Kenai Fjords National Park

National Park Service U.S. Department of the Interior





Spring bird surveys along the shores of Kenai Fjords National Park are one of the legacies from the Exxon Valdez Oil Spill.

The day dawned like any other, barely. Within minutes (at 12:04 a.m. on March 24, 1989 to be precise), the way we think of oil, how we manage commercial shipping, and how the National Park Service manages resources changed forever.

The Exxon Valdez ran aground on Bligh Reef in Prince William Sound. Carrying 1,264,155 barrels of oil bound for Washington, the ship had maneuvered out of the shipping lane to avoid icebergs. The timing of the spill, remote and spectacular location, thousands of miles of rugged and wild shoreline, and the abundance of wildlife combined to make it an environmental and societal disaster well beyond the scope of other spills.

This flyer provides answers to some common questions concerning the Exxon Valdez Oil Spill (EVOS) and its impacts upon Kenai Fjords National Park. The spill represents a watershed event in park management—what we learned from the experience 20 years ago has a profound impact on how we operate today. Some of the lessons learned include:

- Response to a major event or incident is complex, requires careful yet clearly identified management, exemplary leadership, and specialized skills.
- The lingering effects of such an event can be difficult to identify but are vitally important to understand.
- Prevention is inordinately cheaper than cleanup.
- Distance doesn't necessarily mean you're safe (after nearly 2 months, Katmai National Park was struggling with fresh oil).
- We didn't know much about our resources and still today have a lot to learn—a realization which helped initiate natural resource Inventory &Monitoring, coastal mapping, and archeological survey efforts.
- We can and must work well with others—local communities, business, and state & federal government agencies.

Oil Spill Facts & Figures

- 257,000 barrels.....of oil were spilled (equivalent to 11 million gallons or 125 olympic-sized swimming pools).
- 17,000 barrels.....of oil were recovered (750,000 gallons).
- 1,300 miles.....of shoreline were impacted.
- 460 miles.....the distance the spill stretched from Bligh Reef to the village of Chignik on the Alaskan Peninsula.
- 512,000 feet (almost 100 miles)...of containment boom used for cleanup.
- 11,000 people...employed by Exxon to assist with cleanup efforts.
- 250,000 seabirds, 2,800 sea otters, 300 harbor seals, 250 bald eagles, 22 killer whales, and billions of salmon and herring eggs.....the 'best' estimate of how many animals died outright from the spill.

Resources

Exxon Valdez Oil Spill Trustee Council <u>http://www.evostc.state.ak.us/</u>

WHAT HAPPENED

HOW MUCH OF THE PARK WAS OILED?

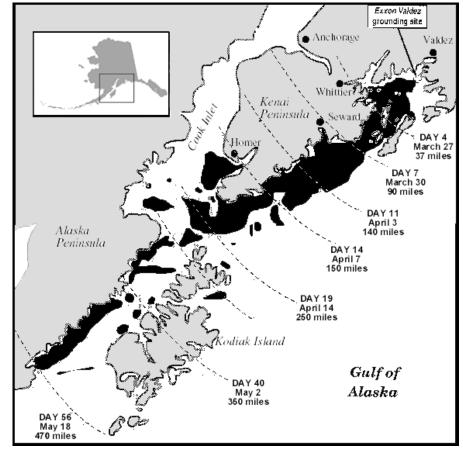
Unlike coastlines in Prince William Sound that were hit by oil within hours or days of the grounding of the Exxon Valdez, the coastline of Kenai Fjords National Park was spared from oiling for nearly two weeks after the onset of the disaster. This gave park managers a brief window to prepare for the arrival of the oil. Initially, response efforts were aimed at keeping the oil out of critical salmon spawning areas by deploying protective boom at the mouths of several rivers and lagoons. There was also hope that the oil might be kept off of the beaches altogether by skimming it from the water before it came ashore. For several days the oil held offshore in a 20 to 30 mile wide sheen and many separate patches of mousse, or weathered and thickened oil. Unfortunately, the oil skimmers were unable to keep the oil from the beaches. A storm that blew in on the night of April 10 sent the first oil ashore in Kenai Fjords National Park.

In the end, approximately 20 miles of the Kenai Fjords coast received oil. This is about five percent of the total coastline in the park and just a fraction of the total coastline oiled during the disaster. Fortunately, the most sensitive salmon spawning areas in the park did not receive oil. Areas classified as moderately or heavily oiled include Pony Cove, Verdant Cove, Taroka Arm, Black Bay, Beauty Bay, Yalik Bay, and McArthur Pass.

HOW MANY ANIMALS DIED FROM THE OIL SPILL?

No one knows for certain how many animals died. Across Alaska, the carcasses of more than 35,000 birds and 1,000 sea otters were found after the spill; but since most carcasses sink, this is considered to be a small fraction of the actual death toll. The best estimates are: 250,000 seabirds, 2,800 sea otters, 300 harbor seals, 250 bald eagles, up to 22 killer whales, and billions of salmon and herring eggs.

The majority of dead birds identified (74%) were murres. Most (88%) were killed outside of Prince William Sound. Due to the timing of the spill, murres were gathered in large pre-breeding aggregations around the Chiswell, Pye and Barren Islands. Few puffins and kittiwakes had yet to return from offshore wintering areas and were therefore spared the direct effects of the oil.



The Exxon Valdez oil spill stretched from Bligh Reef 460 miles to the village of Chignik on the Alaska Peninsula. Map courtesy Exxon Valdez Oil Spill Trustees Council.

Booms were used to contain oil that might run off the shore during cleanup (Pony Cove on September 2, 1989, is shown below); as well as to corral and collect oil in open waters and protect unimpacted shoreline.



WHAT RESOURCES IN KENAI FJORDS NATIONAL PARK WERE AFFECTED?

Since the park boundary ends at high-tide, most of the oil remained in adjacent stateowned submerged lands. Wildlife however, is not aware of this change in jurisdiction.

The well-known resources affected shoreline, sea otters, birds, fish—tell a heartbreaking story. The spill also highlighted the importance of less charismatic resources such as clean water, beach sediment, phytoplankton, and bivalves. The loss of these resources has a cascade effect on the animals that live in or feed upon them.

Seward became a hub of wildlife treatment shortly after the spill occurred. Facilities were set up for cleaning and caring for sea otters, seabirds, and bald eagles; and volunteers from the local community contributed many hours to this effort. Success rates varied, and many animals could not be saved. One hundred eightyfour sea otters were brought to Seward, and eventually only 19 of these were released back into the wild. Success rates were a bit better with birds. Of 1,088 seabirds brought to Seward, 627 were released. Twenty-two bald eagles arrived alive in Seward, and 13 of these were released.

About 6,200 birds were collected along the Kenai Peninsula coast, with many of these undoubtedly coming from the beaches of Kenai Fjords National Park. This comprises about 20% of all birds collected during the spill response. The number of birds found within park boundaries as opposed to those found elsewhere along the Kenai Peninsula has never been tallied.

The massive effort to document damage and cleanup oil led to people surveying and walking on beaches that are rarely visited. As a result, many new archeological sites were discovered that were previously unknown to scientists. The documentation of these sites increased our understanding of former human habitation of what is now Kenai Fjords National Park, but also exposed these resources to the potential threat of human disturbance.

Additional Oil Spill Information

Exxon Valdez Oil Spill Trustee Council For Oil Spill facts, restoration projects, and recovery status of the Exxon Valdez Oil Spill <u>http://www.evostc.state.ak.us/</u>.

Office of Exxon Valdez Oil Spill (EVOS) Damage Assessment and Restoration The National Marine Fisheries Service administers and coordinates federally funded research

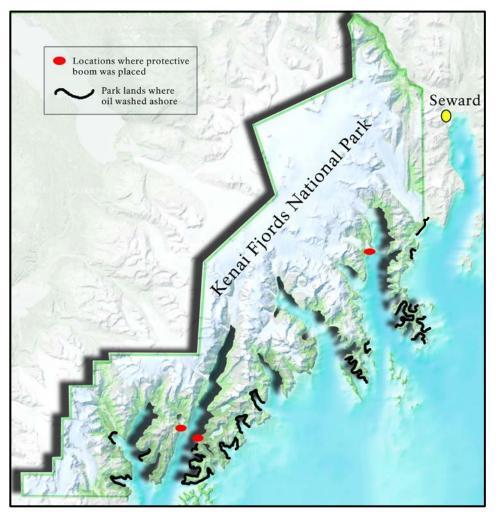
http://www.fakr.noaa.gov/oil/.

Hard Aground Disaster in Prince William Sound

Ten years of stories, photos and reference material from the Anchorage Daily News <u>http://www.adn.com/evos/</u>.

Kenai Fjords Facts & Figures

- 10 April 1989.....the first day that oil reached shores of Kenai Fjords National Park (oil reached Seward several days prior).
- \$7.3 million.....minimum estimate of direct NPS costs attributed to the spill.
- Mosquito fleet.....the small skiffs and vessels that went to the innumerable small bays and beaches to clean oil, where the larger barges were unable to reach.
- Pavement.....a commonly-used term to describe the surface of beaches impacted by the thick oil mousse.
- 2 pounds / 100 square feet.....the rate at which Customblen fertilizer was applied on selected beaches to promote bioremediation.
- 2 bobcats.....used on Yalik beach to remove oil.



Within Kenai Fjords National Park, booms were placed in 3 locations to protect salmon streams. The park coastline which received oil and where response activities were directed was limited compared to other areas in the Gulf of Alaska.

CAN YOU STILL FIND OIL ON BEACHES?

Yes. Despite the tremendous cleanup efforts, not all beaches were cleaned and some beaches remain oiled today. The National Park Service has determined that it is too disruptive to the marine nearshore environment to attempt to remove the oil that remains. There is not much visible oil on the beaches however, and you have to look to find it.



If you look in the right locations, oil from the Exxon Valdez spill can still be found on selected beaches in Kenai Fjords National Park; as seen here in 2003.

Supporting.....

Alaska Fisheries Science Center

The Habitat Assessment and Marine Chemistry Program assesses the impact of development and contaminants on marine and tidal species and their habitats, and maps and evaluates habitat quality. http://www.afsc.noaa.gov/ABL/Habitat/ablha b_default.php

NOAA Office of Response and Restoration

Emergency national response strategies, pollutants in the environment, restoration and planning, section for students and teachers studying spills. http://response.restoration.noaa.gov/

Environmental Protection Agency

EPA is the lead federal response agency for oil spills occurring in inland waters, and the U.S. Coast Guard is the lead response agency for spills in coastal waters and deepwater ports.

http://www.epa.gov/oilspill/

.....Organizations

U.S. Geological Survey, Alaska Science Center

Provides long-term data collection and monitoring, research and development, and assessments and applications for the U.S. Department of the Interior.

http://www.absc.usgs.gov/research/program s/ecosystems_habitats.htm#EVOS

Ocean Alaska Science & Learning Center

Dedicated to understanding and preserving the marine ecosystem connecting Alaska's National Parks through research and education.

http://www.oceanalaska.org/education/multi media-podcast.htm

Southwest Alaska Network, Inventory & Monitoring Program

Provides a scientific foundation for effective, long-term protection and management of natural resources

http://science.nature.nps.gov/im/units/swan/



A bald eagle is cleaned to remove oil contaminants from the Exxon Valdez Oil Spill. Although hastily assembled, the U.S. Fish & Wildlife Service bird cleaning station in Seward processed thousands of birds. Photo courtesy International Bird Rescue Research Center.



Oil mousse on blue mussel (Mytilus) bed, Morning Cove; August 1989.

RECOVERY

WHAT KIND OF RECOVERY ACTIVITIES WERE UNDERTAKEN AT THE PARK?

Hot water treatment was popular until it was determined that the treatment could be causing more damage than the oil. Small organisms were being cooked by the hot water.

High pressure cold water treatment and hot water treatment involved dozens of people holding fire hoses and spraying the beaches. The water, with floating oil, would trickle down to the shore. The oil would be trapped within several layers of boom and either be scooped up, sucked up or absorbed using special oil-absorbent materials.

Mechanical cleanup was done by removing oiled debris by hand and with the use of shovels.

Bioremediation, or the application of fertilizer to stimulate microbes which eat oil, was used in cleanup efforts in Kenai Fjords. The National Park Service banned selected forms of bioremediation (fertilizer) that were known to be toxic to marine life. Workers cleaning an oiled beach, in Paguna Arm; June 13, 1989.





Hot water wash in Pony Cove; August 30, 1989.

HAS THE PARK RECOVERED FROM THE OIL SPILL?

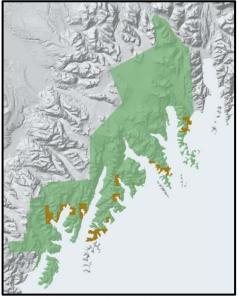
The topic of recovery is contentious, as it depends on your definition. Ecosystems are dynamic, ever-changing, with natural cycles and variability. As time passes, distinguishing cause and effect from the Oil Spill becomes increasingly difficult.

One result of the oil spill settlement is habitat protection through land purchases. It was determined that purchasing land was a more effective way to help recovery than the millions of dollars that were dedicated to attempting to clean oiled animals. In May 1997, Secretary Bruce Babbit signed the agreement to purchase 31,190 acres of privately held land within the boundaries of Kenai Fjords National Park. The Exxon Valdez Oil Spill Trust and the criminal restitution fund paid just over 15 million dollars for the acreage within the park and 2,280 acres within Alaska Maritime Wildlife Refuge. The park continues to acquire limited rights to Nanwalek

(English Bay) Corporation lands to protect valuable coastal habitat.

"There are still effects up there from the spill," Babbitt said in an interview. "But I'll tell you, getting some of these critical lands into public ownership has really been helpful with the eye toward the long range. It's enormously satisfying. Just remarkable." The idea behind the purchases is basic: speed wildlife recovery by ensuring that wild places stay wild.

The Exxon Valdez Oil Spill Restoration Plan provides periodic updates on the recovery of injured species. The most recent of these identify that the following species have yet to fully recover: herring, clams, mussels, pigeon guillemot, black oystercatchers, and sea otters http://www.evostc.state.ak.us/recovery/sta tus.cfm.



Kenai Fjords National Park shown in green, with lands jointly protected by the NPS and Nanwalek Corporation in brown.

ARE THERE ANY UNANTICIPATED IMPACTS FROM THE SPILL?

From oiled beaches to species decline, the lingering effects of oil within the marine and intertidal environment are with us today, twenty years after the spill. Beneath the appearance of recovery, subtle processes of the spill are affecting the landscape and the species that live there.

Much of the information comes from research within Prince William Sound. Some examples:

- Oil is still present on many beaches and in the substrate after 20 years.
- Deeply penetrated oil still leaches from some beaches into the ocean.
- Intertidal animals, such as mussels, are still contaminated by oil that remains in the sediments and water, affecting not only the mussels but any animals (including people) that eat them.
- Toxic subsurface oil and chronic exposures persist and continue to affect fish and wildlife at sublethal levels.

- Rocky beaches, stripped of plant cover by high-pressure hot-water washing, have not fully recovered and the process of plant succession is slow.
- Cleanup can be more damaging than the impacts of the oil itself. What has failed to recover are the invertebrate communities living in the substrate. This is the most noticeable difference between beaches that received high pressure hot water washing than those that did not.

Another impact from the spill was how the National Park Service and other government agencies plan for, coordinate, and respond to emergencies. Through a series of critiques and reviews, the 'Incident Command System' and coordination of emergency response systems has greatly improved.



Jellyfish soaked in oil; April 19, 1989.

IS THERE ONGOING MONITORING?

The 1989 Exxon Valdez Oil Spill highlighted the need for baseline data on the ecosystem in order to accurately assess injury to the resource. The response of management within the park was to institute a variety of projects, programs and collaborative efforts to collect that data. Some of the resulting National Park Service collaborative efforts and partnerships are the Ocean Alaska Science and Learning Center, the Southwest Alaska Network (part of the National Inventory and Monitoring Program).

Kenai Fjords National Park and the adjacent Alaska Maritime National Wildlife Refuge have ongoing monitoring projects of many marine animal species as well as projects that monitor their environments. These projects are both in-house and via partnerships with many state, federal and non-profit organizations. Some examples:

- Marine nearshore vital sign monitoring, including:
 - water chemistry,
 - kelp & eelgrass habitats,
 - intertidal invertebrates,
 - seabird surveys,
 - black oystercatcher nesting surveys,
 - sea otter populations;
- Periodic beach surveys of oiled sites;
- Bald eagle monitoring; and
- Pigeon guillemot, common murre, & kittiwake monitoring.

Scientific Studies

Long-Term Ecosystem Response to the Exxon Valdez Oil Spill Peterson, C.H., et al. 2003. Science. Vol. 302, pp 2082-2086. http://www.afsc.noaa.gov/Publications/misc_pdf/peterson.pdf

Lessons to be Learned: The NPS Administrative History & Assessment of the Exxon Valdez Oil Spill

Kurtz, R.S. 1995. An historic account and policy assessment of the NPS response; http://www.nps.gov/history/history/online_books/akro/exxon_valdez.pdf



Tom Dean and Heather Colletti monitoring rocky intertidal habitat in Nuka Bay as part of nearshore vital sign monitoring; June 13, 2007.

R E S P O N S E S

WHAT SHOULD I DO IN CASE OF AN OIL SPILL?

The National Response Center (NRC) is the sole federal point of contact for reporting oil, chemical, radiological, biological, and etiological spills. If you have a spill to report, contact them at 800.424.8802 (or 202.267.2675). You can also check their website for additional information and procedures. The NRC operates 24 hours a day, 7 days a week, 365 days a year http://www.nrc.uscg.mil/nrchp.html.

Alaska state law also requires all oil and hazardous substance releases to be reported to the Department of Environmental Conservation. During normal business hours call the nearest DEC Area Response Team.

Outside normal business hours call 800.478.9300.

State of Alaska notification requirements include:

reported as soon as the person has knowledge

• Any release of a hazardous substance must be

• Any release of oil into water must be reported as soon as the person has knowledge of the

http://www.dec.state.ak.us/SPAR/spillreport.htm

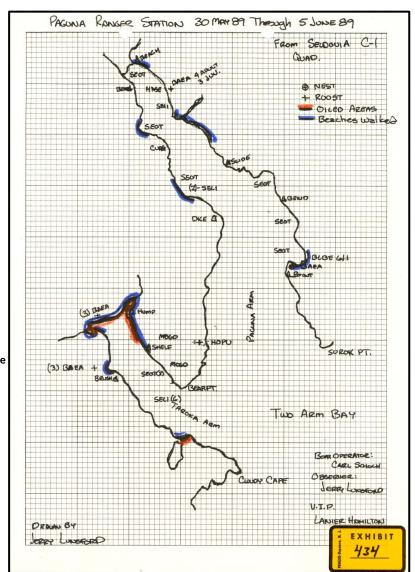
Additional information is available from the National Response Team. They provide technical

- Central (Anchorage): 907.269.3063
- Northern (Fairbanks): 907.451.2121
- Southeast (Juneau): 907.465.5340

of the discharge.

discharge.

Bags of oily debris near Berger Bay, Nuka Island; July 25, 1989.



assistance, resources and coordination on preparedness, planning, response and recovery activities for emergencies involving hazardous substances, pollutants and contaminants, hazmat, oil, and weapons of mass destruction http://www.nrt.org/. Detaild and na descrip beach were p by har Pagun Taroka showr from s condu May a of 198 drawn Lunsfe

Detailed maps and narrative descriptions of beach surveys were prepared by hand. Paguna and Taroka Arms are shown here from surveys conducted in May and June of 1989, and drawn by Jerry Lunsford.

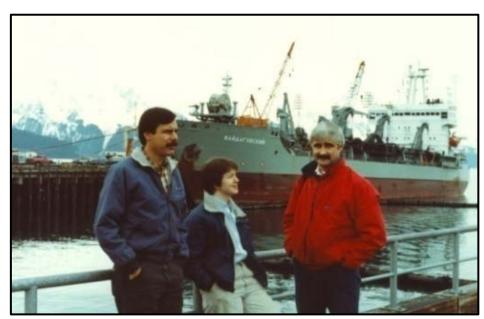
Placing boom to protect salmon streams in McCarty Lagoon; April 4, 1989.

R E S P O N S E S

ARE WE BETTER PREPARED IF ANOTHER SUCH SPILL OCCURS?

At the time of the Exxon Valdez Oil Spill, the park was reviewing a draft of its first spill response plan. In response to the Exxon Valdez Oil Spill, the "Oil Pollution Act of 1990" was unanimously passed by Congress. This legislation specified that planning and response occur at 4 levels: 1) unified plan, 2) subarea plan, 3) local emergency plan, 4) vessel or facility plan. Today, spill response is a coordinated, combined effort by a host of local, state, and federal government agencies and individuals. Each year classroom and field exercises engage local communities and ensure we are better prepared.

The US Coast Guard is the lead agency coordinating spill response in US coastal waters and deepwater ports. With offices in Seward and a continuous presence on marine radios (Channel 16), they are a critical resource in our community http://www.uscg.mil/top/missions/Protect_ NR.asp.



Investigators near Soviet oil skimmer M/V Vaydaghubsky in Seward; April 20, 1989.

HOW HAS OUR ABILITY TO RESPOND TO AN OIL SPILL IMPROVED?

With input from a host of partners, we now have a number of tools at our disposal when the next spill occurs. Geographic Response Strategies for Alaska divide the state into 10 sub-areas. Each area has a suite of detailed maps labeled with sensitive sites, response equipment available, as well as locally applicable suggested techniques for oil removal

http://www.dec.state.ak.us/spar/perp/grs/home.h tm.

In addition to response strategies, there is a list of 'potential places of refuge', or pre-identified sites that may aid decision-makers in responding to vessels in distress. These plans are tailored to protect sensitive areas from impacts from possible spills and are map-based to save time during the critical first few hours of a vessel response

http://www.dec.state.ak.us/SPAR/PERP/ppor/home.htm.

Unfortunately, several spills since 1989 have tested our ability to respond. The 2004 Selendang Ayu spill in Unalaska is one case in point. To be clear, resource damage occurred and there is room for improved response abilities to limit preventable damages. There was however; a rapid coordinate response, a clearly defined damage assessment and recovery effort, and a critical evaluation to ensure we continue to learn from and improve our response to oil spills. Collecting oil mousse at Pony Cove; April 14, 1989.



Community Information

Prince William Sound Regional Citizens Advisory Council

Citizen's site committed to being a voice for communities affected by oil industry decisions in Prince William Sound. <u>http://www.pwsrcac.org/</u>

Cook Inlet Regional Citizens Advisory Council

Fosters long-term partnerships between industry, government, & coastal communities. <u>http://www.circac.org/</u>

A Day in the Life of a Park Ranger

In 1989, park rangers Joe Meehan and Laura Greffenius were stationed in Nuka Bay from May 30th to September 16th. The following excerpts from their June log entries offer insight into their experiences, just two months after the Exxon Valdez Oil Spill.

June 1: Motored over to Yalik Bay to check on oil cleanup crew. ...A gooey brown oil film has been deposited on the rocky shoreline at the mouth of the creek. The crew can only work at low tide and are picking up the oiled gravel and rocks with shovels and hauling it to the boats in plastic garbage bags. JM

June 5: Motored to Beauty Bay to inspect the beach that had been cleaned up by type "A" cleanup [oil cleaned up by hand]. A little over 6,000 bags of oiled gravel & debris were taken off the beach. The only sign of oil was one oil soaked log. Hard to believe this was a heavily impacted beach. JM

June 11: Rain on our roof this morning, seems like a tradition. But, after a rainy A.M., our skies gradually became bluer. Our world in Nuka Bay opened up for us today!! This was the first time since we arrived May 30th that we have been in base camp and have been able to see this fabulous scene before us in its entirety. LG

June 14: Today 13 persons working on beach [Yalik Bay]...they were not digging but using absorbent pads to clean up stream bed as salmon run begins later this [sic]. Seemed like a slow tedious process. Still lots of oil spots permeated into the gravelly, sandy substrate. LG

June 15: Very busy day-3 helicopters, 2 fixed wings and seven boats in the bay. Seems the Yalik operation has become a politically sensitive item. Exxon doesn't have a plan of operation submitted for the cleanup operation. Alaska DEC was concerned that too much of the streambed and tidal zone was being dug up and hauled away, so they prohibited them from hauling away any more oiled gravel. They have resorted to rubbing the rocks and sediments with oil absorbent pads. This seems futile and has caused bad feeling with most parties. This stream has been given high priority for cleanup as pink salmon will spawn in it starting around July 1. JM

June 18: The "Mosquito Fleet" has concentrated its efforts in Morning Cove (faces northeast) and Wildcat Cove (faces southeast). Because of the direction these coves are facing, these locations have been hard hit by the oil coming in from the open ocean...The workers will cleanup the cove of oiled debris, floating oil, and scoop up oil off the rocks one day, then when they return the next morning, the accumulation of oil will be just as bad or worse...LG

SUPERINTENDENT'S THOUGHTS

Anne Castellina Superintendent from 1988-2004

The first task I was assigned as the new Superintendent of Kenai Fjords National Park in 1988 was to rewrite the Land Protection Plan. The grounding of the Exxon Valdez ironically provided the opportunity to make some of it happen. It came at a tremendous cost though.

The environmental and human toll of the Oil Spill was widespread and longlasting. It is difficult for those who were not involved to understand the emotions and the sheer exhaustion that affected every member of the park staff. Spill response went on, it seemed forever. This wasn't a fire where a good rainstorm allowed everyone to pack up and go home. It was a war – a daily battle with Exxon, the Coast Guard, and the Department of the Interior, with suppliers who had no more supplies, with the weather that allowed the oil to come back again and again.

Following the initial response came cleanup. With summer coming we divided the park staff into those who worked on the spill and those who ran the park. Everyone rose to the challenge – it was inspiring and humbling and a tremendous privilege to work alongside the small park staff and with all those who came to help us. Summer came and left and we were still engaged in spill activities on a daily basis.

For the next two summers there was cleanup and surveys. Surveys charting the fate and persistence of the oil that hit the shores of the park continue to this day, 20 years later. And 20 years later, on a hot day, you can still see the rainbow sheen in the water and smell the oil as it seeps from park beaches. I suspect some of it will always be there.

When the dust settled and the spill became a long-term job for the lawyers, the park land protection plan came out once again. Land purchases were made with oil spill settlement money, allowing some closure. We paid a much bigger price for that land than the dollars that were spent. We should never forget that.

Jeff Mow Superintendent from 2004-present

For the average visitor coming to Kenai Fjords in 2009, the impacts of the Exxon Valdez Oil Spill are not readily evident. As a matter of fact, one has to look pretty hard to find a patch of oil hidden amongst the boulders on a wellprotected beach.

The majority of visitors today are more focused on the impacts of climate change than the past event known as the Exxon Valdez Oil Spill. In the past twenty years there have been declines of over 80% of at least three key species in the park: Steller sea lions, harbor seals, and Kittlitz's murrelets. We feel that while the impacts of the Exxon Valdez Oil Spill are not directly responsible for these declines, the event exacerbated changes that were already underway, changes largely attributable to climate change.

We also see lingering impacts of the spill in the ways we manage the park. The spill and the ensuing cleanup activities exposed many previously unknown archeological sites. These sites required protection then and they require protection now. Habitat restoration activities that were begun in the aftermath of the spill continue. We remain vigilant about being prepared for a similar event in the future.

Community Input

"We're saddened to see it come this far up the bay. We were hoping it wouldn't." Seward Deputy City Manager Darryl Schaefermeyer.

Reflecting on what the spill wrought, the late *Chief of the Native Village of Port Graham, Walter Meganack Sr.*, spoke of the time "when the water died." He said "the land and the water are our sources of life. The water is sacred. On the beaches . . . [we] [s]pend all day cleaning one huge rock, and the tide comes in and covers it with oil again. Spend a week wiping and spraying the surface, but pick up a rock and there's four inches of oil underneath."



National Park Service U.S. Department of the Interior

Kenai Fjords National Park PO Box 1727 Seward, AK 99664

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National Park Service US Department of the Interior

This is a special fact sheet to answer common questions associated with the Exxon Valdez Oil Spill and commemoration of the 20th anniversary.

Editors Fritz Klasner, Kristy Sholly, Jim Pfeiffenberger

Contributors Anne Castellina, Jeff Mow

Lynn Aderholt, CJ Rea Shelley Hall, Peter Armato

All photos courtesy National Park Service unless otherwise noted.

Comments? Write to: Jeff Mow, Superintendent Kenai Fjords National Park PO Box 1727 Seward, AK 99664

KEFJ_information@nps.gov Phone: 907-224-7500

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

Kenai Fjords National Park

Kenai Fjords National Park was established on December 2, 1980, by the Alaska National Interst Lands Conservation Act (ANILCA). The park comprises approximately 670,000 acres within its legislative boundary. The National Park Service manages approximately 607,000 acres, with the remaining acreage owned and managed by the State of Alaska, Port Graham Native Corporation, and private inholders.

The park is located on the east coast of Alaska's Kenai Peninsula, thrust into the Gulf of Alaska, windward of the Kenai Mountains. Large fjords and bays cleave the coastal mountains and create a rugged coastline. A narrow slice of temperate rain forest fringes the coastline and provides a brief respite from the stark seas and expansive Harding Icefield. The icefield stretches from tidewater glaciers at sea level to broad expanses of ice and snow, interrupted only by the nunataks of the Kenai Mountains.

The park enabling legislation identifies the following purposes: "to maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers, and coastal fjords and islands in their natural state; and to protect seals, sea lions, other marine mammals, and marine and other birds and to maintain their hauling and breeding areas in their natural state, free of human activity which is disruptive to their natural processes" (ANILCA sec.201(5)). Unlike most other park units added to or created in 1980, ANILCA did not allow for sport hunting or federal susbsistence in Kenai Fjords National Park.