

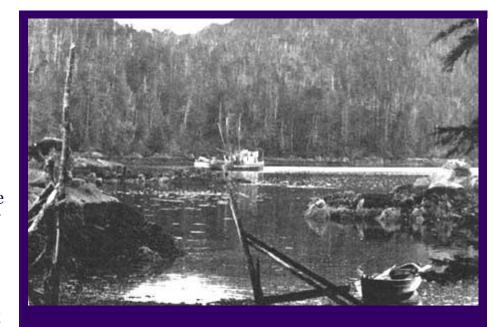
THE *Martha K*. scraped her mooring on Sitka's waterfront as she bobbed gently on the waves created by a passing salmon troller. Herman Kitka, her owner, a full-blooded Tlingit Indian, "the best of the Tlingit sealers," was tying halibut hooks when I stepped aboard.

"If you want to go sealing with us," he said, in answer to my question, "we can leave day after tomorrow. My father used to like sealing, but most of the younger men don't care about it. This might be the last time I go out. Fishing is more important now, and most of

our sealing boats and spears are rotting."

Herman's words bore out reports I had recently read. During the past year, no seals had been taken by Alaska Indians. However, as a wildlife biologist assigned to studies of our fur seal resources, I had come to Sitka hoping that a few seals would be taken so I could add to our knowledge of how the animals live while they are away from the breeding grounds on the Pribilof Islands. We needed to know more about the distribution of different age and sex classes among the migrating seals. And what they eat during their 2000-mile southward migration is of concern to fishermen as well as scientists.

At the appointed hour, Herman had his sealing equipment aboard the *Martha K*. ready to go. Her crew, Cyrus and Lewis,



When commercial sealing threatened the fur seal, an international protective treaty was signed, but the Indians were permitted to continue their ancient hunting. The herds recovered, but ancient ways declined. In the quiet bay above, the author camped with the Indians and accompanied them on what may have been their last seal hunt.

Photo by Karl W. Kenyon

cast off, and we headed south. From Sitka Sound we nosed through a maze of spruce-capped islets bordering the twisting, treacherous 25-mile passage to Crawfish Inlet. There the Tlingits knew that large numbers of fur seals gather each spring.

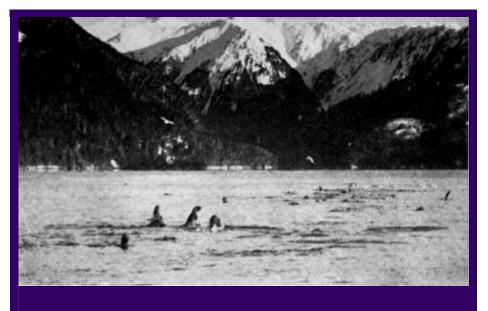
Under international agreement, only the Indians are allowed to harpoon fur seals as they swim northward along the American coast toward their rookeries in Bering Sea. In 1911, after 30 years of intensive sealing, the great fur seal herds of the North Pacific had been all but exterminated. An international fur seal protective treaty was therefore signed by Japan, Great Britain (for Canada), Russia, and the United States. Under this treaty no sealing was permitted at sea except by the few Indian sealers. Today, because of enforced protection, the fur seal herd of the Pribilofs is about as large as it will get under prevailing conditions.

During recent years, scarcely a dozen Indians along the coasts of Alaska, Canada, and

Washington have practiced the ancestral sealing technique that I was about to witness. The *Martha K*. crossed the inlet, threaded the narrows, and entered the quiet open water of a hidden bay.

"Here is where we make our sealing camps," said Herman, pointing to a shack nestled among the trees. "My people have used this camp for many years. Even when the wind blows, it is quiet in here, and we can take a short cut out to Crawfish Inlet in our sealing skiff through that little passage over there." He indicated a rift where the sky pushed down among the trees on the north side of the bay.

Herman maneuvered the *Martha K*. to a spot just off the campsite, and soon the last echo of the engine died among the spruce ridges. The vast silence of the Alaska wilderness seemed overpowering. From the sunset glow overhead to distant snowy mountains, there was no sound, no movement. Then the cry of a bald eagle shattered the chill evening air as it left a gnarled snag to join its mate on a more distant perch across the bay. Three white-winged scoters in courtship flight passed low over the water on whistling wrings, while in the distance a high-pitched chorus of gulls rose above the hoarse grunts and barks of seals and sea lions as they discovered a new school of herring in the inlet.



Fur seals and gulls feeding on herring in one of the coastal inlets near Sitka. In the foreground, alarmed fur seals "porpoise" away from the approaching sealers. The raised flipper of a resting seal can be seen near the righthand edge.

Photo by Ford Wilke

After supper we gathered around the fire, and Cyrus, the old-timer in our group, told about early days when he had gone sealing as a young man. He was now well along in his sixties, but he remembered clearly the time when sealing was an important activity at Sitka.

"In those days," he said,
"there weren't so many
seals as there are now, and
we had to go many miles
out to the blue water to get
them. Now there are many,
and they come into the
inlets where they are easy
to get.

"When I was a boy, we

went out from our camps on Biorka Island and into the blue waters of the sea. Our canoes were heavy, and five of us would paddle for many hours in calm weather to get out to the sealing grounds. If there was a wind, we could sail. Southeast winds are dangerous, and sometimes one or two sealing boats would not come back. Usually we would go out about 20 or 30 miles. Sometimes we could only see the snow on the top of Mount Edgecumbe from out there. When a southeaster came up, it might take us two days to get back to our camp again.

"If the weather was nice, we would sometimes stay out there all night. We kept a fire in the bow of the boat for cooking. One time when we started out, the air was nice and warm, and I laughed at the old men when they told me to take my coat. That night the southeast wind blew strong for many hours, and we couldn't come in. We were wet with spray and cold. Do you know how I got warm? I wrapped up in sealskins. It was lucky we had killed seals that day."

Cyrus spread his weather-beaten hands near the fire, and as shadows of memories flickered across his face, I recalled some of what I had read of the rapid reduction of the seal herds of the North Pacific. Commercial sealers began their operations about 1869.

The adventurous fur hunters who had come north along the Pacific coast had by that time nearly wiped out the more highly prized sea otter, and they turned to the fur seal as the next best source of income. Before Cyrus's time, during the 1880's, open-sea sealing flourished, and the Indians of Sitka were heavily drawn upon, sometimes against their will, to serve as crew members on the sealing schooners that put out from San Francisco.

The ships stopped at Sitka and other Indian villages along the coast to pick up the Indians and their canoes. Eight to eighteen canoes would be put aboard the larger ships and carried out to sea. Once on the sealing grounds, 30 to 80 miles offshore, the canoes, each with a crew of two, set out in different directions. All day they hunted seals with spears and shotguns, then returned to the base ship at night—if they could find it. Seals were killed without regard to sex or age. Many sank before they could be recovered, while others, badly wounded, escaped to die later, A schooner often took more than 1000 skins in a season. Such success prompted the rapid spread of sealing, and by 1892, about 125 American, Japanese, and Canadian sealing schooners were operating in the North Pacific and Bering Sea.

Human tragedy was frequent. Sealing canoes with their crews disappeared in fog and storm. But new sealers took their places, and the damage to the seal herds was devastating. From 1870 to

Frank Kitka, father of Herman, is one of the few remaining Tlingit sealers of the bygone era. Now he seldom goes sealing.

Photo by Ford Wilke

1900, the sealing fleet took an average of over 100,000 animals a year, the majority females.

Such wholesale slaughter on the open sea, plus the kill on the breeding islands, reduced the Pribilof herd to about 215,000 animals, and by 1911, when the protective treaty was signed, ocean sealing had lost its commercial attractiveness. On the Pribilof Islands, commercial killing was discontinued until 1918. Since that time the annual harvest has been supervised by the U. S. government, and the herd has simultaneously yielded a return to the National Treasury and increased to over 1,500,000 animals. The Island kill during the last decade has been from 60,000 to 70,000 skins each year, all young males. The few skins taken in surface hunting by the Indians along the Northwest coast have had no harmful effect.

## **Stalking**

Early the next morning we sailed into the Inlet on our first hunt. Inquisitive fur seals raised their heads to stare at us from a safe distance—then, like playful porpoises, they bounded away. Several groups turned and twisted lazily on the surface, rubbing their sides with their flippers, while others dozed, languidly raising glistening flippers in the early morning light.

Herman stood motionless in the bow, his spear raised, but one of the animals would always hear us before we were within spear range, and with slapping, churning flippers all would flee.

Contrary to popular belief, fur seals on migration do not travel as a compact herd. Instead, they spread out over much of the North Pacific Ocean. It is the exception rather than the rule for them to feed in relatively large numbers as in Crawfish Inlet. Even here, they are often alone or in small groups. Seldom did we see more than ten together. Their behavior in winter is therefore sharply different from that in summer, when they crowd each other for every inch of space on the Pribilof breeding grounds.

After an hour of fruitless stalking, the sealers looked discouraged. "The weather is too still this morning," Herman remarked. "The seals can hear the water lapping on the boat, and it frightens them." In his next statement, the man with the harpoon proved himself to be quite up-to-date. "Sometimes I think their flippers are like radar screens. Have you noticed how they usually wake up when the flipper that is in the air turns in our direction? It will be better when a little breeze comes up. I think the wind and rippling water make a sound in the seals' ears that causes them to sleep so soundly they don't hear the boat."

Even while Herman was speaking, a cat's-paw ruffled the surface near the head of the inlet. Soon, gentle ripples spread evenly over the water. The breeze raised our spirits. "Now we'll get our seals," said Herman, and he motioned Lewis, the oarsman, toward the raised flippers of a sleeping seal.

I noticed that Lewis made a wide sweep, bringing us well upwind of the seal before making a final approach, with the breeze at our back. It seemed to me that the smell and sound of the approaching boat would be carried more easily to the seal from that direction. And when I saw this procedure repeated several times, I asked Herman why he always approached with the wind.



Cyrus Williams, old time Tlingit sealer, hurling the spear at a fur seal that was sleeping on the surface. The animal awoke just as the spear was thrown, but Cyrus's aim was good and the seal was captured. The spear is thrown to hit the water short of the animal and glides to its mark just below the water line. Cyrus began sealing as a boy toward the end of the last century, when sealers from Canada, Japan, and the U. S. were still operating in the North Pacific.

## Photos by Karl W. Kenyon

"When you come up on a seal against the wind," Herman explained, "the water slaps on the boat and makes a noise the seal can hear; you also have to row harder, and the oars and oarlocks make more noise. When we drift down to the seal, the wind helps us and we only use the oars a very little. The seals don't hear us unless they are nearly awake anyway."

We slid to within about 30 feet of the seal, but an instant before Herman hurled his harpoon, the animal suddenly raised its head and was gone with a splash. The spear landed harmlessly in its wake.

"Let an old sealer show you how," Cyrus pleaded. He was anxious to match his skill against that of the younger generation. Herman, being the boat owner, felt he should spear the first seal, but since he had missed, he relinquished his weapon and gave his place in the bow to the old-timer.

Within a few minutes we were again drifting noiselessly down on a resting seal. At a distance of about 25 feet, the shaft left Cyrus's hand, and simultaneously the seal took alarm. But his aim was good. The spear struck the water flat, about two feet short of the seal, but found its mark. Later Cyrus explained that this was the proper way to spear a seal. "The spear will slip along just under the water and hit the animal in the side," he said. "If the spear falls down from above, it is harder to hit a seal."

For an instant, the shaft thrashed at the surface, then it was jerked below, and the carefully coiled quarter-inch line in the bow raced out. In an instant, the 50 feet of line stretched taut in the dark water. The skiff spun half around, and the harpoon shaft, detached from its head, shot into the air. For a few seconds the boat lurched from side to side. Then the line was suddenly slack, and Cyrus began hauling it in, hand over hand, as the seal surfaced 20 feet astern.

At the sight of the boat, black flippers churned the water to foam, and again the line was taut. The seal looked as if it weighed about 80 pounds, and I was surprised at the comparative ease with which Cyrus not only held the line but continued to bring it in. The reason was soon evident. The seal made no organized effort to escape. In a frenzy it dashed first in one direction, then another, sometimes even approaching the boat. Frequently it surfaced, then frantically churned the water and disappeared.

"Be careful when the seal is near the boat," Herman shouted. His warning was hardly spoken when it seemed that a living buzz saw was ripping the planks from beneath our feet. An instant later, flashing teeth grasped the gunwale an inch from my elbow, and a handful of splinters scattered on the turbulent water. Five minutes of wild struggling exhausted the seal. Cyrus now grasped a heavy cedar club and struck the animal a fatal blow on the head.

"It only takes one blow when you hit the seal on top of the head," he panted, as we helped him haul the limp body aboard. When we examined the seal, we found that the spear had penetrated only the web of one hind flipper. "If this one had heard us a second sooner, it would have gone," Lewis observed. Herman had already located the shaft, and as he retrieved it, he motioned Lewis toward another seal.

Aboriginal sealing was conducted in a slightly different way by other Indians along our Pacific Northwest coast. Those at Neah Bay, near the northwest tip of Washington, attached an air-filled sealskin float to the line and tossed it into the water as soon as a seal was struck. While pulling against the float in its struggle to escape, the seal would become exhausted and could easily be brought close to the canoe for capture. Thus, the danger of being bitten by an energetic and angry seal was greatly reduced. Another method was to slide a 20-pound weight down the line, which prevented the seal from surfacing and soon

## drowned it.

In early days the Indians of the Northwest coast made their harpoon heads of bone or ivory. They were attached to lines of whale sinew, and sinew was used to lash one part to another. When cotton line and iron were introduced by the white man, they rapidly replaced the native materials.

In a week of sealing in Crawfish Inlet, my Indian friends had taken 41 seals, and my barrels were almost full of specimens. Then a southeaster blew up, and the next time we rowed out on the Inlet, the inquisitive dark heads of the fur seals were strangely absent.

"I think the seals have gone to the blue water on their way up north," said Herman. "This is about the time they always leave." So we returned to break camp.

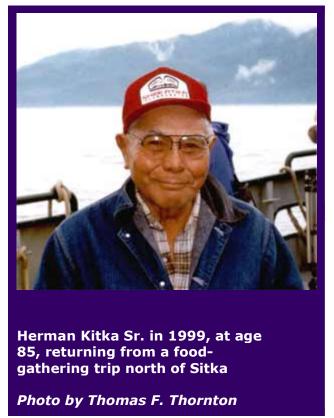
My specimens were hardly on the dock at Sitka before Herman had gotten his halibut gear on deck. "I think my people are fishermen at heart more than sealers—these days anyway," he said. "When old men such as Cyrus and my father are gone, there won't be any more real Tlingit sealers left. Even now, sealing days are over." Herman paused and thought. "If you don't come up next year, we probably won't go sealing at all."

## Last of the Sealers or Last of the Seals?

A special report, fifty years later

By Thomas F. Thornton

IN 1955, biologist Karl W. Kenyon traveled to southeast Alaska to study a segment of the declining northern fur seal *(Callorhinus ursinus)* population in the company of several talented Tlingit Indian guides. Kenyon's lead guide, Herman Kitka—now Herman Kitka Sr.—still lives in Sitka today,



at age 90. As the health and hunting of seal populations remain issues of concern, it is worth a look back—and forward—at the status of some of Alaska's majestic marine mammals and the Native people who still rely on them.

Fur seals, like other marine mammals, have been hunted for centuries for subsistence purposes by Alaska Natives and other indigenous peoples of the North Pacific with little effect on the populations. But in the nineteenth century the seals became lucrative targets for a disastrously exploitative commercial trade, which nearly wiped out the species by the early twentieth century. As Kenyon reported, a 1911 international protective treaty limited commercial hunting and helped the population rebound somewhat, but other marine mammals, including the Tlingits' prized harbor seal (*Phoca vitulina*), continued to be targeted as commodities and

pests. Federal bounties were paid on harbor seals, and they were even dynamited in river mouths because fisheries managers believed they were robbing too many salmon from the nets of commercial harvesters.

Then came the Marine Mammal Protection Act of 1972, a striking turnaround in federal policy. Responding to swift declines in sea mammal populations, the act outlawed marine mammal hunting except for subsistence harvests by Alaska Natives living in coastal villages historically dependent on them. Under this regime, sustainable, largely self-managed Native subsistence harvests have continued to the present day with no demonstrable effect on marine mammal populations. But in recent decades certain species, including, fur seals, harbor seals, and stellar sea lions, have declined sharply in the North Pacific, and Native hunting, although not considered a causal factor, is once again under scrutiny due to conservation concerns.

I was working as an anthropologist with the Alaska Department of Fish and Game, Division of Subsistence, in the early 1990s, when this concern over North Pacific seal and sea lion populations prompted the National Marine Fisheries Service to contract with our office to document contemporary seal harvests in Alaska Native communities. In addition to our quantitative harvest survey, we conducted a number of in-depth interviews with

experienced seal hunters about the history of local sea mammal populations and hunting practices. It was in this context that I met Herman Kitka and learned about his work on fur seals with Karl Kenyon in the early 1950s.

Kenyon hired Herman and the *Martha K.*, the wooden seine fishing boat he built and still operates today, to locate fur seal south of Sitka in a bay known in Tlingit as *Lax'áas*. They made their base at an old Indian hunting camp (*Watla.aa*) and then set off after the fur seals, which gathered there each February to seek respite and feast on the plentiful herring before resuming their long journey west to breeding grounds on the Pribilof Islands. Besides captain Herman and a crewman (identified by Kenyon as "Lewis" but who Herman says was George Hall), also onboard were Herman's father, Frank Kitka, and Cyrus Williams, both "old time" sealers who had hunted fur seal for the commercial market. Although Tlingits had been hunting with western guns for decades, after the 1911 treaty they were limited to taking fur seal with "traditional gear." That meant a toggle harpoon, perhaps the most ingenious indigenous innovation in the Far North.

The toggle harpoon allows large marine prey to be speared from a safe distance, while after impact the barbed point detaches from the shaft and remains under the control of the hunter by means of an attached coiled line. The line, in turn, can be floated, weighted, or simply "played" by hand until the seal tires and can be hauled in. It was this technology that allowed aboriginal hunters to harvest large marine mammals offshore and even under ice, and thus to adapt to harsh circumpolar conditions. (Later it was adapted for the whaling industry by the African-American inventor Lewis Temple.)

The Kitkas possessed a handmade ten-foot toggle harpoon, the point of which was said to have been forged from Alaska Native copper and so tough you "had to sharpen it with a file." Cyrus Williams demonstrated Tlingit harpooning techniques for Kenyon, who captured it on film. While a few seals were taken with harpoons, Herman Kitka confided to me that most of the 200 or so specimens collected for the research over two years were taken with rifles. Initially Kenyon was reluctant to let the Indians shoot because of "the regulations." But he soon found that shooting fur seal from a boat amidst wind, wave, and tide is also a difficult skill, one his Native guides fortunately also had mastered, such that few seals were struck and lost. (As Kenyon reported, approaching fur seals in the absence of wind is almost impossible because of their keen senses.)

Interestingly, while the Kenyon's 1955 article focused almost exclusively on documenting what he perceived to be a dying cultural tradition of Native seal harpooning (indeed he thought this might be the Tlingits "last seal hunt, their final go at the fur seal"), Herman Kitka's memories center upon the ecological conclusions of the research and how it meshed with his own traditional ecological knowledge, observations, and experience. As he tells it, "Karl Kenyon came right to my home in Sitka. He told me they are having

problems with the fur seal herds on the Pribilof Islands. The fur seal numbers have never increased for a number of years . . . even though thousands of little fur seals [are born on and] leave the Pribilof Islands every year." Why did they not survive? Hypotheses focused on disease, predation, and lack of food as factors.

According to Kitka, the researchers ultimately concluded that "the food supply in the ocean controlled the seal numbers." He agreed. "Some of the small fur seals that we took in this area were lean—no fat on the bodies at all!" Kitka believes that juvenile seals starved because they could not compete with the adults in pursuing increasingly scattered and stressed fish stocks, especially Pacific herring. "The young fur seals could not catch the scattered herring," and thus "starved and died along the coast from Alaska on down to California."

Today, the National Biological Service (NBS) reports that northern fur seal populations remain depleted, and that production in the Pribilofs dropped more than 60 percent between 1955 and 1980, before stabilizing at 40 percent of the mid 1950s level. Nor have the fur seals returned to Southeast Alaska in significant numbers. (Indeed, in the early 1990s a young government biologist I spoke to was not even aware that fur seals had ever been present in Southeast, and was sure I was mistaken in suggesting they had.) The situation with Steller sea lions (Eumetopias jubatus) is even more alarming. A 73 percent reduction in the adult and juvenile populations since 1973 has resulted in the northern sea lion being listed as "threatened." According to NBS, "Most of this decline occurred in Alaska waters [north of Southeast Alaska], and is believed due to a combination of factors, including incidental kills, illegal shooting, changes in prey availability and biomass, and perhaps other unidentified factors." Again, legal subsistence hunting is not considered a causal factor.



Tlingit elder Herman Kitka Sr., 90, in front of his house in Sitka, Alaska, May 2005

Photo by T.F.T.

For Herman Kitka the fate of sea mammals in Alaska and elsewhere is ultimately tied to prey availability and biomass. In Southeast Alaska, Pacific herring is the linchpin species that holds the system together and serves as a bellwether when it begins to fall apart. Sitka Tlingits know their herring, too, because Sitka is where herring stocks return to spawn

each spring, providing the first real fruits of spring. Locals provide a substrate—usually western hemlock branches—for herring to spawn upon, and harvest the richly delicious and nourishing eggs by the boatload. Traditionally, the return of the herring was a cause for great celebration, and the white clouds of spawn spanned the shores and bays for miles around town.

Now, however, the herring spawn is shorter and spottier, and the small subsistence herring roe harvest has been overshadowed by an intense, lucrative, and globalized commercial fishery, which Sitka Tlingits fear is harming the species and the ecosystem. Unlike the Native herring roe harvest, which spares the herring to spawn again, the commercial fishery kills the fish—up to 11,000 tons each year in Sitka—to get the roe *en sac*, as the Japanese markets prefer, paying up to \$100 per pound for the final product.

"Before the herring roe fisheries in Alaska," Kitka observes, "the fur seals used to come into all the inlets along the Pacific Coast. Today you no longer see any fur seals at all. If we don't control the roe fisheries in Alaska I am afraid even our salmon will also be gone forever. The salmon fingerlings leave the streams in time to move into herring spawning areas to feed on the eyed floating herring. The fish ducks and Dolly Vardens also move in to feed on the small salmon fingerlings. The salmon [is] also part of the fur seals' diet. The fur seals, sea lions, whales and all fish ducks will be gone forever . . . if we don't cut back on the roe fisheries in Alaska. I am very sure this is where our fur seals are going and all marine mammals. I hope we can do something about saving our marine mammals for our future generations."

Unfortunately, in 1994, Herman Kitka's observations were dismissed by the National Marine Fisheries Service as merely "anecdotal," a common way of ignoring traditional ecological knowledge. If we are to see fur seals again in Sitka, Herman Kitka's herring theory and the broader "prey availability and biomass" hypothesis concerning marine mammal declines deserve more thorough investigation.

Thomas F. Thornton has conducted extensive research on Tlingit and Alaska Native history, geography, and subsistence issues since 1989. A visiting associate professor of anthropology at Trinity College, in Hartford Connecticut, he previously taught anthropology at the University of Alaska, in Juneau, and in the Global Studies Department at Saint Lawrence University, in Canton, New York. In addition to authoring numerous articles, he edited the Fall 1998 issue of Cultural Survival Quarterly, on Alaska Native subsistence (<a href="www.culturalsurvival.org">www.culturalsurvival.org</a>); Haa Aan—Our Land: Tlingit and Haida Land Rights and Use (University of British Columbia Press, 1998); and, with Andrew Hope III, Will the Time Ever Come? A Tlingit Sourcebook (University of British Columbia Press, 2000). He is currently working on a book, Being and Place among the Tlingit.