

The Sea Otter in Jones' Reports

A Narrative Drawn from the Refuge Reports of Robert D. Jones Jr.

Izembek and Aleutian Islands National Wildlife Refuges, 1948–1974

*Compiled from OCR-digitized annual reports by AI-assisted extraction
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Introduction

Robert D. Jones Jr. served as Refuge Manager at Izembek National Wildlife Refuge and the Aleutian Islands NWR from the late 1940s through the mid-1970s. His annual and quarterly narrative reports, filed with the U.S. Fish and Wildlife Service, constitute one of the most detailed firsthand accounts of sea otter (*Enhydra lutris*) recovery in the decades following near-extinction by the fur trade. Jones was not merely an administrator recording numbers. He was a field researcher who dove with SCUBA gear to study otter feeding grounds, captured animals by hand in Aleutian surf, conducted aerial surveys from military aircraft, and argued passionately for the species' protection. His writing reveals a man who combined rigorous scientific observation with deep personal engagement.

What follows is a thematic narrative assembled from Jones' own words across 38 reports spanning 1948 to 1974. The quotations are drawn from OCR-digitized text and may contain minor transcription artifacts, but Jones' voice—direct, vivid, and often wryly humorous—comes through unmistakably.

1. The Researcher in the Field

Jones made the sea otter his central research subject from his earliest days at the refuge. His 1949 report opens with a declaration of purpose:

The principal research problem that concerns this headquarters is the life history of the Sea Otter (*Enhydra lutris*). Studies were conducted during the period covered by this report and the information obtained follows. [1949, Report 1949]

His fieldwork was anything but routine. At Amchitka, he counted otters from military aircraft—with mixed results:

My experience trying to inventory Sea Otter from the nose of a B17 at 140 to 150 KMH has not been very successful principally because of the speed. [1949, Report 1949]

By 1959, Jones was diving with self-contained breathing apparatus to study the invertebrate food sources on the ocean floor, producing what were likely among the first direct underwater observations of sea otter feeding habitat:

In conclusion it can be said that the invertebrate population at Amchitka, where a large population of sea otters has been known to exist for a long time, presents a wholly different picture than in areas of relatively small and/or recent otter populations. [1959, Report 1959a]

His survey methodology was iterative and self-critical. After aerial counts at Amchitka and Rat Island produced wildly variable results, he wrote:

The best commentary on the accuracy of results can be made by comparing an overlap. From New House to Alcat Point 17 Otter were counted in the first flight. We counted 109 Otter between Alcat Point and Bird Rocks on the second flight. Thus we have encountered considerable error. Before our figures can become a sound basis for management the method of census taking must be perfected. [1949, Report 1949b]

2. The Animal Observed

Jones' reports contain some of the most vivid firsthand natural history of sea otters written in the mid-twentieth century. His observations of behavior, physiology, and ecology reveal an observer of unusual attentiveness.

Parental Care

The parent Sea Otter devotes a great deal of attention to the care of its young. In one instance such a subadult was asleep with its parent on a rock and when disturbed the adult carried the younger animal in its teeth to the water. An adult with a very young pup was observed to swim underwater at a considerable distance with the pup in its teeth. In one case a startled adult pitched her pup into the water from a high rock and then jumped in after it. [1950, Report 1950]

Sleep and Wariness

Jones found the sea otter's deep sleep extraordinary—and potentially relevant to its vulnerability:

It was necessary to repeatedly shout at one old animal asleep on the beach before he could be roused. Meanwhile, a group of eight other Otter sat motionless...continued to sleep in spite of the presence of the observer watching their sides. [1950, Report 1950]

The Refuge Manager is convinced that the Sea Otter would become extinct before any degree of wariness would be achieved. [1951, Report 1951]

Vocalization

While not particularly vociferous, except as a pup, the Sea Otter has a shrill shriek bordering on a whistle. It is a sound quite piercing at close range, occupying the higher register of the human ear, possibly even higher. It conveys almost a physical blow or shock such as a blast. [1950, Report 1950]

Physiology

Jones made careful anatomical observations, noting the absence of blubber and the critical role of fur:

The fineness and density of the Otters fur is as efficient in shedding water as a ducks feathers. There is no layer of fat under the skin, hence no insulation such as is found in the seal or sea lion. No doubt the presence of a saponifier that would break down the surface tension would sink the Otter as well as wet its skin. [1950, Report 1950]

He noted the astonishing metabolic demands:

Gradually the amount of food offered and eaten rose until at one time we were feeding four otter 35 pounds of varied foods with fish comprising 4/7 of the total. During the last stages...we fed to these animals (totaling 70 pounds body weight) 20 pounds of fish daily plus what shrimp, crabs, sea urchins, and chitons they would eat. [1954, Report 1954]

Feeding Ecology

When feeding, the Otter grasps its food between its front paws, thrusts it between the molars and crushes. What portion of the shell falls away is then washed by dipping in the water or by the entire animal rolling. A relationship exists between the Otter and the gulls. When an Otter is feeding gulls frequently rest on the water beside them picking up any items discarded and stealing from the Otter when an opportunity offers. [1949, Report 1949]

Predators

In the matter of predators, mankind as usual will occupy the number one position, running a very poor second will be the Killer Whale. Except for these two I have no evidence to believe there are others at Amchitka. [1949, Report 1949]

Jones later discovered that bald eagles were a significant predator of sea otter pups—a finding that surprised the research community:

Since every eagle's nest at Amchitka in which young birds have matured, yielded upon investigation at least one pelt or other identifiable sea otter pup remains we are of the opinion that the predation above recorded is the rule rather than the exception. [1961, Report 1961b]

3. Disease, Death, and the Mysteries of Winter

A recurring theme across Jones' reports is the annual winter die-off at Amchitka—a phenomenon he investigated for years without fully solving. His descriptions of the sick and dying animals are detailed and compassionate.

Some of the dead Otter recovered have been preserved by freezing for further studies. In the instances where symptoms could be observed, it was frequently noted the animal came onto the beach and crawled up into the grass where it died. In every case but one, the stomach was empty save for fluids. There is indication of hemorrhage in the liver and kidneys. [1949, Report 1949]

It goes without saying that little concrete scientific evidence has been collected. Only sufficient knowledge has been gained to realize that disease is an important limiting factor in populations of the Otter and to highlight the need for laboratory equipment on Amchitka to more thoroughly investigate the cause of these losses. [1949, Report 1949]

The parasite investigations with Dr. Lanach of the U.S. Public Health Service deepened the mystery rather than resolving it:

Our records of losses of sea otter occurring in late winter now include four continuous years. This takes it out of the realm of coincidence. We have observed the incidence of parasitism with relation to these symptoms and so far find there is no apparent correlation of infestation with the severity of the symptoms. [1952, Report 1952]

Jones connected disease mortality to a broader ecological question—whether the Amchitka population was exceeding its food supply:

The possibility of over population of sea otter at Amchitka has frequently been considered as an influencing factor in the losses we are observing. [1952, Report 1952]

The animals were in excellent condition, exhibiting extensive fat depositions. These collections were coincidental to the waning of reproductive activity in the green urchin population. Dr. Kenyon reported the usual losses of emaciated animals. Significance of these was considerable dependence of the sea otter population at Amchitka on the green sea urchin, and the heavy strain that occurs when the nutritional value of the echinoid drops almost to zero following completion of reproductive activity. [1962, Report 1962a]

4. Capturing Live Sea Otters

Some of the most gripping passages in the reports describe Jones' attempts to capture live sea otters for translocation and research—efforts that tested his ingenuity against the Aleutian environment.

We cannot overemphasize the importance and difficulty of this matter for it involves a force that cannot be dealt with by human means under certain conditions. To launch a boat at these times is to court certain disaster. [1951, Report 1951]

The Otter accepted food immediately after capture. In several instances food was offered and accepted while the animal was still in the hand net used for its capture. Attempts to escape were abandoned in these cases even though the net was open. [1951, Report 1951]

Jones wrote with evident affection about the captive otters:

The extremely gregarious nature of the Otter became very apparent. All hands were fascinated by the nature of the delightful creatures. [1951, Report 1951]

But captivity brought heartbreak. Again and again, captured animals died:

It proved impossible to keep the Otter alive. At first it was thought this resulted in some manner from captivity. Comparisons with the symptoms of those observed dying on the beach, however, convinced us that the animal had been caught sick. [1951, Report 1951]

One harrowing episode at sea in 1954 illustrates both the difficulty and the human drama:

Threw sixth otter back in ocean, she tortured other smaller ones too much. [1954, Report 1954, ship's log, Aug 29]

5. People, Politics, and the Otter's Fate

Jones was acutely aware that the sea otter's survival depended on human attitudes. He documented both threats and allies.

Military Cooperation

The military department has made a sincere effort to stop this waste and at present it is successful. In all of the animals recovered dead on the beach none were found to have died of bullet wounds. [1949, Report 1949]

Frankly, without the assistance of these men and many others along the line we are not yet set up to achieve much in the way of field work. [1949, Report 1949]

Public Ignorance

At Sandpoint in the Shumagin Islands, Jones sounded an alarm:

In this area, where every marine mammal is regarded as a fish pirate, there is little chance for survival of the otter unless an educational program is undertaken. [1953, Report 1953]

A Visitor at Adak

One passage from 1954 captures a moment of pure delight:

A few weeks ago we had a very nice visitor, down at the number 1 fire station one morning a young sea otter was found asleep on the front walk. He appeared to be hungry so the men fed him. He would come back each time they could get their hands on a sea food nature. He was very gentle and never did snap or appear to be annoyed with the huge crowd that was constantly petting him. It was a real treat, everyone took pictures and rubbed his fur, but he didn't mind at all; he rather seemed to like it very much. After a few days he went away and has not been seen since. [1954, Report 1954]

Illegal Killing

A Marine was apprehended at Adak for having killed a sea otter, claiming it was a case of mistaken identity. A Summary Courts Martial judged him guilty, assessed a fine of \$80.00, sentenced him to 15 days at hard labor without confinement, and reduced him from Lance Corporal to PFC. [1963, Report 1963a]

6. The Bomb and the Otter

The most politically charged passages in the reports concern nuclear testing on Amchitka. Project Longshot (1965) and the later Cannikin test (1971) placed Jones' sea otters directly in the path of the Cold War. His restrained bureaucratic language barely conceals his frustration.

On the announcement of nuclear testing near the sea otter population:

In the announcement only the sea otters and "commercial interests in Aleutian sea life" were mentioned so far as wildlife was concerned. The public was assured, "Special attention has been given to possible effects on the growing sea otter population in the Amchitka area and to commercial interests in Aleutian sea life. None of these interests will be jeopardized by the experiment." That there might be other considerations either did not occur to them or they did not think them important. [1965, Report 1965]

Jones described his efforts to mitigate the damage:

Alaska Refuges maintained a representative on Amchitka from the time of our arrival July 16 until after the explosion October 29th. However, we were in effect without portfolio as no ground rules had been laid down by the people as to how we should act.

They had no concern for the function or purpose of a “refuge.” Some second thoughts among the Bomb people became evident when we were approached concerning the possibility of driving sea otters from the close areas just prior to the explosion. We worked with them and found it was indeed possible to disperse concentrations through the use of Zon exploders, fire crackers, explosive charges and the like. [1965, Report 1965]

Six years later, the 5-megaton Cannikin test was detonated 6,000 feet beneath Amchitka. Jones reported the outcome with terse gravity:

This year hopefully marks the last nuclear test on Amchitka Island. On November 6 the Atomic Energy Commission detonated a 5 megaton warhead 6,000 feet beneath the island’s surface. “Cannikin,” as the test was called, caused no known drastic alteration of the island’s environment. The greatest toll to wildlife was sustained by sea otters. Perhaps several hundred killed. [1971, Report 1971]

7. The Return of the Sea Otter

Across the arc of these reports, the most hopeful story is the gradual expansion of sea otter range—from the Amchitka stronghold outward through the Aleutian chain and eventually into Izembek Bay itself.

In 1953, Jones documented the first signs of population growth:

It was learned while at Sandpoint that sea otter have in recent years been appearing around the village, usually in the fall. Indications are that numbers are growing and the area occupied is expanding. Within a few years otter should become a familiar sight in the northern Shumagin Islands. [1953, Report 1953]

Two years later, the first sea otter appeared at the doorstep of Jones’ own headquarters:

Reports that we have deemed reliable have been repeatedly heard about an occasional sea otter appearing in Cold Bay. On March 13 while proceeding to King Cove in the dory we observed a young sea otter feeding at Vodapoint Point, the eastern entrance to Cold Bay. [1955, Report 1955]

By 1967, the colonization was complete:

Both land otters (*Lutra canadensis*) and sea otters (*Enhydra lutris*) are sufficiently common now in Izembek Bay that we encounter both in the course of gathering brant data. A whole family group is usually encountered at that time of year when one sees a land otter, but the sea otters are solitary when in the Bay. Large pods of sea otters lie offshore in summer. [1967, Report 1967]

By 1968, Jones could write of “a growing population of sea otters” along the outer break. The species that had been reduced to remnant pods in his first years at the refuge was now established across its former range.

8. Ice and Endings

The last mention of sea otters in the Jones reports is also the most devastating. The 1974 report, one of the final documents in the series, records an environmental catastrophe:

For the third time in four years the Bering Sea froze solidly, leaving no open water north of the Alaska Peninsula and Unalaska Island. This had serious consequences to the sea otter population inhabiting the area. [1974, Report 1974]

When Bering Sea froze for the third time in four years it destroyed the last of a sea otter population that had grown quite large. These animals cannot maintain holes in the ice as seals do, and when their world freezes they have little recourse but to die. They strike out over the ice afoot looking for water, but except for the 25 we intercepted and released in Cold Bay on the Pacific Ocean, none survived. [1974, Report 1974]

That final image—sea otters walking across the ice, searching for open water that no longer exists, and a refuge manager intercepting 25 of them to carry to safety—is a fitting end to Jones' quarter-century chronicle. It captures both the vulnerability of the species and the persistence of the man who dedicated his career to its survival.