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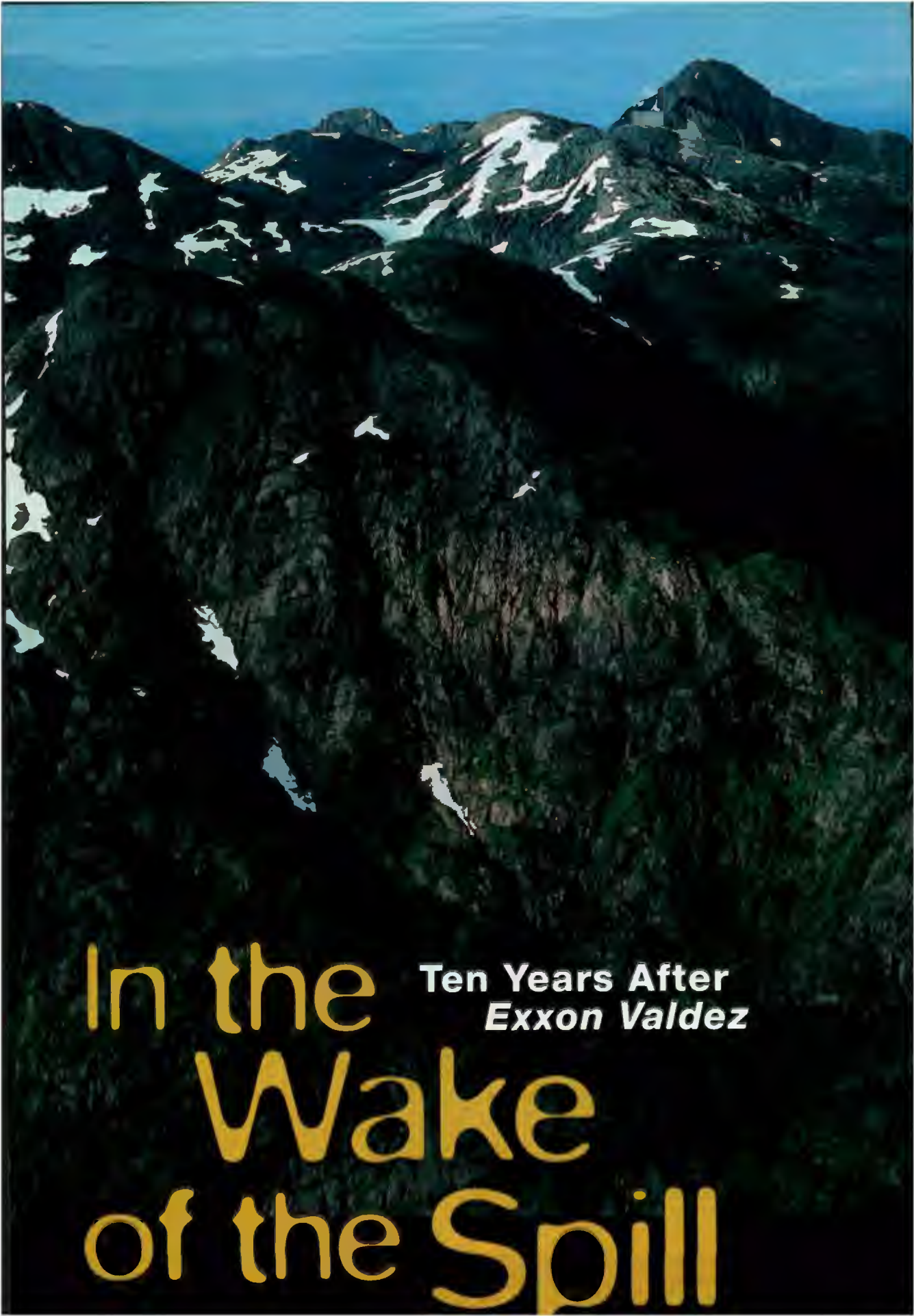
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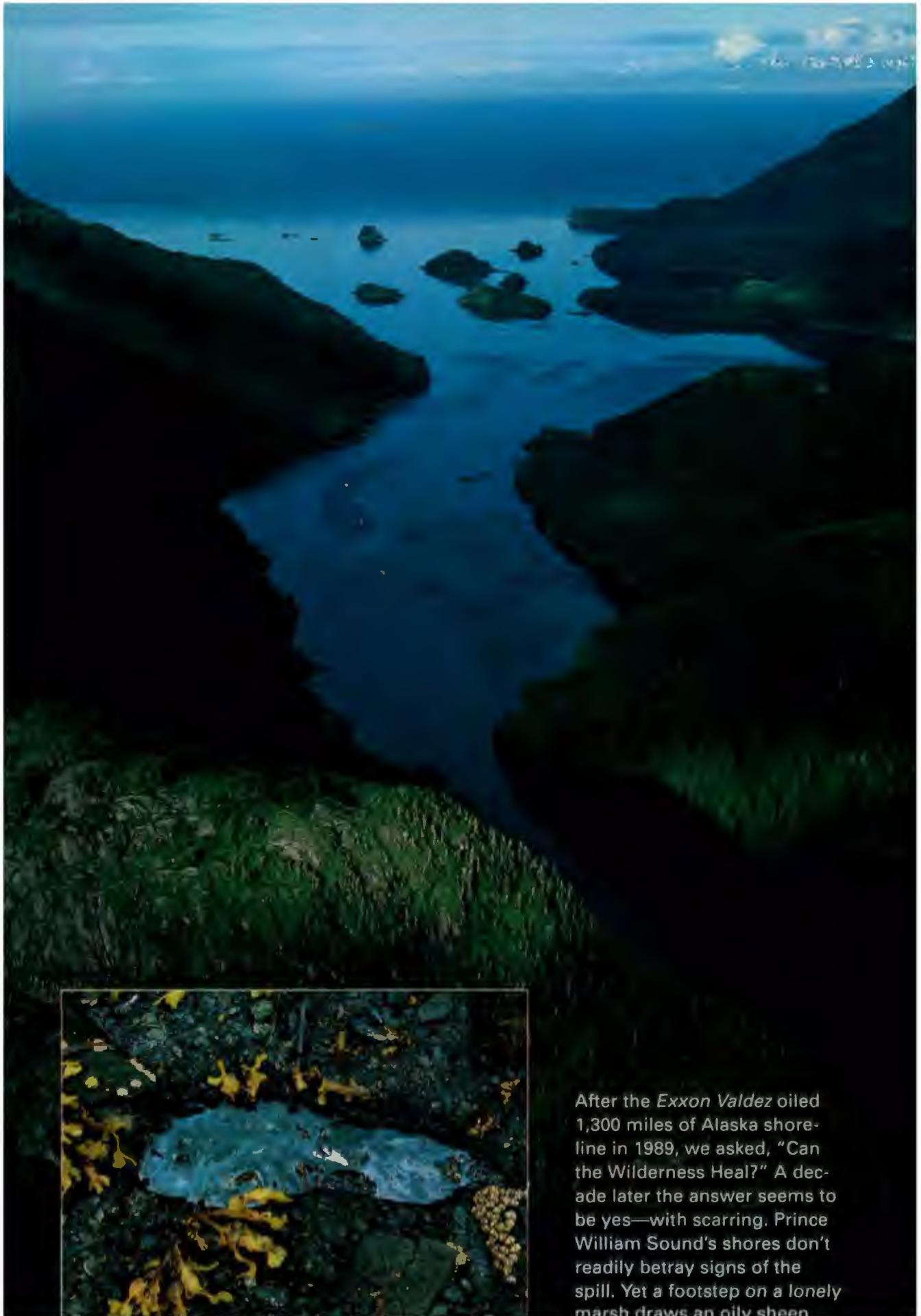
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In the **Ten Years After**
Exxon Valdez
Wake
of the Spill



After the *Exxon Valdez* oiled 1,300 miles of Alaska shoreline in 1989, we asked, "Can the Wilderness Heal?" A decade later the answer seems to be yes—with scarring. Prince William Sound's shores don't readily betray signs of the spill. Yet a footstep on a lonely marsh draws an oily sheen

Rebounding from a slick that killed perhaps 40 percent of their population, common murrelets are again making the Gulf of Alaska's Barren Islands a little less barren. Other species are also recovering, but a number still struggle.

By JOHN G. MITCHELL
SENIOR ASSISTANT EDITOR

Photographs by KAREN KASMAUSKI

FROM THE VILLAGE of Tatitlek, the way to Bligh Reef runs northwest to the cusp of Busby Island, then bounces into the bright blue chop of Prince William Sound. There is a red buoy far ahead to starboard. Closer and dead-on, a tall steel pylon rises from the water, festooned with navigational aids to speed the mariner on a safe voyage. The *Alutiq* people of Tatitlek have a name for the pylon. They call it Hazelwood's Stick, in grudging memory of Joseph Hazelwood, the *Exxon Valdez* skipper who, just after midnight on March 24, 1989, found his fully loaded tanker fetched up hard on the jagged shoals of Bligh Reef. The pylon marks the spot where oil began to flow from the tanker's ruptured hull, poisoning birds, marine mammals, and pristine Alaska beaches for hundreds of miles and casting across the region's human community a psychic stain that lingers still, ten years later.

"It's not something that people can easily forget," says Gary Kompkoff, a commercial fisherman and president of the Tatitlek Village Council. We are four miles out from the village pier, approaching the reef in a motor skiff. "To some extent," he says, "the resources are recovering. But the people still hurt."

On such a clear and bracing morning as this, the healing of Prince William Sound from one of North America's most devastating offshore oil spills seems far more palpable than the residual hurt. Here are sparkling waters, seabird skies, high green headlands, the icy ramparts of the Kenai Peninsula gleaming across the sound. Even Hazelwood's Stick supports the

Photographer KAREN KASMAUSKI collaborated with JOHN MITCHELL on "Oil on Ice" in the April 1997 issue. This is her 17th NATIONAL GEOGRAPHIC assignment.



illusion that Prince William Sound is fully alive again. A soft brown lump reclines above the waterline on one of the pylon's ice guards—a movable lump that, as we draw near, turns out to be a Steller sea lion sunning itself.

"We see them here from time to time," says Kompkoff. "A good sign, but who knows?"

Apparently no one knows. The Steller sea lion, largest of all the eared seals and an endangered species, has been in serious decline in the northern Gulf of Alaska for 20 years. Scientists can only guess what effect, if any, the spill may have had on the decline of this graceful pinniped.

But there are some questions science can answer a decade after 11 million gallons of North Slope crude sullied this ecosystem and compelled the Exxon Corporation to pay the



state and federal governments more than a billion dollars in criminal and civil damages. Government at both levels has invested many of those dollars in research and monitoring, not only to assess the spill's damage and the prospects for achieving recovery but also to forge for the long term a better understanding of how all the pieces of the ecosystem fit together—prey and predators, plants and habitats, tides and currents.

It is understood, for example, that the natural flushing action of waves and storms was far more efficient in healing the sound than all the mops and sponges and power hoses of the cleanup crews. For despite its best intentions, the human response swept some of the oil out of sight—but not out of the sound. Globules of petroleum mousse still lurk here and there

under a littoral carpet of gravel and rocks. Similarly, the initial effort to rescue and bathe oil-smearred otters and seabirds, however emotionally gratifying, may have had scant effect on the recovery of specific populations. In fact, many of the rehabilitated otters, and there were hundreds, died soon after they were released to the wild, in some cases possibly as a result of human handling.

So now the prevailing wisdom holds habitat protection to be a better cure than hand towels and tender care. “If you want to have marbled murrelets,” a restoration scientist said to me in Anchorage as I was heading for Tatilek, “you have to have old-growth trees for them to nest in. You want salmon, you need to protect the streams salmon spawn in. You can’t just draw a line at the ocean’s edge.”



Looking landward from a skiff on Prince William Sound, one can only imagine the real metes and bounds that have been drawn in recent years with oil-spill settlement dollars—back from the ocean's edge to protect by purchase or easement more than half a million acres of private land, all prime habitat that otherwise might well have been logged or commercially developed at some time in the future.

Kompkoff points to Bligh Island, off our port side. It is owned by the village corporation of Tatitlek, but the corporation has placed these 8,267 acres under a conservation easement guaranteeing the government that the timber, much of it old-growth, will never be cut. And this is only one part of a larger conservation package that will preserve habitat along 61 trout and salmon spawning streams,

transfer 32,000 acres of corporation land to the Alaska state park system and Chugach National Forest, and enrich Tatitlek's 97 Alutiiq residents and other corporation members with the benefits of a trust fund worth 35 million dollars. Kompkoff declares it a good deal "all the way around."

In the Alutiiq tongue Tatitlek means Windy Place, though it wasn't very windy the night that the *Exxon Valdez* went aground on Bligh Reef. Prevailing currents began to carry the oiled waters out across the sound to the southwest, away from Tatitlek. When the people awoke the next morning and heard the first sketchy accounts of what had happened just five miles away but saw no oil on their beach, they could hardly believe it. Then the sharp, ambient stink of petroleum began to seep



How toxic is ten-year-old oil? Very, according to recent studies. Slow-degrading compounds in oil can damage salmon fry—as they have the one in the left vial below—at concentrations just one-tenth Alaska’s allowable limit. With pockets of oil still seeping into some intertidal spawning streams (left), the threat to salmon lingers.



through the thin frame walls of the houses of Windy Place.

“The smell made some people sick,” Koimpkoff remembers. “The herring season was about to open, our first harvest after winter. The government had to shut it down. Shut down our salmon too. We lost it all.”


IF ANYONE HAS a sense of the resources that were lost here ten years ago and a good idea as to which of them might be bouncing back, it’s likely a dynamic woman named Molly McCammon, who presides in Anchorage as executive director of the Exxon Valdez Oil Spill Trustee Council. The council was established by Alaska and the federal government in 1991 to oversee the restoration effort and to expend some 900 million dollars of Exxon’s

out-of-court settlement on habitat protection, scientific research, and resource monitoring.

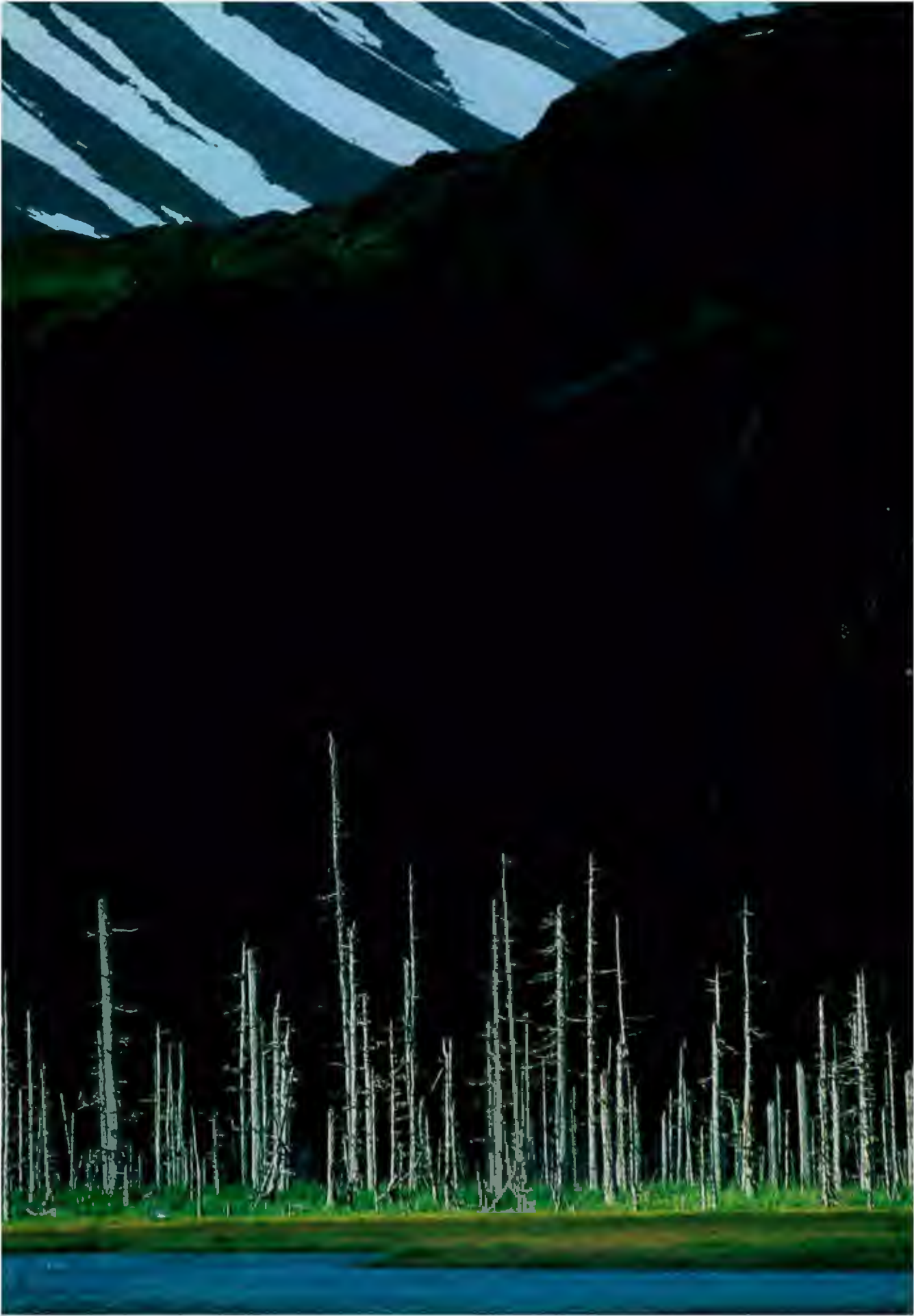
Before setting out on a tour of the spill area, I called on McCammon and Stan Senner, the council’s science coordinator, to see what their balance sheets showed of the gains and losses in Prince William Sound. Were things looking brighter?

“Yes,” said McCammon. “The injured ecosystem is on its way to recovery. But we cannot say that it has recovered because there are still signs of trouble among sea otters and other species on the western, most heavily oiled side of the sound.”

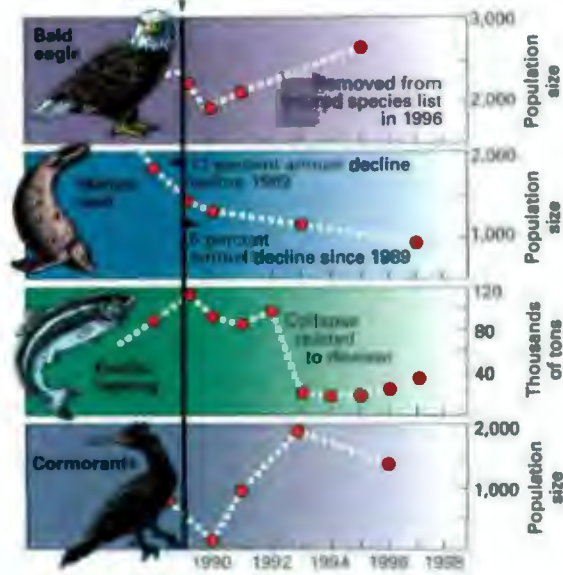
And Senner added: “The ecosystem that is there today is not the ecosystem that was there before the spill, and that is due both to the effects of the spill (Continued on page 106)



On Good Friday, 1964, these woods on the Kenai Peninsula were sentenced to death by drowning from North America's strongest recorded earthquake. On Good Friday 25 years later one of the nation's worst offshore oil spills delivered a kind of reprieve: This tract is part of 640,000 acres of sensitive land being bought and protected with 400 million dollars of Exxon's billion-dollar settlement.

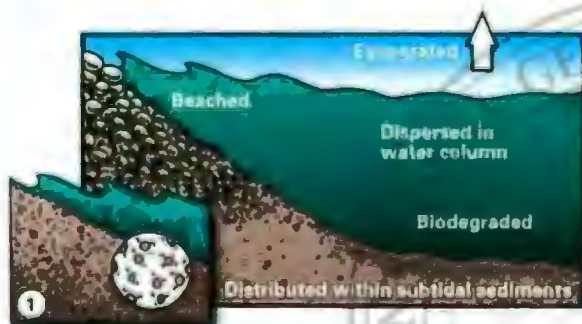


Exxon Valdez oil spill
March 1989



PRINCE WILLIAM SOUND DATA COMPILED BY EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL. ART BY RICHARD L. JONES

It was easy to count oily carcasses after the spill. It has been harder to assess long-term effects. Harbor seals were already in decline, and oil may or may not have contributed to a disease-induced herring crash in 1993. Bald eagles have returned to pre-spill numbers, while cormorants have again dropped.



Less than 15 percent of the spill was recovered. Most of the oil evaporated or biodegraded, but what remains is tenacious. While waves easily wash sandy beaches clean (1), on rocky shores oil can remain beneath and between rocks, sheltered from sun (2). Marshes and mudflats hold oil even tighter (3). Their fine sediments keep oxygen out—and with it the microorganisms that break oil into nontoxic elements.



A decade after disaster: still plenty of oil on this Knight Island cove. "It surprised me," says David Sale, ecotour leader and former damage assessment scientist, holding rocks he pulled from a crevice. "Most beaches haven't changed since I saw them in '91 and '92." But cleaning is expensive, environmentally disruptive, and controversial. The 11-million-gallon spill (right)



Area affected by Exxon Valdez oil spill



Ten years ago the port of Valdez (right) showed the world how *not* to contain oil spills. Now it's an industry showcase. In a monthly drill, workers on one of the port's escort response vessels (below) unfurl a containment boom. **Spills are commonplace in the industry; worldwide, about 50 spills the size of Exxon Valdez or larger have happened since 1970.** After the Alaska spill Congress passed laws designed to reduce the risk of such disasters.



and to natural change, which is happening all the time.”

Among the known effects of the spill was a huge loss of wildlife—perhaps as many as 5,000 sea otters, 300 harbor seals, 22 killer whales, more than 150 bald eagles, and an estimated 250,000 waterfowl and other birds, including murre, cormorants, guillemots, oystercatchers, loons, and ducks. “I don’t think anyone will ever know how many birds were lost,” a U.S. Fish and Wildlife Service official had already told me. “There were windrows of feathers two feet high on some of the beaches.”

But now, according to the council’s monitoring reports, some of the species on the casualty list are looking healthier. The sound’s bald eagle population, for example, was found to be fully recovered in 1996 and is holding strong. The common murre appears to be recovering after sustaining what some scientists believe was a 40% reduction in numbers. Pink

salmon, one of the region’s top commercial species, have been rebounding after several years of high egg mortality in the intertidal stretches of their spawning streams.

That’s the good news. The bad news is that harbor seals, herring, harlequin ducks, marbled murrelets, and pigeon guillemots do not seem to be recovering. The verdict is still out on the loon and the black oystercatcher.

I asked McCammon and Senner about the poor response of the harbor seal, a species of great importance in the subsistence diet of native villagers but one that, like the Steller sea lion, was in a downward spiral in this region long before the spill. Senner said: “In addition to the effects of the spill, there isn’t the abundant prey that seals used to find in these waters. Over a couple of decades we’ve seen the system resetting itself to support fewer seals. But we don’t know why. We’re still looking into it.”

And the herring? The herring had crashed.



While the catches were good until 1992, the following year herring returned for their spawning cycle infected with lesions. Researchers are busy sorting the possible causes—not all necessarily related to oil—from a viral infection to winter starvation. “Herring are the key to this ecosystem,” a fisheries oceanographer in Seward told me. Almost everything eats herring—including herring.

Including people. And how were *they* holding up, those 10,000 or so fishermen, cannery workers, charter-boat operators, and village chiefs sprinkled across the region from Cordova to Kodiak? Molly McCammon shook her head. She knows a thing or two about the Alaska psyche from her years as a journalist, a homesteader in the Brooks Range, a fisheries and subsistence specialist in the governor’s office and the statehouse.

“That’s the sad part,” she said. “The government settled with Exxon early on, in 1991. But

the private individuals who were affected by the spill—their claims are still under appeal, and who knows when they will be settled. There’s not been healing. This has become a metaphor for everything bad that has happened in the region in the past ten years.”

CORDOVA, ALASKA, is a town of some 2,600 people, snug in its harbor on the far southeastern edge of Prince William Sound, under the great green brow of the Chugach Mountains. “Take a New England fishing village and put it down in the Swiss Alps,” says Margy Johnson, a former mayor and the proprietor of the Reluctant Fisherman Inn on the waterfront, “and that’s Cordova.” Where bad things do happen nonetheless.

Over the years Cordovans have confronted, overcome, and moved beyond a number of wrenching events—a fire that razed much of the downtown business district in 1963, the



Prince William Sound's striking vistas conceal not only oily residue but also a changing ecosystem. Alaska has warmed by as much as five degrees F in the past 30 years; glaciers are retreating, the food web is changing, and scientists are scrambling to assess the ramifications. "The spill was a dramatic event, but it was just a blip really," says a restoration official.





great Alaska earthquake a year later that wreaked havoc with the harbor. But it was the aftershock of the spill of the Exxon Valdez that many Cordovans could not—and cannot yet—put behind them, even though no oil came within 60 miles of their community. “Look,” says Margy Johnson, “I’m sorry that some people can’t get on with their lives, because they should. But imagine how hard it must be if you’re in the middle of a class-action lawsuit and it just goes on and on and on. . . .”

In 1994, after a four-and-a-half-month trial in U.S. District Court in Anchorage, a jury awarded the commercial fishermen of Cordova and other affected communities five billion dollars in punitive damages for the economic losses they had incurred as a result of the spill. Exxon appealed. Today, five years later, the judgment is still unpaid, and many of the plaintiffs are bitter and frustrated.

“Before the spill we had a good thing going here,” said Stephen Riedel aboard his 42-foot purse seiner, *Lucky Lady*, in Cordova harbor. “We had confidence. Now we don’t know what

to expect. Exxon and the government just left us out in the cold.” In the late spring Riedel goes east to the Copper River Delta for sockeye and king salmon, then, come July, seines in the sound for pinks. “Prince William Sound isn’t the same,” he said. “But we still have the Copper. It’s the lifeblood of this town.”

Totle Baker also fishes the Copper commercially, and with good results, for it is one of the most productive salmon rivers in the world. One evening she dropped by the Reluctant Fisherman, and we talked about the big river and its delta while the sun, going down, cast a rosy glow across the harbor. “You know,” she said, “some people who depend on the Copper River are beginning to worry that the next big spill will be a break in the pipeline.”

“I didn’t know the trans-Alaska pipeline crosses the Copper.”

“It doesn’t,” she said. “It runs beside it and crosses dozens of Copper tributaries. The pipeline was built to last 20 years. We’re past that now. Just stop to think what a break in it could do to that river.”

THE WAY Jerome Selby views it, the wound has healed, but “there’s still a lot of shrapnel under the scar.” At the time of my visit, Selby was mayor of Kodiak Island Borough, which embraces the namesake city and an archipelago of emerald isles that rise from the Gulf of Alaska to challenge the fogs and furies of the northern seas. The town itself, the oldest in Alaska with European roots, shelters some 7,500 residents, most of whom, directly or indirectly, are economically dependent on the bottom fish, crabs, and salmon the Kodiak fishing fleet hoists from the water. In March 1989 a Kodiak fisherman could feel only pity for the people of Tatitlek and Cordova, and at the same time much relief that Bligh Reef and Exxon’s ruptured tanker were 300 miles away. Five weeks later, Exxon’s slick came to Kodiak Island, and some borough residents have been pitying themselves ever since.

“I’d rather focus on the triumphs that came from this tragedy,” Selby was saying in his office one day. “The science, the research, the critical lands acquired with settlement money. But let’s face it. The disruption of human lives has had no compensation. Families fell apart that summer. When a judge brings the gavel down on a divorce, that’s it. You can’t restore a busted marriage.”

I had heard about that, had poked into some of the reports documenting the social and cultural fallout, had spoken with one of the casualties. She had been married to a Kodiak fisherman. With the big commercial seasons shut down and his boat grounded, the husband shut *himself* down and, she said, spent the summer and fall staring out a window, speaking hardly a word. No change in the winter. Down came the gavel.

Possibly the most painful dislocations occurred in the native villages. First there was the temporary loss of the subsistence resources villagers claim, not just for sustenance but as the crux of their cultural heritage. Even today there is uncertainty among some villagers as to the safety of eating traditional foods harvested from the sea—“clean” by laboratory standards but nevertheless suspicious because of the continuing presence of oil residue. And then there was the stress generated by the cleanup itself; the sudden influx of strangers in hard hats with barrels of cash—\$16 an hour for grunt labor—was enough to tip more

Quality time with a puffin chick doesn’t come easily on this island cliff, but at least it comes. Before 1989, data on regional wildlife were sketchy at best, making it difficult to gauge the spill’s effects. But settlement money has helped turn the region into one of the world’s most studied ecosystems. Biologist Kathy Frost tracks harbor seals with glued-on satellite tags (below). “The past ten years of biology has been tremendous,” she says.



than a few impressionable young village men toward the alcohol and drugs that, in some cases, led to domestic violence. There was trouble like this even on Kodiak.

But Mayor Selby wanted to focus on triumphs, and among his favorites is the Alutiiq Museum, not far from his office. A real success story, he called it, built in 1995 with 1.5 million dollars from the oil spill trustee council as a repository for Alutiiq cultural artifacts, some of which were uncovered by cleanup crews at ancient seaside encampments. “It’s already a big draw for tourists,” Selby said. “There’ll be ten cruise ships in here by the end of the summer. We never had that before.”

To my way of thinking, the most outstanding triumph achieved so far in the wake of the Exxon Valdez disaster has been the effort to protect coastal and upland habitat the old-fashioned way—by owning it and letting it be. The program, into which the trustee council has pumped some 400 million dollars, has widespread support among Alaskans and environmentalists in the lower 48, but there are

His boat's called *Lucky Lady*, but salmon fisherman Steve Riedel (right) is quick to note that it was already named when he bought it a year after the spill. The sound's herring fishermen saw catches plummet in the 1990s; the cause is unclear. Alaska natives have faced fluctuations in their subsistence harvest, and some fear their food is not as safe as experts say. But life goes on. Of his son Loren (below), Old Harbor native Jeff Peterson says, "At least he'll be able to live off the land."



dissenters too, as I would presently discover.

To understand the conflicting perspectives here, it may be useful to examine the intent of the Alaska Native Claims Settlement Act of 1971. The act established among the state's Indian, Eskimo, and Aleut people a number of regional and village corporations, endowed them with cash to invest in profitable ventures, and allowed them to select from existing federal lands millions of acres to help sustain not only the old ways of hunting and gathering but also the corporate way of putting black ink on the bottom line. In the Gulf of Alaska region the villagers, being coastal people, selected much of their land from Chugach National Forest, Kodiak National Wildlife Refuge, and a string of de facto parklands on the Kenai Peninsula and the coast of Katmai.

Fast forward to 1994 and the Exxon Valdez Oil Spill Trustee Council's decision to enhance restoration through habitat protection. But

what habitats would the council protect? Why, none other than many of the lands now owned by the regional and village corporations, which in some cases had been busy pursuing their statutory mandate the new-fashioned way—by clear-cutting timber.

Before touching down at a couple of villages, I chartered out of Cordova in a small plane and flew over some of the lands recently or about to be acquired from the Tatitlek and Eyak Corporations on the eastern side of Prince William Sound. Sawmill Bay and Emerald Cove and Port Fidalgo and Hells Hole. Sheep Bay and Sahlin Lagoon and Alice Cove. Here and there in scattered patches the scalped slopes of clear-cuts passed in review. But here too were clean gray beaches and silver streams twisting through old-growth spruce, and tan meadows and turquoise ponds and brooding peaks with swatches of lingering snow in their shaded couloirs. And having seen the country, I was



better prepared to understand some of the passionate feelings people would express in discussing the pros and cons of selling it back to the government.

In Chenega Bay, home base of one of the first native corporations to strike a deal with the trustee council (59,520 acres for 34 million dollars), there is concern that too much cash in hand could entice some families to move away, further fragmenting a small community already stressed by the oil spill and, 25 years before that, a tsunami that carried off most of the original town and killed 23 people. The Chenegans later rebuilt their village in this new location. "I just hope," said Gail Evanoff, the village council president, "that what the corporation did two years ago, selling the land, doesn't come back at us in ten and bite us all in the leg."

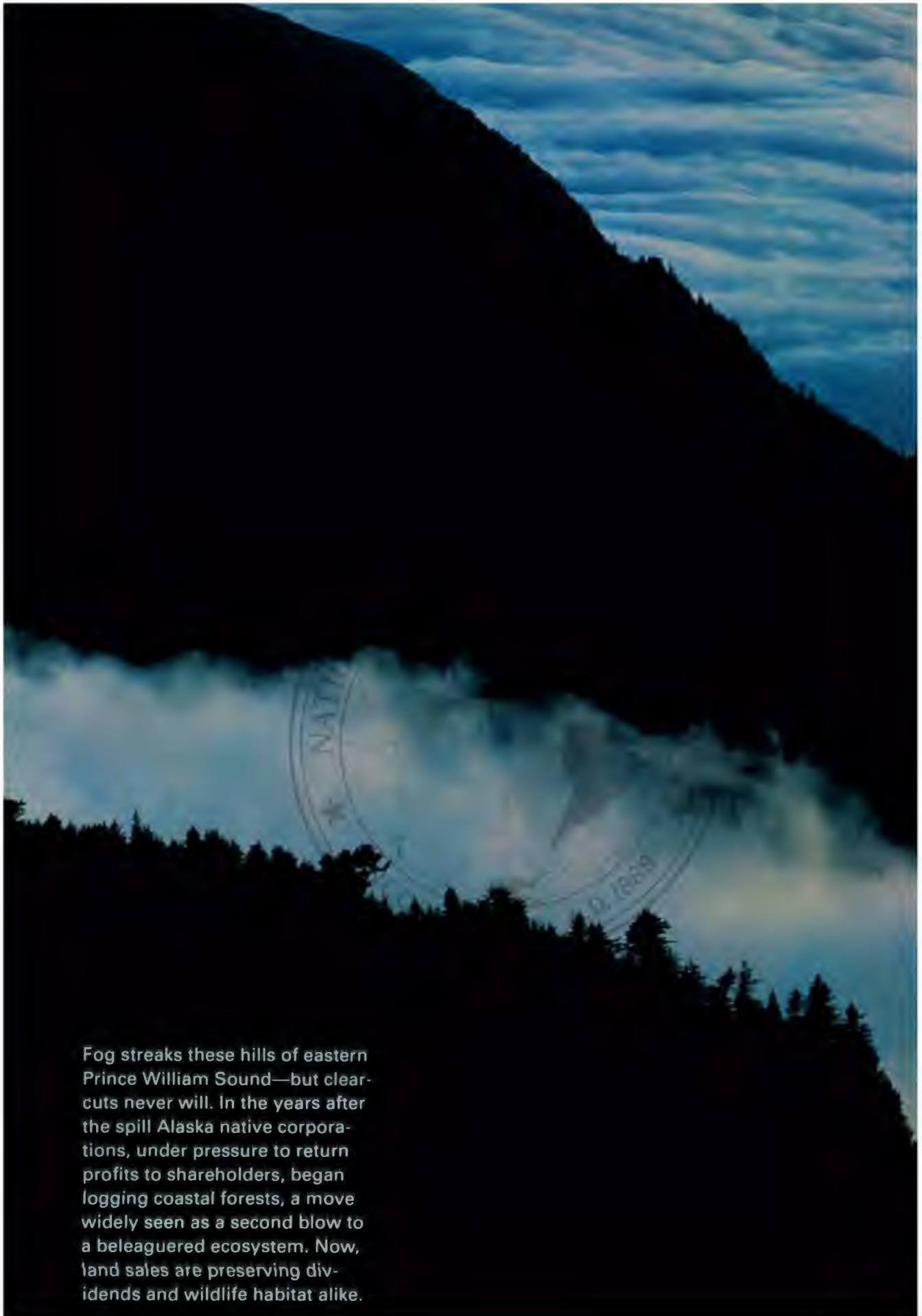
Eyak people also have strong views about selling off their land. In Cordova, where many

of them reside, I stopped by the village council office and spoke with Glenn Ujioka, the council vice president. Ujioka said, "We lose our identity when we lose our land. We'd rather own the land with stumps on it than sell it off. Guess what — trees grow back."

But at his home across town, Jim McDaniel, a member of the Eyak Corporation board, told me: "Hey, there's no good market for timber now. The corporation has tried to strike the most lucrative deal we could in the spirit of protecting the land and our people."

Among the most coveted corporation lands in the entire spill area are several large parcels on Afognak, after Kodiak the largest island in the archipelago. These lands are endowed with dense stands of old-growth Sitka spruce, salmon spawning streams, and excellent breeding, feeding, or nesting habitat for many of the species most seriously affected by the spill.

After buzzing around the sky up north, it



Fog streaks these hills of eastern Prince William Sound—but clear-cuts never will. In the years after the spill Alaska native corporations, under pressure to return profits to shareholders, began logging coastal forests, a move widely seen as a second blow to a beleaguered ecosystem. Now, land sales are preserving dividends and wildlife habitat alike.





was good to get my feet on the ground at Bluefox Bay, at the north end of Afognak, where Jerry Sparrow and his partner, Colleen Rankin, run a low-profile, no-frills wilderness lodge and, semiofficially, keep an eye on things roundabout for their neighbor, Uncle Sam. At the time of my visit, Uncle was about to acquire from native corporations one of those cherished parcels abutting the Red Peak unit of Kodiak National Wildlife Refuge, right across the bay from Sparrow's place.

It is a lonely, faraway kind of country, the north side of Afognak. Sparrow and Rankin and I toured a bit of it in Sparrow's launch, saw hideaway coves and ancient forests, saw puffins and auklets and sea otters and seals in sufficient numbers to make one wonder if anything deadly could ever have happened here, which of course it did. We beached for a bit on the backside of a small island poised between Afognak and the full windblown fury of the Shelikof Strait, and Rankin sat down beside me on the bleached skeleton of a driftwood spruce and said, "You know

what it's all about? The most important thing?"

I said I could only guess.

"It's the land," she said. "I'm an Alaskan, and for Alaskans nothing's more important than the land."

SINCE 1974 the oil spill trustee council has been feeding 12 million dollars a year into an endowment called the Restoration Reserve. It is designed to keep good things happening after the final installment of Exxon's civil settlement comes due in 2001. By the following year the reserve is expected to be worth 140 million dollars. Already the potential beneficiaries are scrambling to stake out a slice of the pie.

Not surprisingly, many interests want the money invested in more research and monitoring. Commercial fishermen, who tend to be skeptical of biologists, seek assurance that the science will have some practical applications to their industry and to fisheries management. And some conservationists call for more habitat protection, preferably in the treeless

Spill-containment vessels are a familiar sight to Prince William Sound's sea otters these days. The *Exxon Valdez* they wouldn't recognize. Congress barred the ship from these waters in 1990—not as a precaution but as a symbol. In many Alaskans' eyes the *Valdez* fouled Eden; the wilderness may recover, but it will never again be pristine.

heath-and-shrub river valleys of Kodiak Island, in the salmon-rich commissaries of the Kodiak bear.

Protecting bear habitat ranks high on the agenda of those who would have the trustee council invest much of its budget—and the Restoration Reserve—in land acquisition. The most desirable lands still to be acquired are some 50,000 acres, formerly part of Kodiak National Wildlife Refuge but now owned by the Koniag regional corporation, embracing the Karluk and Sturgeon River watersheds. The Karluk is said to support runs of three million fish a year—all five species of Pacific salmon plus steelhead and arctic char.

With Jay Bellinger, the Kodiak Refuge manager, I flew over the Karluk and the Sturgeon, and bears aplenty were there to be seen. The bears, he explained, den in the high country but store up protein when salmon run thick in the rivers below. "Koniag picked up the best of it," Bellinger said. "We kept the bedrooms, but they got the kitchens."

Though purchase negotiations between the trustee council and the corporation have not been concluded, a conservation easement prevents development on the Karluk and Sturgeon until 2002, the year the Restoration Reserve comes of age.

There is another, somewhat diffuse constituency, however, that would like to see more money invested in the prevention of any future oil spill and in the capability to respond effectively, should it ever come to that. Not that prevention and response have been ignored over the past ten years. On the contrary, the government, the Alyeska consortium that manages the pipeline terminal at Valdez, and the oil companies that own the tankers plying Prince William Sound have all made substantial investments in new equipment and procedures designed to cut the risk factor closer to zero.

To ensure safer tanker operations, for example, new escort procedures are in place, coastal

pilots stay on outbound ships longer, radar coverage has been extended, and reduced speed limits are in effect. On the response side, three large vessels equipped to assist a stricken tanker are on constant standby in the sound, containment and cleanup supplies are stockpiled at a number of communities, and airborne chemical dispersants are ready to fly out of Anchorage on a moment's notice.

If there is any significant worry about a weak spot in the defenses, by most accounts it is a fear that the industry might win postponement of a **federal mandate that all tankers in U.S. waters have double hulls by 2015.** According to a U.S. Coast Guard study, if the *Exxon Valdez* had been equipped with a double hull, as much as 60 percent less oil would have entered the water. As it is, only three of some 28 tankers operating out of Valdez now sail through Prince William Sound on the safety cushion of a second hull.

Yet Al Maki of Houston, Texas, an Exxon environmental adviser who has spent much of the past decade in Alaska, told me that the safeguards now in place leave him with a "comforting feeling." Did he feel sufficiently comfortable to predict that a major oil spill—from a tanker—would never again occur in Prince William Sound or the Gulf of Alaska?

"No one can provide a 100 percent guarantee that it won't happen again," Maki said. "But if it ever did, you can be sure there would have to be a highly unusual event of great magnitude, like an earthquake or a tidal wave, to make it happen."

It's good to hear these assurances. Yet now as I sit in my electrified work space, sated with all the comforts of oil, I have to weigh the technological confidence of Houston, Texas, against the commonsense hunch of a man in a skiff from Tatitlek, Alaska, riding the chop of Prince William Sound. For as we turned away from Bligh Reef that morning only a memory ago, I had asked Gary Kompkoff the same question. I asked him if he thought there could ever be another spill like the last one.

"It won't happen right here," he said.

"But will it happen?"

His answer was a long time coming, his voice so soft and low I could barely hear it. He said, "Plan on it." □

Share your thoughts about the *Exxon Valdez* spill at www.nationalgeographic.com/ngm/9903.