

**Reading passage: (reading time 3 minutes)**

Sea otters are a small mammal that lives in the waters along North America's west coast from California to Alaska. A few years ago some of the sea otter populations off of the Alaskan coast started to decline rapidly and raised several concerns because of their important role in the coastal ecosystem. Experts began investigating and came up with two possible explanations. One explanation was environmental pollution and the second was attacked by predators.

At first, it seemed as if the pollution was the most likely cause for the population decline. One reason pollution was more likely was because of the known pollution sources along the Alaskan coast such as oil rigs. Also, water samples taken in the area showed increased levels of chemicals that could decrease the otters' immune systems and indirectly result in their deaths.

Another thing that pointed to pollution as the culprit was the decline of other sea mammals such as seals in the same areas. This indicated that whatever was affecting the otters was also affecting the other sea mammals. Environmental pollution usually affects an entire ecosystem instead of just one species. Only predators that occurred in a large area, such as orcas (a large predatory whale), could cause the same effect, but they usually hunt larger prey.

Finally, scientists believed the pollution hypothesis would also explain the uneven pattern of otter decline. In some Alaskan locations, the otter population declined greatly while other populations remained stable. Some experts suggested this could be explained by ocean currents, or other environmental factors might have created uneven concentrations of pollutants along the coast.

**Transcript of the lecture:**

Professor:

Ongoing investigations have shown that predation is the most likely cause of the sea otter decline after all.

First, there is a lack of dead sea otters washing up on Alaskan beaches which is not what you would expect from infections caused by pollution killing them off. However, the fact that dead otters are seldom found supports the predator hypothesis. If a predator kills an otter, then it is eaten right away and can't wash up onshore.

Second, orcas prefer to hunt whales, but whales have essentially disappeared in that area from human hunters. Since the whales are not as available, orcas have had to change their diet to what is available. Since it is only smaller sea animals available, the orcas have probably started hunting those more and created a decline in all of the species mentioned in the passage.

Finally, predation is a more likely reason for the uneven pattern of otter decline. Otters in locations that are more accessible to orcas are more likely to be hunted. This is supported by the stable populations of otters in shallow rocky locations where orcas can't access.

**Question: Summarize the point made in the lecture and explain how the speaker cast doubt on specific points made in the reading passage.**

**Sample answer:**

Both the reading passage and the lecture talk about the declined population of sea otters. The author in the reading passage mentions environmental pollution is the reason behind the decline in the number of sea otters; however, in the lecture, the attacks by predators are mentioned as a cause behind it. So, basically, these two contradict.

Firstly, the author mentions the pollution sources along the Alaskan coast which causes a decay of the population. However, the lecturer argues that the predators hunt otters and ate all of those - it is right away responsible here.

Secondly, the reading passage mentions that environmental pollution affects otters most since other sea mammals are dead. The lecturer, on the other hand, argues that the decline of other sea mammal populations, such as orcas, is also caused by the attacks of predators. Their predators used to live on the whale, but human hunters hunted these. As a result, they lost the main source of food. Later, they switched their prey to smaller mammals like orcas.

Thirdly, the reading passage mentions that pollution hypotheses can explain the uneven pattern of the decline in the number of otters. The lecturer contradicts it and argues it in terms of the attacks of predators. The lecturer says that the population of sea otters is not large in the location where orcas or the predators flourished. So, the population of sea otters is more stable where orcas cannot inhabit.

To conclude, the reading passage and the lecture agree nowhere and both contradict almost all points.