusing to abide by the law and are not removing the sea otters. This has resulted in the loss of millions of dollars for the commercial shellfish industry. Since I get paid by how many pounds of shellfish I catch, my salary has dropped so much that I can't make it from day to day.

# Researchers

The southern sea otter is listed as a threatened species under the federal Endangered Species Act, and is also protected under California state law and by the Marine Mammal Protection Act. Sea otters derive their nutritional needs from shellfish. By limiting the numbers of invertebrates, especially sea urchins, that feed on kelp, sea otters help to keep kelp forests healthy. Kelp beds provide habitat for fish and other invertebrate species and act as a nursery, protecting young fish.

As researchers, one of our jobs is to assess the status of the California sea otter population. This population declined by nine percent from 1995 to the present. This concerns us because sea otters are indicators of the health of the ecosystem, when they are in trouble it means the entire ecosystem is suffering. The causes for the sea otter declines since 1995 aren't entirely understood, but some of the apparent impacts are from entrapment in fisheries gear, habitat loss and degradation, and disease. In order to get a better assessment of the status of the California sea otter population declines, critical research funding is needed. In addition, we now believe that allowing for natural range expansion of this population is the key to their recovery.

# Conservation/Environmental Groups

Sea otters are keystone species, their affect on the ecosystem is disproportionate to how many sea otters there are. Very few sea otters can have a large effect. They also serve as important habitat modifiers, keeping sea urchins and other kelp grazers from destroying the kelp forest. Sea otters are indicators of the health of their ecosystem.

It is true that a compromise was reached on the creation of the management zone (as the fisheries groups wanted) as part of the agreement to translocate otters to San Nicolas Island in the Channel Islands (as the conservation groups wanted). However, capturing and releasing otters has proven to be far more difficult than anticipated. Some of the otters translocated to San Nicholas Island died. Some swam back to the parent range. More than half of them disappeared. In addition, it is believed that moving otters from the management zone back into the parent range may be stressful for the otters already living there. We believe that the existing management zone and translocation program violates the Endangered Species Act because it is likely to jeopardize the continued existence of this species. The stressful practice of capture, translocation and release must be discontinued. The shellfish industry should support efforts to maintain a healthy otter population since sea otters are an indicator of the health of the ecosystem which in turn affects the quality of the shellfish they harvest. A healthy sea otter population means a healthy marine ecosystem for all to enjoy

Perspective Card

# Government Agency

I am a sea otter management expert with the U.S. Fish and Wildlife Service. We are the agency that is assigned to oversee management and recovery for the southern sea otter. We work with the California Department of Fish and Game and other agencies, to ensure that sea otter recovery is a priority.

We can't please both the fisheries community and the conservation community all the time. Because of the conflicts between shellfish groups and the sea otter, a management zone was established in 1986 as a way to appease the fishing industry. Any sea otters found in the management zone are to be translocated back into the parent range. This helps the fishing industry in two ways. It reduces the competition for shellfish and it protects the fishermen from accidentally killing a sea otter in their fishing gear. However, statistics show that sea otter deaths were higher than anticipated as a result of translocation efforts. In addition, sea otters already in the parent-range may become stressed when sea otters from the management zone are brought back into the parent population. These reasons, along with the current belief that allowing for passive, natural range expansion will be the key to recovery for the southern sea otter, support our initial evaluations and review to abandon the California translocation program and refrain from further captures of any sea otters found in the management zone.

## Perspective Card

# Public

I am confused about this issue. On one hand, I enjoy eating seafood and personally have friends who are fishermen who have lost money because of the drop in harvests. But on the other hand, sea otters are an important part of the ecosystem and I do not believe that sea otters should die just because they have ventured out of a specific area. Sea otters are such cute and intelligent animals. I hate to think that they are being harmed. They are also a big tourist attraction and bring in lots of money for the tourism industry that benefits our local economy. Is there a way that fishermen and sea otters can coexist?

## Perspective Card

# Sea Otter

I am a male sea otter looking for better habitat and more food resources. We may have run into problems in the main part of our range. It seems that many of us are dying from disease and some of us still get caught in those fishing nets. We depend on many animals such as abalone, crabs, sea urchins, and other invertebrates for our food.

We keep the nearshore marine ecosystem healthy by making sure that sea urchins and other animals that graze on kelp don't destroy the magnificent kelp forests we have in California. We have never caused the extinction of any species. We have been blamed for declines in prey populations, but from our perspective, that is an unfair accusation. Why would we cause our own extinction by eliminating our food source?

Our role is vital for the health of the ecosystem. We are a keystone and indicator species, essential to the health of our nearshore system. If we are dying from disease due to the food we eat, what does that mean for all of you? You should pay attention to us and what we might be trying to tell you.

Perspective Card

# Kayaker/Diver/Tourist

We really enjoy visiting the coastal area. There are so many things to do here that allow us to be closer to nature. In fact, the beauty of this area is what brings us back time and time again. When we visited this area many years ago, there were lots of sea otters that were fun to watch. When we went scuba diving, the kelp forests were healthy and there was a variety of marine life. We don't see sea otters as often anymore and there seems to be less kelp. The sea otters are obviously an important part of the ecosystem. Without them visiting the coast just isn't the same.

Perspective Card

# Tourism Industry

We are a coalition of businesses along the coast of California. Tourism in this area is dependent on weather and the health of the magnificent environment in which we live. The weather is great, but lately the health of our coastal ocean is a big concern. If human activities and contaminants affect the quality and safety of our coastal waters, our businesses suffer. After all, much of what brings tourists to our area is the beautiful coast and its diverse marine life such as kelp forests, marine bird colonies, migrating whales, and, of course, the sea otter. Sea otters are featured in logos, magazine advertisements, and the names of businesses. We truly believe that the sea otter is a big draw to tourists. And, along with sea otters come healthy kelp forests. This translates into the tourist activities such as kayaking, diving and sailing. We love to see the sea otter doing well because it means our tourist economy will do well. But over the last several years, as sea otter numbers have declined and kelp forests have been diminished, people are not visiting in the numbers they once did. We must do everything to fix the problems that are causing the decline of sea otters. This will mean a healthier coastal ecosystem and a healthier tourist economy.