A Bird That Vomits Acidic Oil as a Defense

Here at CWC we often receive calls about “a gull with a broken beak.” More often than not the reporting member of the public is unaware that they are actually calling about a Northern Fulmar. Fulmars are similar in size and shape to gulls, but they are “tube-nosed” birds who are related to shearwaters and petrels. They are pelagic (which means they spend all their time at sea except during the breeding season), and the tube on their nose contains a gland that helps remove salt from the ocean water they consume while feeding. Fulmars are one of the few bird species that have a well-developed sense of smell, and they can locate their food source by smelling the oil from fish that rises to the surface of the water.

During the breeding season, in spring and early summer, Northern Fulmars nest in colonies along cliffs in the North Atlantic, North Pacific, and Arctic Oceans. Nests are usually a slight depression on bare rocks or soil. They will sparsely line the nest with gravel chips and dried vegetation if those items are easily available within reach of the nest. Fulmars are slow to breed and will wait until they are about eight to ten years old to mate. Pairs are monogamous and will return to the same nest site each year. They lay, at most, one egg per year and so it is no surprise that they have developed a successful defense mechanism. Northern Fulmars create a specialized acidic and oily substance from their stomachs that they store in the upper aspect of their digestive tract. If a predator comes too close to the nest both the adults and young can spit the putrid smelling substance as far as five feet with relatively good accuracy. If the oil severely contaminates the feathers of predatory birds, the predator will lose their ability to fly and will fall to their death. The oil is extremely tenacious, and predatory birds may drown, or die from hypothermia since the substance destroys the natural oils that keep birds waterproof. Northern Fulmars are aptly named since the term fulmar originates from two Old Norse words: “fúll” meaning “foul” and “már” meaning “gull.”

Northern Fulmars spend the winter at sea and have been spotted as far south as the Baja Peninsula. During this time these birds live on the open ocean and should never be near the beach, and any individual washed up on shore would be in need of rescue. Historically when this has happened, the fulmars were most often emaciated, hypothermic, and sometimes suffering from superficial abrasions on their feet and legs.
California Wildlife Center
Patient of the Week
November 11, 2022

This was the case with a Northern Fulmar that was recently reported by a LA Country Lifeguard on Zuma Beach. Members of the public were concerned when they saw the bird looking wet, lethargic, and unstable on the shore by the water’s edge. Our Marine Mammal Response Team quickly responded and was able to capture the fulmar and bring them back to CWC for care.

Upon arrival the patient was severely hypothermic, and they were quickly placed in an incubator. Once the fulmar was warm, technicians performed a full exam and noticed that the bird did not have any injuries but was suffering from emaciation. These types of cases require a slow introduction of easily digestible nutrition, and the patient is currently receiving nutritional support multiple times a day. We are hopeful that this Northern Fulmar will eventually fully recover and be able to be released back into the wild.

If you find a Northern Fulmar on land, contact your local wildlife rehabilitation center as soon as possible. These birds are usually in critical condition as soon as they arrive on shore, and swift intervention is needed in order to rehabilitate and eventually release this species.