



The Novarupta

A trip planning and informational guide to
Katmai National Park



ANELA RAMOS

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ROY WOOD



NATIONAL GEOGRAPHIC SOCIETY

Three National Parks, Many Amazing Experiences



National Park Service
U.S. Department of the Interior

**Alagnak Wild River
Aniakchak National Monument &
Preserve
Katmai National Park and Preserve**

Katmai was declared a national monument in 1918; Aniakchak in 1978. The Alaska National Interest Lands Conservation Act of 1980 established Alagnak Wild River, while Katmai and Aniakchak were expanded to include national preserve areas. Katmai was also redesignated a national park. Together, these lands encompass nearly five million acres of unique landscapes managed by the National Park Service.

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Welcome to Katmai Country

2018 marks Katmai’s 100th anniversary as a unit of the National Park System, making it an especially great time to visit. President Woodrow Wilson originally created Katmai National Monument in 1918 to protect the area in and around the Valley of Ten Thousand Smokes. Since then, Katmai has been expanded and become a National Park and Preserve. Katmai is located on the Alaska Peninsula, a vast and beautiful landscape where the National Park Service (NPS) also has the privilege of managing Aniakchak National Monument and Preserve, and the Alagnak Wild River. Regardless of your interests, these areas offer a diversity of outstanding Alaskan experiences.

The geologies of these places are at once both ancient and new. The parks’ diverse landscapes are comprised of expansive mountains; active volcanoes; glaciers; a wild and beautiful seacoast; and freshwater rivers and lakes. The cataclysmic eruption of Novarupta in 1912 took place long ago when compared to a human lifespan, but is geologically recent. Even today life continues to recover from the effects of the eruption.

Human habitation of this region goes back many thousands of years and the resulting history speaks of thriving communities, as well as their perseverance through periodic times of difficulty. This story continues as Alaska Natives maintain their traditional lifeways in the momentum of an ever-changing world. Their connection to these lands is profound and worthy of our unwavering support and respect.

It is through the efforts of many dedicated individuals from diverse walks of life, over the years and down to the present, that has ensured that wildlife remains abundant and diverse across the region. Today, all three NPS units continue to support world class fisheries and wildlife viewing opportunities. To be able to observe the Alaskan brown bear in its natural environment is a testament to the priorities of a nation, and a gift to humankind today. Our charge is to carry this legacy on into the future as Katmai enters its second century.

We hope you might come and experience the sights, sounds and feel of these special places for yourself this year; if you do, you are sure to take back memories that will last a lifetime.

Mark Sturm
Superintendent

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Alagnak

Wild River

Unbounded by dams or artificial channels, the Alagnak River meanders its way from headwaters in the Aleutian Range across the Alaska Peninsula to Bristol Bay and the Bering Sea. The upper 69 miles of river are designated a national wild river, meaning free flow, no dams, and little human impact.

From the time of the earliest Alaskans, the river has given much to those willing to learn its ways. In summer, the river teems with salmon. Falls brings migrating caribou and berries. It traverses the beautiful Alaska Peninsula, providing opportunities to experience the unique wilderness, wildlife, and cultural heritage of the area.

This river is one of the most popular sport fishing destinations in all of Alaska. Alagnak's extraordinary rainbow trout, char, grayling, and abundant salmon are some of the most attractive sport fish in the world, and the river has become the most popular fly-in fishing destination in all of Southwest Alaska.

See pages 22-23 for more information.

Aniakchak

National Monument and Preserve

Midway down the wild, remote, and mostly roadless Alaska Peninsula lies one of the nation's most fascinating, but least visited, volcanic features. Aniakchak National Monument and Preserve surrounds a large caldera formed by the collapse of a 7,000 foot volcano. Set inland in a place of frequent clouds and fierce storms, Aniakchak was unknown to all but area Natives until the 1920s, and had its last eruption in 1931. Nestled inside the caldera is Surprise Lake, a remnant of a much larger lake that catastrophically drained in a massive flood. Warm springs, melting snow, and glaciers feed Surprise Lake, which in turn gives rise to the Aniakchak Wild River.

This narrow stretch of the Alaska Peninsula boasts a rich human history. Volcanoes, earthquakes, and tsunamis have interrupted the human story, yet the land abides as a wild place where people can experience independence and interdependence. Life has persisted here in the face of catastrophic change.

See pages 20-21 for more information.

Katmai

National Park and Preserve

On June 6th, 1912 residents of the northern Alaska Peninsula experienced one of the largest volcanic eruptions in recorded history. The eruption at Novarupta volcano sent ash over 100,000 feet into the atmosphere, led to the collapse of Mount Katmai, and created the Valley of Ten Thousand Smokes.

Katmai National Monument was established in 1918 to protect the volcanically devastated region surrounding Mount Katmai and the Valley of Ten Thousand Smokes. Today, Katmai National Park and Preserve is still an active volcanic landscape, but it also protects 9,000 years of human history as well as important habitat for runs of salmon and the thousands of brown bears that feed on them.

Katmai is a rugged and diverse land where bears are plentiful, salmon leap waterfalls on their journey to spawn, steaming volcanoes serve as a reminder of the earth's power, and the stories of cultural change continue to live on.

See pages 6-18 for more information.



Glacially shrouded volcanoes, like Mount Mageik, form the geologic backbone of the Alaska Peninsula. Katmai National Park is the site of the largest volcanic eruption of the 20th century (see pages 14-15).

Essential Information

Dates and Hours of Operation

Alagnak, Aniakchak, and Katmai are open 24 hours a day every day of the year. Most services such as lodges and air taxis operate seasonally.

National Park Service and concessionaire operated facilities at Brooks Camp, in Katmai National Park, are open from June 1 through September 17.

Camping

Within 1.5 miles (2.4 km) of Brooks Falls (i.e., the Brooks Camp Developed Area), camping is only allowed at Brooks Camp Campground. Camping is permitted elsewhere in Katmai with one exception (see page 18) and on any public lands within Aniakchak and Alagnak.

Fees and Reservations

There are no entrance fees associated with public use of Alagnak, Aniakchak, and Katmai.

Reservations and fees are required for camping in Brooks Campground and must be made by telephone or online prior to arrival at Brooks Camp. See pages 8-9 for more camping info.

Reservations and fees also apply for public use of Fure's Cabin at the northeast corner of the Bay of Islands on Naknek Lake. Reservations can be made through www.recreation.gov.

Visitor Centers

The **Brooks Camp Visitor Center**, open June 1–October 1, is the point of entry for all visitors to Brooks Camp. A park ranger is on duty to provide information, campground check-in, bear safety talks, and backcountry planning. An Alaska Geographic Association (AGA) bookstore offers books, maps, and other Katmai-related items.

Located next door to the King Salmon Airport, the **King Salmon Visitor Center** provides information on the many federal public lands of Southwest Alaska, particularly those in the Bristol Bay area. A large collection of films is available for viewing and an AGA bookstore sells maps, charts, videos, posters, clothing and more. Contact the King Salmon Visitor Center at 907-246-4250.

Bears

This is bear country! All park lands on the Alaska Peninsula contain substantial populations of brown bears. Be prepared for bear encounters

anywhere on the Alaska Peninsula. See page 13 for more bear safety information.

Visitors to Brooks Camp are required, upon arrival, to participate in a brief, mandatory bear safety talk at the Brooks Camp Visitor Center.

Food Storage

All food, beverages, garbage, equipment used to cook or store food, and/or any odorous item must be properly stored in an approved bear-resistant container (BRC). BRCs include those approved by the Department of Interior and Agriculture's Interagency Grizzly Bear Committee <http://igbconline.org/certified-products-list/> and additional items listed by the Alaska Department of Fish and Game (www.adfg.alaska.gov/index.cfm?adfg=livingwithbears.bearcontainers). Public food caches are available at Brooks Camp.

Hunting

Sport hunting is permitted in the preserve areas only of Katmai National Park and Preserve and Aniakchak National Monument and Preserve.

Only non-guided sport hunting is allowed in the Alagnak Wild River corridor. In all other areas, sport hunting is prohibited. All hunting activities require a license and are subject to National Park Service and Alaska Department of Fish and Game regulations and restrictions.

Weather

Even during summer, visitors to the Alaska Peninsula should be prepared for cool and stormy conditions with frequent strong winds. Clear skies occur about 20 percent of days. In general, visitors to the Aniakchak area should expect significantly cooler, stormier, and windier conditions. Wherever you travel, remain aware of the dangers and treatments for hypothermia and be equipped with appropriate clothing and shelter.

Pets

Pets are not allowed within 1.5 miles (2.4 km) of Brooks Falls (i.e., the Brooks Camp Developed Area). In other areas, pets must be leashed or physically restrained at all times.



Weather Information for King Salmon, Alaska

Month	Average High	Average Low	Average Precip.
January	22.8°F (-5.1°C)	8.0°F (-13.3°C)	1.03" (26.2 mm)
February	23.8°F (-4.6°C)	7.4°F (-13.7°C)	.72" (18.3 mm)
March	32.0°F (0°C)	15.1°F (-9.4°C)	.79" (20.1 mm)
April	41.3°F (5.2°C)	24.9°F (-3.9°C)	.94" (22.9 mm)
May	52.1°F (11.2°C)	34.8°F (1.6°C)	1.35" (34.3 mm)
June	59.5°F (15.3°C)	42.2°F (5.7°C)	1.70" (43.2 mm)
July	63.8°F (17.7°C)	47.5°F (8.6°C)	2.15" (54.6 mm)
August	62.2°F (16.8°C)	47.4°F (8.6°C)	2.89" (73.4 mm)
September	54.9°F (12.7°C)	40.3°F (4.6°C)	2.81" (71.4 mm)
October	40.5°F (4.7°C)	26.0°F (-3.3°C)	2.10" (53.3 mm)
November	30.5°F (-0.8°C)	15.9°F (-8.9°C)	1.54" (39.1 mm)
December	25.1°F (-3.8°C)	9.3°F (-12.6°C)	1.39" (35.3 mm)

Quick Tips for Visiting Three of the Most Remote National Park Units

MANY PEOPLE CONSIDER SOUTHWEST Alaska's remoteness to be an attractive characteristic, but the remote nature of the area necessitates careful planning in order to overcome certain logistical and accessibility challenges. Unlike most national parks in the United States, Alagnak, Aniakchak, and Katmai are almost exclusively accessed by plane or boat. Much of this area is rarely visited and opportunities for incredible wilderness experiences abound. Other areas, such as Brooks Camp, are more easily accessed and have amenities like lodging and hot meals.

The National Park Service headquarters for Alagnak, Aniakchak, and Katmai is located about 290 miles southwest of Anchorage in King Salmon. Regularly scheduled commercial flights to King Salmon (AKN) are available from Ted Stevens Anchorage International Airport (ANC) via Peninsula Airlines and Alaska Airlines.

These parklands are open year-round for the adventurous. Numerous companies—over 115 in and around Alagnak,

Aniakchak, and Katmai—provide a variety of commercial visitor services, including transportation, guided day trips, guided multi-day trips, overnight accommodations and food services. Commercial partners are authorized by permit to operate in the parks. A complete list of services is available at go.nps.gov/AKComm.

Katmai National Park and Preserve and Alagnak Wild River

Katmai is located on the Alaska Peninsula, west of the Shelikof Strait and Afognak and Kodiak islands. The Alagnak River is located on the Alaska Peninsula about 260 miles southwest of Anchorage.

Most destinations in the Katmai region, including Brooks Camp and Alagnak River, may be directly accessed via air taxi flights originating from Anchorage, Dillingham, Homer, Iliamna, King Salmon, Kodiak, Soldotna, and other nearby towns and villages.

Boats can access Katmai from villages and towns along the Pacific Ocean coastline.

Brooks Camp and other locations along the Naknek River drainage can be reached by both motorized and non-motorized boats from Naknek and King Salmon, located west of the Katmai. Boats can access the Alagnak River from towns and villages along Bristol Bay and the Kvichak River.

Aniakchak National Monument and Preserve

Aniakchak is one of the least visited and remote of all national park areas in the United States. It is located on the Alaska Peninsula about 450 miles southwest of Anchorage and 150 miles southwest of King Salmon.

Most people access Aniakchak via chartered airplanes departing from King Salmon and other nearby towns and villages. Boats can also reach the Pacific coast of the monument and preserve. A few adventurous groups have also hiked into the Aniakchak Caldera via a cross-country route from Port Heiden.



Welcome To Brooks Camp



D. KOPSHEVER

Brooks Camp is renowned for its remarkable bear viewing opportunities. For more information about bear viewing at Brooks Camp, See page 10.

The Bear Essentials:

Brooks Camp attracts people from all over the world to fish for trout and salmon, to view brown bears, explore the Valley of Ten Thousand Smokes, and to learn about the long human history of the area.

Brooks Camp is situated at the mouth of the Brooks River, along the shore of

Naknek Lake (the largest lake within any national park in the United States). From June 1 to September 17, the National Park Service operates a visitor center, ranger station, campground, and auditorium. Several ranger-led programs are led each day (see page 7 for more information).

Brooks Lodge

Lodging, meals, flights, and many other services at Brooks Camp are provided by Katmailand, the park's authorized concessioner.

For more information on Katmailand's sport fishing, bear viewing, air services, and lodging opportunities go to www.katmailand.com or call 1-800-544-0551.



Please Remember...

Upon Your Arrival

Visitors to Brooks Camp are required to begin their stay by checking in at the visitor center for a brief bear safety talk outlining park regulations. Special regulations designed to keep bears and people safe apply to Brooks Camp.

Accessibility

While most trails around Brooks Camp and the trail to Brooks Falls are wheelchair accessible, they are unpaved and frequently muddy. The walk to Brooks Falls can be arduous for some people with limited mobility. A limited number of wheelchairs are available to borrow from the visitor center.

Pets

Pets are not allowed within 1.5 miles (2.4 km) of Brooks Falls (i.e., the Brooks Camp Developed Area).

Food Storage

Do not carry food, beverages, or any other odorous items around Brooks Camp. All food and drink, except water, must be stored inside of a building or designated food cache. Eat and drink only in buildings or designated picnic areas. Only water can be consumed outside of designated picnic areas.

Gear and Equipment Storage

All gear and equipment must be attended or properly stored inside of a building. Gear or equipment cannot be left unattended at any

time. Caches for gear are located at the Brooks Camp Visitor Center, Lake Brooks, and in the campground.

Camping

Within 1.5 miles (2.4 km) of Brooks Falls (i.e., the Brooks Camp Developed Area), camping is allowed only in the Brooks Camp Campground. Consult pages 8-9 for more information.

Bear Viewing

Three viewing platforms are situated to provide exceptional opportunities for observing bears. The Lower River Platform is located at the mouth of Brooks River. See *Please Remember* on page 7...

Please Remember from page 6...

Two additional platforms, Falls and Riffles, are located at Brooks Falls. **Note that these platforms are closed between the hours of 10:00pm and 7:00am, June 15th to August 15th.** See pages 10-11 for more information.

Visitor Center

From June 1 to October 1, a ranger is on duty to provide information, campground check-in, and backcountry planning. A bookstore is also available offering Katmai-related items.

Hiking

A variety of hiking opportunities are available at Brooks Camp. For more information: <http://go.nps.gov/1cqg64>

Ranger-Led Programs:

Valley of Ten Thousand Smokes Tour

A park ranger leads this scenic bus ride through some of Katmai's spectacular backcountry. After lunch at The Robert F. Griggs Visitor Center overlooking the Valley of Ten Thousand Smokes, you can take the optional, ranger-led hike into the valley. The hike is three miles (4.8 km) round-trip, with 1000 feet (305 m) of elevation change. Sturdy boots, water, rain gear and warm clothes are recommended. Total trip time is 7-8 hours. Inquire at Brooks Lodge for reservations or contact Katmailand at 1-800-544-0551 and www.katmailand.com.

Evening Slide Show Programs

Join a park ranger for an illustrated program offering information and unique perspectives on Katmai's special features, history, and wildlife. Inquire at the visitor center for times and topics. The program lasts 45 minutes.

Cultural History Walk

A park ranger-naturalist leads this short .25 mile (0.4 km) walk about the human history of Brooks River Archeological District and National Historic Landmark, including archeological studies and traditional Alaska Native uses of plants and animals. The walk lasts about an hour and leads to a reconstructed traditional Native dwelling (see photo below).



Creature Comforts: Braving Alaska's Infamous Insects

RAIN, COLD WINDS, AND THE unrelenting onslaught of biting insects. Enjoying the beauty of Alaska does indeed come at a price.

While photographers are busy lining up the perfect shot at Brooks Falls, black flies and mosquitoes may be working at an equally frantic pace to find the perfect shot into the photographers' skin. It is not uncommon to leave Brooks Camp with new belts and anklets of swollen, itchy insect bites—pain-

ful souvenirs of happy times in the great outdoors.

These parasitic invertebrates can inspire horror stories, so what do you need to know in order to survive with your skin intact? For starters, don't plan on being attacked by mosquitoes alone. As the saying goes, to everything there is a season. The same goes for Alaska's resident invertebrates.

At Katmai, mosquitos and black flies are typically most abundant in late spring and early summer. No-see-ums (very small biting midges) peak in August. Population sizes do vary each year depending on weather conditions and temperatures, so no-see-ums could reign supreme one year and seem nonexistent the next. Furthermore, everyone reacts differently to insect bites and thus there are differing opinions on which insect is peskiest.

One of the most despised insects around Brooks Camp, however, is the white sock. White socks are a species of small biting black fly, nicknamed for characteristic white stripes on their legs. White sock swarms can be brutal and persistent in seeking out flesh, working their way under clothing until they are successful.

Female flies actually rasp into the skin of their hosts, unlike mosquitoes that merely pierce the skin with their needle-like proboscis. White sock bites can be identified by a characteristic red incision mark in the middle of the swollen bite area. Other tell-tale signs include blood stains left behind on the insides of T-shirts after a stealthy attack.

Later, the bite area can become swollen, somewhat painful, and intensely itchy. Relief from biting insects usually arrives on days when the weather is windy, rainy, and just generally dismal.

See Comforts on page 16...



Biting insects like mosquitoes and black flies are ubiquitous in Katmai. Expect to encounter them.

Brooks Camp Campground

The only developed campground in Katmai National Park and Preserve is located at Brooks Camp.

With its wildlife viewing opportunities, access to Naknek Lake, and stunning views of nearby mountains, the Brooks Camp Campground is considered by many to be one of the top campgrounds in North America.

Because of the high numbers of bears in the Brooks Camp area, the campground is specially managed to minimize human–bear conflicts. Campers must take special precautions to reduce odors from food, garbage, and anything else that could appeal to a bear’s strong sense of smell.

Campground reservations are required and must be made in advance. The campground has a limit of 60 people. See page 9 for more information.

Campfires

Campfires are allowed in the three designated fire rings near each cooking shelter. Only dead and downed wood may be collected for firewood. Please do not cook over open fires.



Facilities in the campground include cooking and eating shelters as well as food and gear caches.

Cooking

All cooking and eating must take place within one of the three shared cooking shelters. (As a safety precaution, campers arriving by air with portable camp stoves should bring empty fuel bottles and purchase fuel at the Brooks Lodge Trading Post.) Wash dishes and cooking utensils at the water spigot near the food storage cache.

Food and Gear Storage

All food, refuse, and any other odorous items (e.g., toothpaste, deodorant, etc.) must be stored in the centrally located food cache



which also contains a trash receptacle. In order to prevent curious bears from investigating, please store any unused equipment in the gear storage cache adjacent to the food cache. A fireproof locker is available for storage of all flammable materials, such as stove fuel.

Electrified Fence

Brooks Camp Campground is enclosed within an electric fence designed to deter bears from entering. The fence is not bear proof, although once “shocked,” bears tend to avoid any subsequent contact with such fences.

How Far is the Walk to...

	Visitor Center	Brooks Camp Campground	Brooks River “The Corner”	Cultural Site	Lower River Platform	Falls Trail Outhouse	Falls Platform	Lake Brooks
Visitor Center	0	0.3 mi (0.5 km)	0.2 mi (0.3 km)	0.1 mi (0.2 km)	0.3 mi (0.5 km)	0.6 mi (1 km)	1.2 mi (1.9 km)	1.2 mi (1.9 km)
Brooks Camp Campground	0.3 mi (0.5 km)	0	0.4 mi (0.6 km)	0.4 mi (0.6 km)	0.6 mi (1 km)	0.9 mi (1.4 km)	1.4 mi (2.3 km)	1.5 mi (2.4 km)
Brooks River “The Corner”	0.2 mi (0.3 km)	0.4 mi (0.6 km)	0	0.3 mi (0.5 km)	0.1 mi (.2 km)	0.4 mi (0.6 km)	0.8 mi (1.3 km)	1.1 mi (1.8 km)
Cultural Site	0.25 mi (0.4 km)	0.55 mi (0.9 km)	0.45 mi (0.7 km)	0	0.55 mi (0.9 km)	0.85 mi (1.4 km)	1.45 mi (2.3 km)	1.55 mi (2.5 km)
Lower River Platform	0.3 mi (0.5 km)	0.6 mi (1 km)	0.1 mi (0.2 km)	0.4 mi (0.6 km)	0	0.3 mi (.5 km)	0.9 mi (1.4 km)	1 mi (1.6 km)
Falls Trail Outhouse	0.6 mi (1 km)	0.9 mi (1.4 km)	0.4 mi (0.6 km)	0.7 mi (1.1 km)	0.3 mi (0.5 km)	0	0.6 mi (1 km)	0.7 mi (1.1 km)
Falls Platform	1.2 mi (1.9 km)	1.4 mi (2.3 km)	0.8 mi (1.3 km)	1.3 mi (2.1 km)	0.9 mi (1.4 km)	0.6 mi (1 km)	0	1.3 mi (2.1 km)
Lake Brooks	1.2 mi (1.9 km)	1.5 mi (2.4 km)	1.1 mi (1.8 km)	1.4 mi (2.3 km)	1 mi (1.6 km)	0.7 mi (1.1 km)	1.3 mi (2.1 km)	0

Campground Reservations

Reservations are required for the Brooks Camp Campground from May to October. Reservations can be made beginning January 5 each year. Telephone and internet access are not available at Brooks Camp, so campground reservations must be made prior to your arrival.

During the month of July, campsites may be reserved for a maximum of seven nights, cumulatively. Campers arriving without a reservation, especially during July when the campground is

usually full, must be prepared to backcountry camp outside of the Brooks Camp Developed Area – defined as the area within 1.5 miles (2.4 km) of Brooks Falls.

Reservations cost \$12.00 per person per night from June 1–September 17 and \$6 per person per night in May and September 18 to October 31. Please visit www.recreation.gov or call 877-444-6777 (from the United States), 518-885-3639 (international).



Brooks Camp Campground is surrounded by an electric fence. It is bear-resistant, but not bear-proof. Campers must take precautions so that bears are not tempted to enter the campground.

Brooks Camp Area Map



Bear Viewing at Brooks Camp

Bears Galore

BROOKS CAMP IS WORLD FAMOUS for its bear viewing opportunities. It is one of the most accessible and popular bear watching sites in Katmai National Park. Watching bears at Brooks Camp is an unforgettable experience, but timing your trip properly is critical because the overall number of bears as well as their general behavior varies with the seasons.

When can bears be seen at Brooks Camp?

Bear viewing at Brooks Camp is best from very late June through the end of July and again in September. At other times of the year, like June and August, less food is available along the Brooks River so bears aren't seen as frequently.

Springtime is a lean season for bears who live in the interior of Katmai National Park. Little food is typically available to bears in the spring so bears are dispersed throughout the area and are only infrequently seen at Brooks Camp in May and June.

When the salmon begin to arrive in late June, bears migrate to the Brooks River. Bears can be seen fishing at Brooks Falls and in the lower Brooks River throughout the month of July. Mid-July is typically when the largest number of bears can be seen along the river. In late July, bears begin to disperse to feed in other areas.

In August, salmon are beginning to spawn in the Brooks River, but they are less concentrated, remain energetic, and are no longer migrating. This creates difficult fishing conditions for bears and almost all of the bears will leave the area. Like June, there are typically days in August when no bears are seen at Brooks Camp.

By late August, many salmon have already spawned and will begin to die. As the fish weaken and die, bears will again migrate to the Brooks River to feed. In September, bears are usually present in high numbers as they search for dead and dying salmon.



Watching a mother bear play with her cub is an unforgettable experience.

The behavior and appearance of the bears also varies with the season. In July, more aggressive interactions between bears are observed, especially at the beginning of the month. Bears are also thinner and many will shed their fur at this time. In September, bears at Brooks Camp are typically less aggressive towards each other. In contrast to early summer, bears in September and later in the fall are usually fat and covered with a new coat of fur.

Where can bears be seen at Brooks Camp?

The brown bears of Katmai are eating machines. A Katmai bear must eat a full year's worth of food in 6-8 months to ensure its survival. Katmai's bears predictably congregate around rich and concentrated sources of food. At Brooks Camp this means salmon.

During the peak of the salmon migration in July, bears will fish for salmon all along the Brooks River, but bears will be especially concentrated at Brooks Falls. The falls creates a temporary barrier to migrating salmon which gives some bears the opportunity to catch many fish with little effort. Typically, the largest and most dominant bears along the river fish at Brooks Falls.

In July, many of the bears that cannot compete for fishing spots at Brooks Falls will fish the lower half of the Brooks River. At this time of the year, females with cubs are usually easiest to see near the mouth of the Brooks River.

After the salmon begin to spawn and die in late summer, bear activity is concentrated in the lower half of the Brooks River. In some years a few bears may still fish at Brooks Falls and the upper Brooks River in September and October, but most will patrol the slower moving waters of the lower Brooks River as they search for dead and dying salmon that collect in the slow moving currents and eddies near the river mouth and bridge.

Three wildlife viewing platforms can be found along the river – one at Brooks Falls, one downstream of the falls, and one at the mouth of Brooks River. Each one can offer unique bear watching experiences in season.

Other Considerations

Brooks Camp is a unique place with special regulations designed to protect bears and people. See *Bear Viewing* on page 11...

Bear Viewing from page 10...
Everyone who arrives at Brooks Camp is required to begin their stay by checking in at the Brooks Camp Visitor Center for a brief bear safety talk outlining park regulations and proper behavior at Brooks Camp.

Be sure to dress and pack in anticipation of diverse and changing weather conditions. Whether staying for just a few hours or for several days, you should expect to encoun-

ter windy, cool, and wet weather as well as biting insects like mosquitos and black flies.

Weather and bear encounters can sometimes delay the arrival and departure of float planes, so it is usually best to incorporate some extra time into your itinerary in case of any delays.

The floating bridge across Brooks River can temporarily close to foot and vehicle

because of bear activity in close proximity to the bridge. To minimize the chance of missing an outgoing flight or a meal at Brooks Lodge, give yourself some extra time to cross the bridge in July and September.

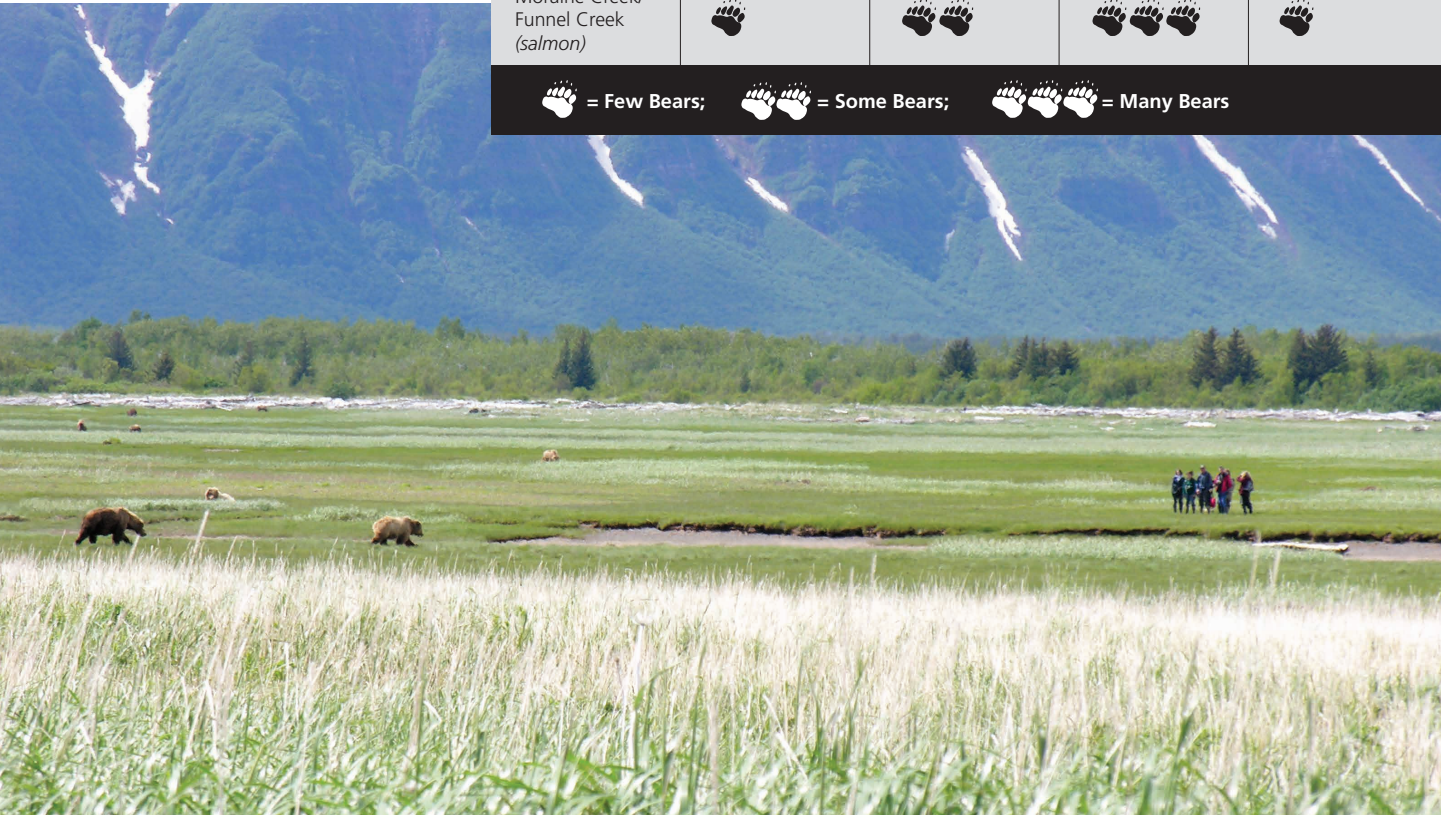
More people visit Brooks Camp in July than any other month. If you come at this time, expect crowded conditions at the Brooks Falls Platform.

Other Bear Viewing Opportunities in Katmai

A bear's waking hours are often dominated by their search for food. Outside of their denning season, bears predictably congregate in food rich areas throughout the Katmai region. Some areas of Katmai National Park, like the food rich Pacific coast, support some of the highest densities of bears ever documented. Other areas of the park with little food, such as the Valley of Ten Thousand Smokes, support only a few bears in any season.

If you know what foods bears prefer to eat and when that food is most abundant, accessible, and nutritious, then you will be able to find many areas in Katmai to observe these fascinating animals. Many guided trips to observe bears in Katmai's backcountry are available. See page 5 for information on commercial services.

Where the Wild Things Are: A Bear Viewing Calendar for Katmai National Park and Preserve				
Location <i>(primary food)</i>	June	July	August	September
Brooks Camp <i>(salmon)</i>				
Hallo Bay <i>(vegetation, clams)</i>				
Geographic Harbor <i>(salmon)</i>				
Swikshak Lagoon <i>(vegetation)</i>				
Moraine Creek/ Funnel Creek <i>(salmon)</i>				
= Few Bears; = Some Bears; = Many Bears				



Exceptional wildlife watching opportunities can be found throughout Katmai, like Hallo Bay.

Bearcam!

Watch Live Streaming Video of Brooks River and Its Famous Bears

Watch live footage of brown bears fishing for salmon anywhere with an internet connection. Katmai's bearcams are live, freely accessible, streaming webcams from Brooks River. Cameras are located at Brooks Falls, at the outlet of the Brooks River, near the summit of Dumphling Mountain, and even underwater.

Don't miss a second of the action. Go to go.nps.gov/bearcam and follow the links to watch the world famous bearcams.

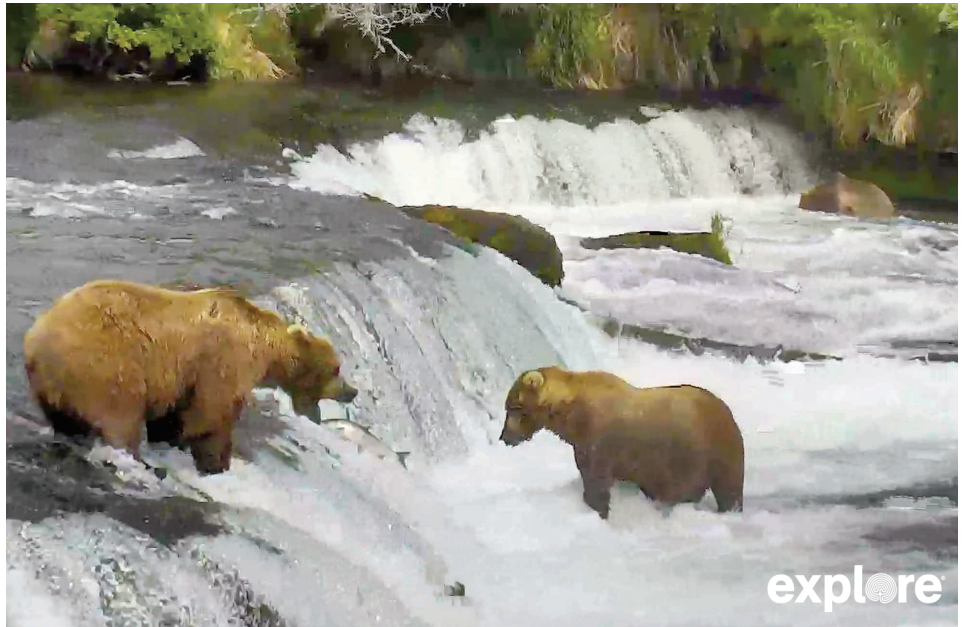
Join the Bearcam Community

Connect with the growing online community of Katmai and brown bear stewards. Discuss recent and past bearcam events with other fans, share your thoughts on national parks and wildlife conservation, and upload your favorite bearcam screen shots for others to enjoy.

On social media, use #bearcam and join the real-time chat at the bottom of any bearcam page on www.explore.org/bears.

Ranger Live Chats

Throughout the year, rangers host live web chats on the bearcams to discuss the biology, behavior, and ecology of bears and the salmon they depend on. Check



Streaming webcams at Brooks River take you right to the action at Brooks Falls. Watch the cams at go.nps.gov/bearcam.

the park's calendar of events (go.nps.gov/KATM_calendar) or social media pages for the live chat schedule.



explore

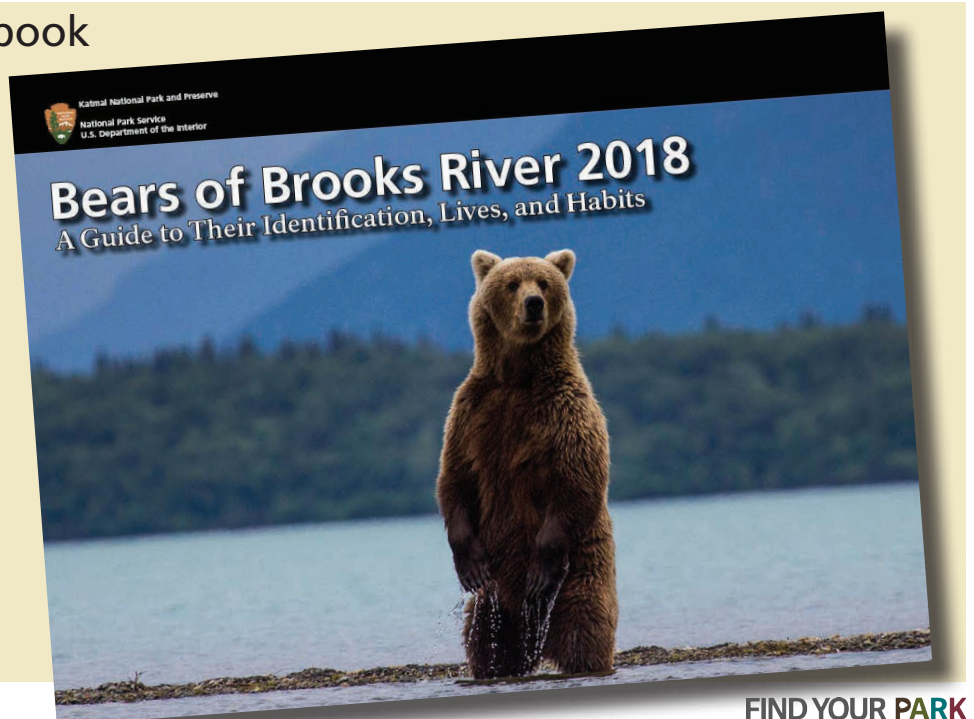
explore.org

Funding for the installation, maintenance, and technical support for the bearcams is proudly provided by explore.org. Explore.org is a philanthropic organization with a mission to champion the selfless acts of others, create a portal into the soul of humanity, and inspire lifelong learning. Katmai was granted \$150,000 by explore.org to further fund educational efforts related to the bearcams.

Bears of Brooks River ebook

Every bear at Brooks River has a story. Since 2001, biologists at Katmai have conducted in-depth monitoring sessions along Brooks River to record data on bear and human use of the area. Over time, this information has grown into one of the most comprehensive data sets about bear use of a particular place ever recorded and provides you with the opportunity to learn more about the lives of these amazing animals.

Brown Bears of Brooks River, a free ebook, provides life history and identification information on the most commonly seen Brooks River bears as well as stories about bear research, biology, and behavior. Visit go.nps.gov/katmai_ebooks to download the latest edition of *Brown Bears of Brooks River*.



You are in Brown Bear Country

Prepare For Bear Encounters Anywhere You Go

Bears are fascinating animals that add excitement and risk to any trip in bear country. Katmai National Park and Preserve, and the surrounding lands in southwest Alaska, support some of the highest densities of bears on earth, so the chances of encountering a bear in Katmai are very high. Before you begin your visit, learn as much about bears as you can. You need not fear bears, but you do need to respect them. Follow these general guidelines during your stay and don't hesitate to ask your guide or a ranger for more information.

Avoid Surprise Encounters

Take appropriate steps to avoid surprising bears. Where visibility is limited or where windy conditions prevail, make noise to warn bears of your approach. The human voice is the best tool for this. Bears may not associate other noise makers, such as bells, with people. If you see a bear that is unaware of you and/or far away, back away slowly and quietly while observing the bear's behavior.

Avoid Food Sources That Attract Bears

Bears can be especially protective of concentrated food sources like salmon and animal carcasses, so be especially cautious in areas where bears are likely to gather and feed. Stay far away from animal carcasses. Bears often defend these aggressively.

Do Not Run

Running may encourage a bear to pursue you. Bears can run faster than 30 mph (50 km/hr). You cannot outrun them. If you are charged, try to appear non-threatening. Stand your ground and speak to the bear in a calm voice. Bears sometimes come within a few feet of people before stopping.



Give Bears Space

Do not approach bears within 50 yards (46 m), or as otherwise directed by National Park Service personnel. Some bears need more space than others. To lessen your impact on the animals, avoid actions that interfere with bear movement, behavior, or foraging activities. Please check with a park ranger if you're unsure about a situation. In general, the greater the distance between yourself and a bear, the safer you can be.

Hike and Travel in Groups

Groups of four or more people are typically very safe in bear country. Groups of people

are usually noisier and smellier than a single person. Therefore, bears often become aware of groups of people at greater distances, and because of their cumulative size groups of people are also passively intimidating to bears. Hiking and traveling in groups is typically the best way to increase your level of safety in bear country.

Remain Calm

A bear may approach closely or rear up on its hind legs to identify you. Back away slowly, moving out of its line of travel if necessary. You may need to leave a trail temporarily to allow a bear to pass. If a bear follows you, stop and hold your ground. If a bear continues to approach, make noise, wave your arms, and try to appear as large as possible.

If A Bear Makes Contact, Play Dead

Fall to the ground on your stomach with your legs apart. Lock your hands behind your neck to protect your neck and face. If you do get rolled over, keep rolling until you're face down again. Stay quietly in this position until the bear has left the area. If the attack continues long after you have assumed the protective position, fight back vigorously.

For More Information and Regulations

Special regulations designed to keep bears and people safe apply in Katmai. See page 6, pages 17-18, and Katmai's bear safety pages at go.nps.gov/Katmai_bearsafety for more in-depth information.



Katmai and the National Park Idea

NATIONAL GEOGRAPHIC SOCIETY



The Valley of Ten Thousand Smokes filled its discoverers with wonder, awe, curiosity, and a sense of stewardship.

Robert Griggs: Katmai's First Champion

On June 6, 1912, Novarupta Volcano exploded in a remote valley on the northern Alaska Peninsula. For 60 hours, ash and pumice darkened skies across the region, pyroclastic flows and surges buried Ukak River valley, and the summit of Mount Katmai collapsed forming a 2000 feet (600 m) deep caldera.

The ash and pumice released during the eruption represents over 3 mi³ (13.5 km³) of magma beneath the earth, 30 times more magma than the 1980 Mount Saint Helens eruption. The Novarupta-Katmai eruption was the largest of the 1900s and one of the five largest in recorded history.

The eruption created a harsh land of abandoned villages, ghost forests, quicksand, and ash covered mountains. Even so, a few people were eager to explore the transformed terrain. Curious about vegetative recovery in the wake of such a large scale eruption, Robert Griggs organized and led expeditions funded by the National Geo-

graphic Society into the heart of the area. He discovered far more than imagined.

In July 1916, Griggs and his team suffered through exhaustive slogs in quicksand, punishing wind storms, and two treacherous climbs to reach the rim of Mount Katmai's newly formed caldera. On July 31, the day after their second Mount Katmai ascent, Griggs continued toward Katmai Pass. Temporarily leaving behind one companion who "was incapacitated by too many flapjacks," he and L.G. Folsom traversed a deeply gullied notch between Mount Trident and Mount Mageik.

Just as Griggs was ready to turn back, he caught sight of a small volcanic steam vent in Katmai Pass. After warming his hands in this small fumarole, he spotted another, much larger one nearby. Curiosity hastened him forward. In the January 1917 issue of National Geographic Magazine, Griggs described what he saw next.

"The sight that flashed into view...was one of the most amazing visions ever beheld by mortal eye. The whole valley as far as the eye could reach was full of hundreds, no thousands – literally tens of thousands – of smokes curling up from its fissured floor.

See Griggs on page 15...



Robert Griggs (1881-1961) led several National Geographic Society expeditions that brought worldwide attention to the Katmai region.

E.C. KOLB / NAU CLINE LIBRARY

Griggs from page 14...

It was as though all the steam engines in the world, assembled together, had popped their safety valves at once and were letting off steam in concert.”

Griggs discovered the Valley of Ten Thousand Smokes, an amazing 46 mi² (120 km²) steaming landscape. Later that night, he found sleep impossible—his mind restless with thoughts. Griggs later described himself as “overawed” but he “had seen enough to know that we had accidentally discovered one of the great wonders of the world.”

What to do with such a place? Citing Yellowstone as an example Griggs answered, “I recognized at once that the Katmai district must be made a great national park accessible to all the people.” Through the National Geographic Society, Griggs lobbied for permanent protection of the Katmai region. Two years after the discovery of the Valley of Ten Thousand Smokes, Katmai National Monument was established by presidential proclamation.

The National Park Service enters its second century in 2017, but the national park idea was born long before the creation of the National Park Service, in the minds and actions of citizens. It lived in the mind of Robert Griggs during his explorations of Katmai. He “found” Katmai and became Katmai’s first modern day champion. Robert Griggs’s discovery of and subsequent efforts to protect the Valley of Ten Thousand Smokes exemplifies the national park idea. This idea continues to live in the hearts and minds of people all over the world. How will you #FindYourPark?



Several hundred feet of ash and pumice cover the Valley of Ten Thousand Smokes near Novarupta.



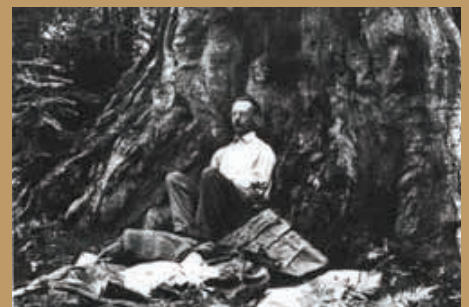
Volcanic gas vents, or fumaroles, in the Valley of Ten Thousand Smokes formed where water became superheated by heat trapped within the 1912 ash flow. Today, fossil fumaroles are recognized by their colorful halos. Most of these fumaroles cooled by the late 1920s.

Gilbert Grosvenor

Robert Griggs received enthusiastic support from Gilbert H. Grosvenor, then President of the National Geographic Society, to explore Katmai. Did Grosvenor plant the seeds of the national park idea in Griggs’s mind?

Shortly before Griggs discovered the grandeur of Katmai, Grosvenor discovered the importance of national parks. In 1915, Stephen Mather invited Grosvenor to the Sierra Nevada in a bid to garner support for the fledgling national park idea. Grosvenor was overwhelmed by the trip and quickly became a staunch supporter of national parks. He helped Mather draft the Organic Act of 1916 which established the National Park Service.

Griggs was likely familiar with Grosvenor’s support of national parks since the entire April 1916 edition of National Geographic Magazine was devoted to national parks. Grosvenor also fully supported Griggs’s efforts to protect Katmai. Today, Grosvenor Camp and Lake Grosvenor bear his name—a tribute to an influential national park supporter.



Gilbert H. Grosvenor

Photographing a Wild Heritage



You are encouraged to enjoy Katmai's wildlife, but please do it with respect and care. National parks are symbols of our wild heritage. The forethought of past generations has given us the special places we enjoy today. Help protect and preserve the natural wonders of Katmai, Aniakchak, and the Alagnak for the future by maintaining standards of ethical photography—it's up to each of us.

The North American Nature Photography Association (NANPA) encourages adherence to the following Principles of Ethical Field Practices:

Environment: Knowledge of Subject and Place

- Learn patterns of animal behaviors so as not to interfere with animal life cycles.
- Do not distress wildlife or their habitat. Respect the routine needs of animals.
- Use appropriate lenses to photograph wild animals. If an animal shows stress, move back and use a longer lens.
- Acquaint yourself with the fragility of the ecosystem. Stay on trails that are intended to lessen impact.

Social: Knowledge of Rules and Laws

- When appropriate, inform managers or other authorities of your presence and purpose. Help minimize cumulative impacts and maintain safety.
- Learn the rules and laws of the

location. If minimum distances exist for approaching wildlife, follow them.

- In the absence of management authority, use good judgment. Treat the wildlife, plants and places as if you were their guest.
- Prepare yourself and your equipment for unexpected events. Avoid exposing yourself and others to preventable mishaps.

Individual: Expertise and Responsibility

- Treat others courteously. Ask before joining others already shooting in an area.
- Tactfully inform others if you observe

them in engaging in inappropriate or harmful behavior. Many people unknowingly endanger themselves and animals.

- Report inappropriate behavior to proper authorities. Don't argue with those who don't care; report them.
- Be a good role model, both as a photographer and a citizen. Educate others by your actions; enhance their understanding.

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If people behave consistently, then animals may learn to behave consistently around people. Your potential impact on animals can be minimized by photographing from predictable places like the wildlife viewing platforms at Brooks Camp.



Black fly larvae live in clean and cold flowing water before they pupate into aerial adults. Early in summer, they are not hard to find on rocks and logs in Katmai's streams.

Comforts continued from page 7...

Fortunately, skies around Brooks Camp are clear for only 20 percent of the summer. The best defense against the insect mobs is to cover up. Many people report that insect repellent containing DEET is not always effective. Therefore, it is wise to invest in a good head net, wear long sleeved shirts, and be prepared to tuck your pant legs into your socks on particularly buggy days.

It may be difficult to see any value in the Class Insecta after being harassed by a cloud of black flies or mosquitoes, but consider the indispensable role these

insects play in the ecosystem. Male mosquitoes and black flies are pollinators. They all serve as food sources for other animals. Furthermore, they respond more quickly to environmental changes than vertebrates do, which can help provide early detection of ecological changes.

Regardless of their ecological importance, the insects of Katmai provide visitors with something else: stories to take back home—battle scars, even—to remind us that the beauty of Alaska can't be won without persevering through hardships, however large, or small, they may be.

Fishing in the Katmai Region

A visit to Alagnak and Katmai offers tremendous fishing opportunities for rainbow trout, arctic char, grayling, and salmon.

Katmai's runs of salmon, in particular, also support some of the greatest gatherings of brown bears on earth. No matter when or where you choose to fish, extra care and responsibility are necessary to protect people, wildlife, and the experience.

Fishing Around Bears

When salmon spawning activity peaks in a stream, bears and anglers compete for the same resources. Expect to spend more time out of the water than in, and be prepared to give up your fishing hole to a bear at some time during your trip.

Splashing fish sound like food to bears. Bears will often move in your direction to investigate a fish on a line. Always be prepared to cut or break your fishing line, so that you can free the fish and move out of the water until the bear passes. Never let a bear acquire a fish from you.

It is easy to become so engaged in fishing, that you forget to be alert for bears. They are surprisingly quiet and difficult to see in dense grass or tall brush, so always have someone

spot bears for you. At minimum, keep 50 yards between yourself and all bears. Stop fishing and move away well before a bear approaches within 50 yards, or you may find yourself in a situation with a fish on the line and a bear in pursuit.

Catch & Release Ethics

Many areas in the Katmai region experience heavy fishing pressure each year. Fish are often caught multiple times per season. Therefore, anglers must release fish as quickly and gently as possible to ensure their continued survival.

Avoid playing a fish to exhaustion. As a fish is landed, keep it in the water when removing the hook. Fish can quickly suffocate when removed from water, especially after battling the forces of rod and reel. Use barbless hooks as much as possible. They are easier to remove and less injurious to fish.

The slime on fish helps to protect it from disease and parasites. Handling a fish roughly, with dry hands, or dragging it onto the shore removes this slime and reduces its chances for survival.

A short video, *Letting Go: The Art of Catch and Release*, is available to watch online at

https://youtu.be/snKzEskc_OY and in the Brooks Camp Visitor Center. This video, written and produced by experienced local fishing guides, succinctly highlights proper catch and release techniques.

Regulations

Fishing in Katmai, Aniakchak, and the Alagnak is subject to Alaska Department of Fish and Game (ADF&G) regulations and restrictions. Additional federal regulations apply to Brooks River. Alaska state fishing licenses are required. For more fishing information, ask a park ranger or visit the ADF&G website at www.adfg.state.ak.us/.



Backcountry Travel



Hikers often find challenge, adventure, unique geology, and surreal beauty in the Valley of Ten Thousand Smokes.

Logistics

Permits

Permits are not required for backcountry travel or camping, but you are encouraged to submit a backcountry itinerary at the Brooks Camp and King Salmon visitor centers. In cases of emergency, these itineraries give park rangers a point of reference to begin a search and rescue.

Camping

Camping is allowed anywhere on public lands within Aniakchak National Monument and Preserve and Alagnak Wild River. At Katmai, no camping is permitted within 1.5 miles (2.4 km) of Brooks Falls except within the Brooks Camp Campground. Seasonal camping restrictions may apply to other areas of Katmai. Please visit go.nps.gov/KATMbackcountry for the latest information.

Campsites must be relocated at least 2 miles (3.2 km) after 14 consecutive days in one location. When choosing a campsite, follow Leave No Trace guidelines. Food, trash, and all odorous items must be carried and stored in a bear-resistant container (BRC). A limited supply of BRCs are available to borrow at the Brooks Camp and King Salmon visitor centers. Hanging food is not encouraged as trees of appropriate height are not usually available.

Maps

Maps are available from the USGS Map Store (store.usgs.gov). The Brooks Camp and King Salmon visitor centers (see page 4) maintain a limited selection of topographic maps as well.

Leave No Trace

Leave No Trace is a national and international program designed to assist outdoor enthusiasts with their decisions about how to reduce their impacts when they hike, camp, picnic, snowshoe, run, bike, hunt, paddle, ride horses, fish, ski or climb. The program strives to educate all those who enjoy the outdoors about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts. Leave No Trace is best understood as an educational and ethical program, not as a set of rules and regulations.

Leave No Trace information is rooted in scientific studies and common sense. The message is framed under seven Leave No Trace Principles:

1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Others

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Center for Outdoor Ethics | LNT.org



Backcountry campers should consider using portable electric fences in areas with high densities of bears.

Attention Hallo Bay Campers:

To ensure bears' free access to prime feeding sites and to reduce the risk of bear/human conflicts, camping within the core Hallo Bay Meadows is closed from April 1st through October 31st annually. For more information, please visit go.nps.gov/KATMbackcountry.

Explore the Savonoski Loop

Magnificent lakes, rivers, and mountains await exploration on the Savonoski Loop, an 80 mile (129 km) backcountry canoe or kayak trip. The trip generally takes four to ten days to complete, depending on weather conditions and paddlers' experience.

Most paddlers begin at Brooks Camp and travel to the North Arm of Naknek Lake and Bay of Islands where rugged topography and an intricate shoreline invite further exploration. At historic Fure's Cabin, a 1.5 mile (2.4 km) portage leads to Lake Grosvenor. After reaching Lake Grosvenor, paddlers usually continue southeast on the lake to its outlet. After reaching Savonoski River, paddlers are swiftly carried to the Iliuk Arm of Naknek Lake.

Bears are commonly seen along the route. In July, many paddlers avoid camping along Savonoski River, as it is particularly popular with bears fishing for salmon. Strong winds and cold water can create dangerous conditions at any time. Down trees form sweepers and strainers in Savonoski River.

Paddlers should exercise caution to avoid these potential hazards and practice Leave No Trace skills used elsewhere.

Equipment rentals, outfitters, and guides may be available locally. Contact the King Salmon Visitor Center at 907-246-4250 for more in-

formation. Public use of Fure's Cabin in Bay of Islands is available by permit. Reservations and permits are issued through www.recreation.gov. To read more about the Savonoski Loop and other boating opportunities in Katmai, please visit go.nps.gov/KATMboating.

The 80 mile (129 km) Savonoski Loop.



River Crossings in the Valley of Ten Thousand Smokes

The Valley of Ten Thousand Smokes poses special challenges for backcountry travelers. Suspended volcanic ash and glacially-derived sediments in river waters often make water depths impossible to estimate, and most of the rivers in the Valley are confined to narrow gorges that are deceptively deep and swift. Hikers must be especially cautious when choosing a place to cross the Valley's rivers and creeks. The River Lethe and Knife Creek, for

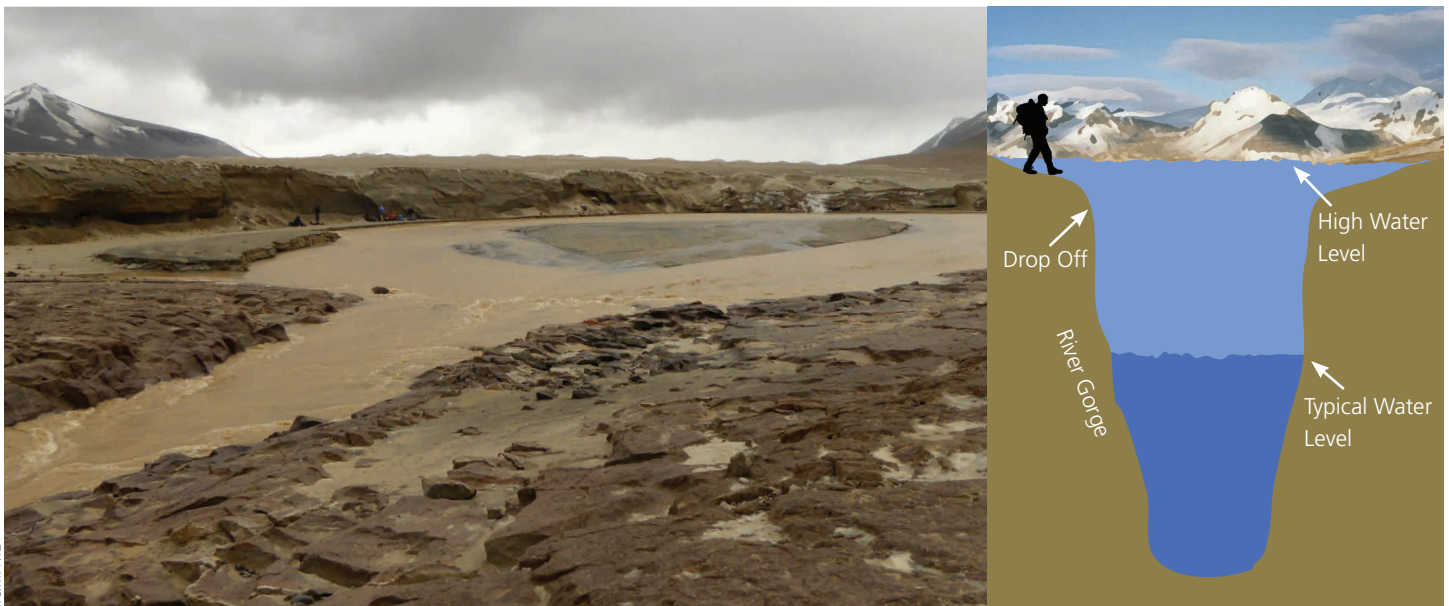
example, can only be forded in a few places. If you cannot find a safe crossing, then you should not attempt to cross. You may also need to wait a day or longer until lower water levels permit safe crossing.

Follow these tips when crossing:

- Watch the water's surface and cross where you see small ripples, not waves.
- Wear shoes while crossing.

- Release your pack's belt buckle and loosen shoulder straps so you can drop your pack easily.
- Cross early in the morning when runoff from glaciers is low.
- Allow yourself a retreat. Don't commit to one route.
- Use a hiking pole or stick to help steady yourself and gauge the water's depth.

Below: Hikers can cross River Lethe in very few places. High and sediment-laden water often hide steep drop-offs and gorges (see inset at right).



Aniakchak National Monument and Preserve



NPS/J. MILLER

Vent Mountain (middle foreground) in the Aniakchak Caldera is one of the more recent reminders of Aniakchak's active volcanism.

A Remote and Wonderful Land

ANIAKCHAK IS OUT THERE, really out there. It lies 450 miles south of Anchorage on the roadless Alaska Peninsula. Because of its remote location and notoriously bad weather, Aniakchak is one of the least visited units of the national park system. However, the monument's extraordinary landscape make it a truly unique place to experience.

Aniakchak is a vibrant reminder of Alaska's location on the volcanically active Ring of Fire. About 3,400 years ago, a 7,000 feet (2150 m) volcano collapsed during a massive eruption. A six-mile (10 km)

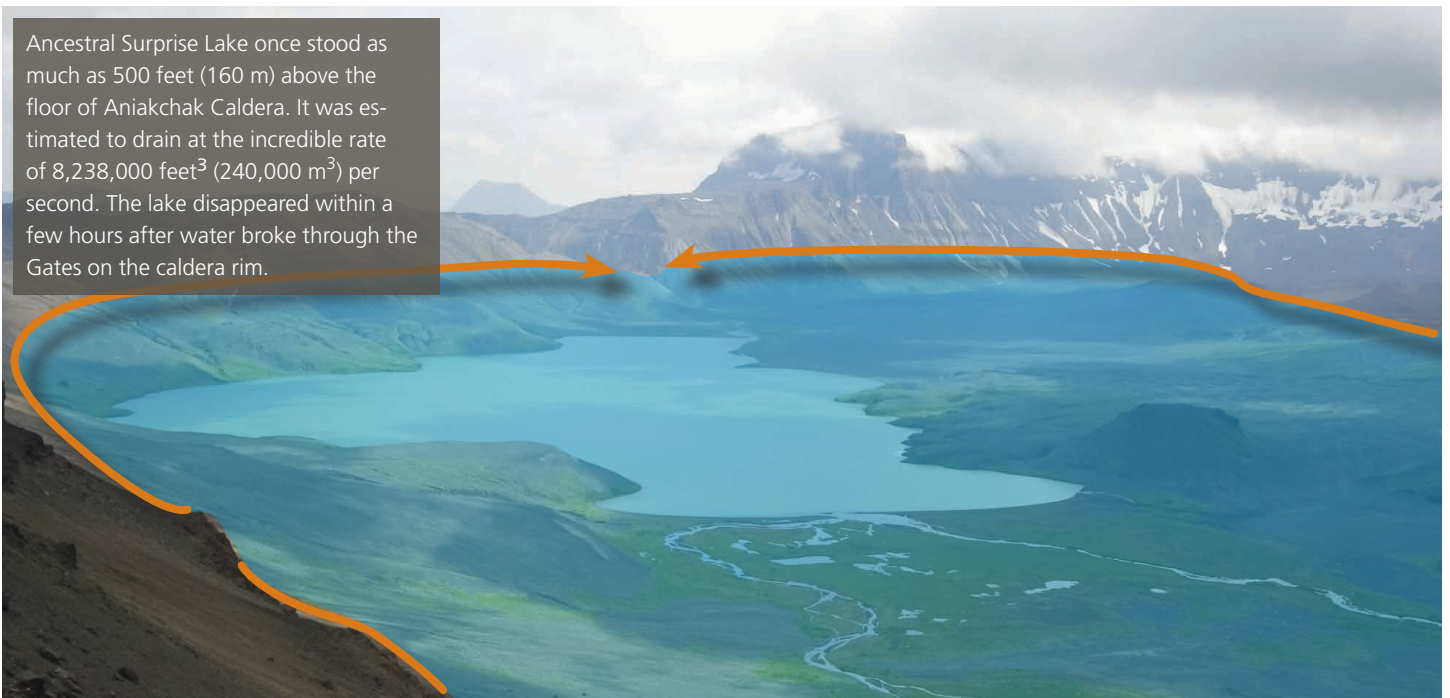
wide, 2,500 feet (770 m) deep caldera was left in the eruption's wake. Since then, subsequent eruptions created cinder cones, lava flows, and explosion pits that dot the caldera floor. Aniakchak's most recent eruption occurred in early May, 1931. When you are in the caldera, you feel like you are inside of a volcano.

Aniakchak's caldera was once partly filled with a large lake, similar to Crater Lake in Oregon. Eventually, a weaker portion of the caldera rim collapsed. The resulting outflow eroded the rim to create the Gates through which the Aniakchak River now

flows. At 2.5 miles long, Surprise Lake is all that remains of the once larger lake. Catastrophic change has repeatedly altered the face of the landscape, but that is only one of the many things to discover at Aniakchak.

Only a few dozen people per year visit making solitude easy to find. It is rich with wildlife and fish, and archeological excavations have revealed a substantial record of human history in the area. Of course, there is always the volcano. If you visit be prepared for the worst, but expect to experience the best of Alaska.

Ancestral Surprise Lake once stood as much as 500 feet (160 m) above the floor of Aniakchak Caldera. It was estimated to drain at the incredible rate of 8,238,000 feet³ (240,000 m³) per second. The lake disappeared within a few hours after water broke through the Gates on the caldera rim.



NPS/T. HAMON

Through the Gates: Rafting Aniakchak Wild River

Congress designated Aniakchak River a national wild river in 1980. Spectacular scenery and remoteness make rafting this river a rewarding experience. From Surprise Lake, the river flows a peaceful mile (1.6 km) to the Gates. The river moves swiftly through this narrow gorge in the caldera wall, and large rocks demand precise maneuvering. A gradient of 75 feet per mile (14.2 m/km) makes this section challenging.

After a more gentle 10 miles (16.1 km) rafters arrive at the confluence with Hidden Creek where car-sized boulders, abrupt bends, and a narrow bed requiring extreme caution. After 5 more miles (8 km), the river slows as it meanders toward the Pacific Ocean and the seals, sea otters, bald eagles, and sea birds of Aniakchak Bay. Bears can be seen all along the river.

Are you contemplating the trip? Aniakchak River challenges even the most experienced river runners. Only a few parties float the river each year, mostly in July. Aniakchak's weather is often severe. Strong winds and cold temperatures can appear suddenly. A hefty budget and pre-tested skills are absolutely necessary. Plan on delays getting in and, especially, getting out. The river is dynamic; conditions often change rapidly.



Rafters must negotiate car-sized boulders in The Gates of the Aniakchak Wild River.

Bring durable, field tested equipment. Inflatable rafts 12–13 feet (4 m) long with rowing platforms are most popular, but smaller packrafts are also used. Total float time is 3–4 days from Surprise Lake to the ocean. Contact the National Park Service in King Salmon for the latest information and always be prepared for the unexpected.

Safety Concerns for Backcountry Travelers

The Alaska Peninsula's backcountry provides access to millions of acres of wilderness and limitless possibilities for adventure and exploration. With these opportunities come great responsibility to maintain the safety of your group, yourself, wildlife, and the land. Planning ahead will help ensure your safety and enjoyment and that of future visitors.

Weather

Weather in all areas of the Alaska Peninsula can be both sudden and severe. Be prepared for extreme conditions at all times of the year and have the wisdom to alter, delay, or abandon your travel plans if current conditions or the weather forecast appear ominous.

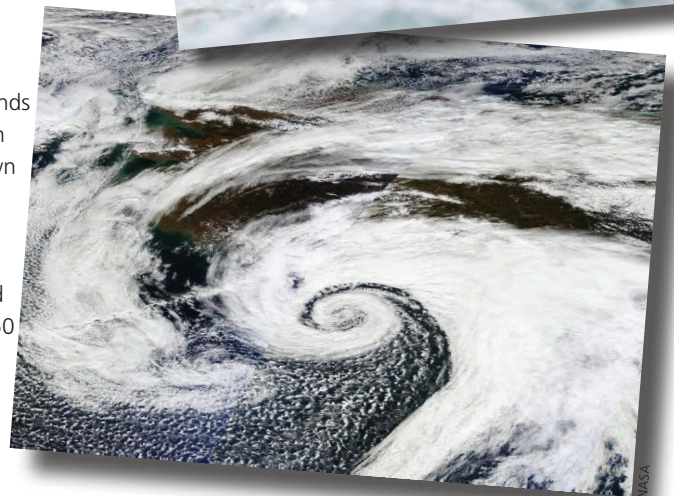
Hypothermia

Hypothermia is the critical lowering of the body's core temperature and is signaled by these symptoms: shivering, numbness, slurred

speech, loss of coordination, drowsiness and exhaustion. Avoid hypothermia by eating plenty of high-calorie foods, drinking plenty of water, and staying dry. Layer clothing appropriately for your level of activity to minimize sweating.

Bears

This is bear country! All park lands on the Alaska Peninsula contain substantial populations of brown bears. Avoid close encounters by remaining aware of your surroundings at all times. Store food and garbage properly, and do not approach bears within 50 yards (46 m). See page 13 for more info.



Alagnak Wild River



NPS / R. WOOD

Alagnak Wild River is popular with rafters and anglers.

Meander After Meander After Meander

ALAGNAK RIVER FLOWS THROUGH A land of captivating landscapes, abundant wildlife, and cultural heritage. Meandering down the braided river, you may discover a bald eagle perched atop a spruce tree in the boreal forest, gaze at a moose browsing above the river bank in the wet sedge tundra, or perhaps encounter a brown bear feasting upon spawning salmon.

In Yup'ik, Alagnak means “making mistakes” or “going the wrong way.” It’s easy to see why. The middle section of river rarely occupies one channel. Many local people call Alagnak the Branch River, because of its branching and meandering nature.

In order to protect the Alagnak’s free-flowing characteristics, striking scenery, diverse wildlife, and cultural history, the upper 67 miles were designated a wild river in 1980 by the Alaska National Interest Lands Conservation Act under the provisions of the 1968 National Wild and Scenic Rivers Act.

Alagnak Wild River is part of the National Wild and Scenic Rivers System. In Alaska, 3,210 miles of protected wild, scenic and recreational rivers have been designated. The National Park Service manages approximately 83 percent of the river within the Alagnak Wild River corridor; the remaining 17 percent of the lands within



NPS / R. WOOD

For much of its length, Alagnak River is rarely contained in one channel.

the corridor are privately owned by Alaska Natives. Please respect the rights and privileges of private land owners.

most popular destination for sport fishing in Southwest Alaska.

For centuries people have lived along the Alagnak and depended on the rich natural resources for survival. Today, Alaska Natives from nearby villages own land along the river and still depend on the area for subsistence hunting and fishing. The Alagnak River’s wildlife and Class I–III rapids offer an exciting trip for many boaters, and the abundant fish make the river the



People and the Alagnak River

Alagnak River has been a productive place to live for thousands of years—home to many people thriving on its bounty. An archeological survey conducted in 1997 revealed that people have lived along the river for the past 8,000 years.

Some early inhabitants lived in settlements with as few as 4 dwellings, while others resided in larger villages with as many as 69 houses. From more recent times, the remains of an early historic village provide evidence of a community whose members cached their food in the ground, attended a Russian Orthodox church, and buried their loved ones in a cemetery.

A Subsistence Life

For thousands of years, people inhabited many places along Alagnak River such as Alagnag'llug (which is diminutive for teasing cousins) and Locknuk. Their descendants have since moved to small villages like Kokhanok, Igiugig and Newhalen, but many people still return to the area for subsistence purposes.

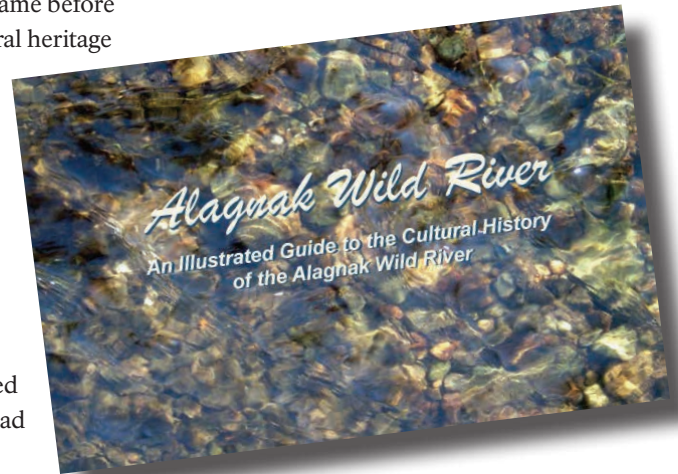
Alagnak River provides a place for people to thrive in a rural landscape. Along the

Alaska Natives continue to own land along the Alagnak River, practicing traditional subsistence activities. As you enjoy the river, remember those who came before and respect the special cultural heritage of the area.

Please do not disturb archeological sites, leave artifacts where you find them, and do not camp or trespass on private property.

To learn more about the people who live and have lived along Alagnak River, download

your free copy of the *Illustrated Guide to the Cultural History of the Alagnak Wild River* at go.nps.gov/alagnakhhistory.



river, people traditionally caught birds and gathered eggs, sour dock, wild celery and fiddlehead ferns. At summertime camps, fish are gathered for smoking, salting, canning, and freezing for the winter. When dogs were used as the major mode of transportation, fish was stored for them too.

Long ago, fish was stored in underground pits and was used to make fermented fish heads, a delicacy. In the fall season, salmon

berries, blackberries, blueberries and cranberries are gathered and stored for winter. Wild game such as caribou, moose, and bears are hunted.

In the late fall, whitefish are harvested and stored for the winter. Smelt, trout and grayling are caught by ice fishing. Trapping is still done to provide fur for hats, mittens, coats and household use such as throw rugs and furniture coverings.

Salmon drying on a traditional rack.



Neighbors on the Alaska Peninsula



U.S. Fish and Wildlife Service



Alaska Peninsula National Wildlife Refuge

This wildlife refuge stretches nearly 340 miles along the Alaska Peninsula and encompasses about 4.3 million acres. Elevations range from sea level to 8,225 feet (2,507 m) at the summit of Mount Veniaminof. It's a place of towering volcanoes, misty fjords, steep cliffs, deep bays and long beaches that provides important wildlife habitat.

Located approximately 330 miles (547 km) southwest of Anchorage and 55 miles (89 km) south of King Salmon, the refuge is bordered on the north by the Becharof National Wildlife Refuge, and to the south it is bisected by Aniakchak National Monument and Preserve.

Phone: 907-246-3339
www.fws.gov/refuge/alaska_peninsula/

Becharof National Wildlife Refuge

Becharof National Wildlife Refuge contains a variety of landscapes within its 1.2 million-acre boundary including rolling tundra, wetlands, glacial lakes, rivers, rugged cliffs and volcanic peaks. Land elevations range from sea level to 4,835 feet (1,474 m) at the summit of Mount Peulik.

Located approximately 295 air miles (475 km) southwest of Anchorage and 10 miles (16 km) south of King Salmon, this refuge is situated between Katmai National Park and Preserve to the north and the Alaska Peninsula Refuge to the south.

Phone: 907-246-3339
www.fws.gov/refuge/becharof/

Alaska Department of Fish and Game



McNeil River State Game Sanctuary

Many of the same conditions that make Katmai National Park and Preserve prime bear habitat are also found at McNeil River State Game Sanctuary. McNeil is located on Katmai's northwest boundary and is famous for its large brown bear population and for the opportunity it affords a small group of visitors to watch bears fishing and interacting in a natural setting.

To reduce the human impact on bears at McNeil, the Alaska Department of Fish and Game limits the number of visitors to 10 people per day by means of a permit lottery. Permit applications are due by March 1 and an application fee is required.

Phone: 907-267-2189
<http://1.usa.gov/s9aSFI>

Alaska State Boroughs

Bristol Bay Borough

Bristol Bay Borough is a rural Alaskan fishing community situated at the mouth of Kvichak and Naknek rivers. The borough includes three cities: King Salmon, Naknek, and South Naknek. Commercial fishing, salmon processing, and tourism are economic mainstays. The Bristol Bay salmon fishing industry is one of the largest and most valuable in the world.

King Salmon, connected to Naknek by the 15.5 mile (25 km) Alaska Peninsula Highway, serves as the transportation center and is the site of a former U.S. Air Force Base. South Naknek is a more traditional rural community and is not connected to the other communities in the borough by road.

Phone: 907-246-4224
www.bristolbayboroughak.us/



Lake and Peninsula Borough

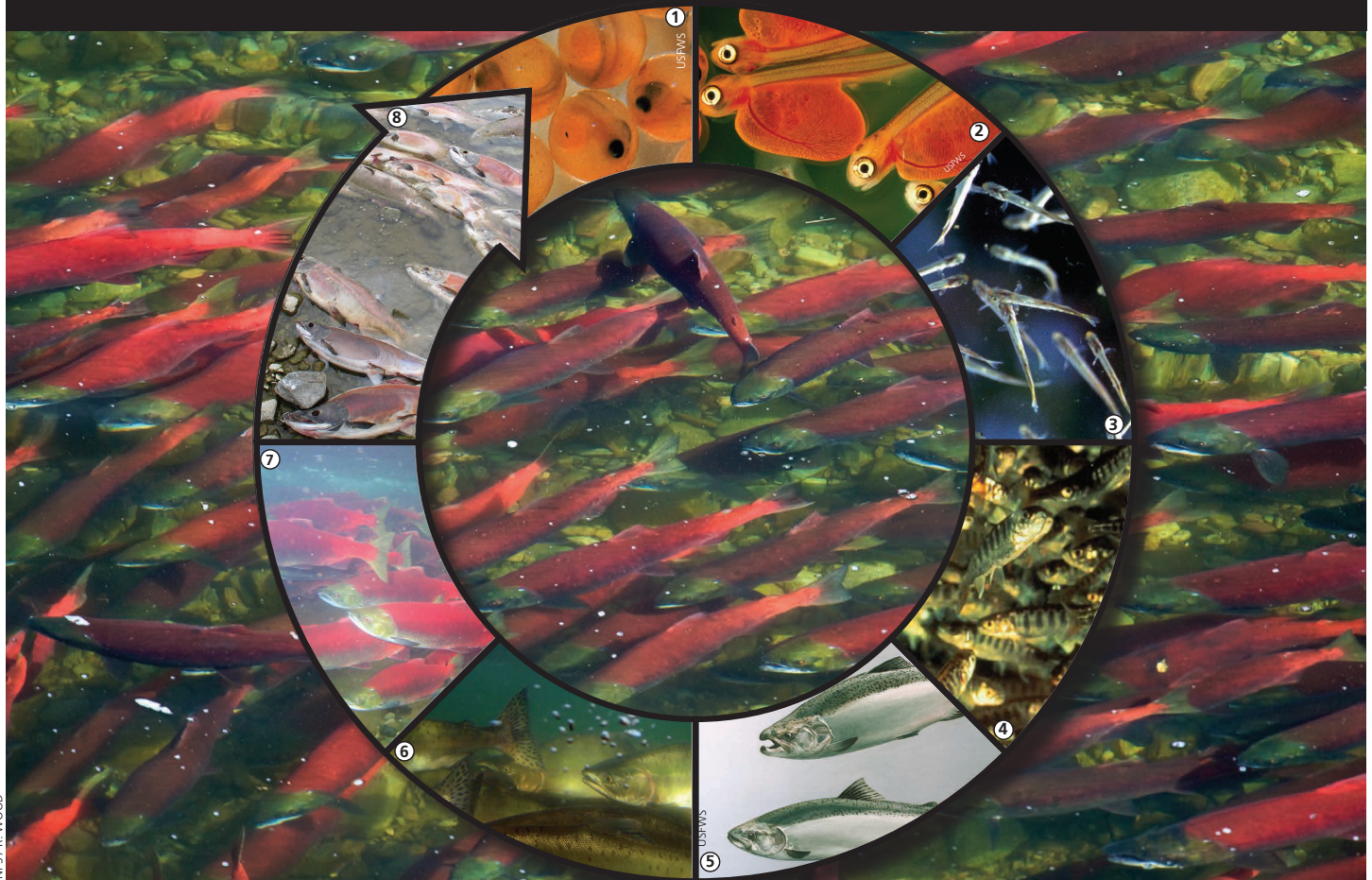
Lake and Peninsula Borough encompasses nearly 24,000 square miles—about the size of West Virginia—and stretches from Lake Clark in the north to Ivanof Bay in the south.

Incorporated in 1989, the borough includes 17 communities with a combined population of about 1,800 people grouped in three distinct geographical areas: the Alaska Peninsula/Pacific

side, the Alaska Peninsula/Bristol Bay side, and Iliamna Lake/Lake Clark area. Major rivers in the area provide outstanding recreational opportunities and the largest runs of sockeye salmon in the world. Commercial fishing and fish processing are the borough's economic foundation.

Phone: 907-246-3421
www.lakeandpen.com

Cycle of the Salmon



Salmon overcome tremendous obstacles in order to reproduce.

DURING WINTER, WHEN THE ALASKA Peninsula is locked under ice and snow, salmon eggs incubate quietly in well oxygenated streams and lakes (1). Months before, adult salmon struggled against nearly insurmountable obstacles in order to spawn. Every stage in a salmon's life illustrates their ability to survive and their drive to reproduce.

After incubating, salmon eggs hatch in mid-winter. The larva, called alevins (2), remain in the nest feeding on a yolk sac still attached to their bodies. They may even migrate deeper into the stream gravel for protection during this vulnerable period.

Salmon fry (3) emerge from the gravel between April and June. Most salmon live in freshwater for one to two years while feeding on zooplankton. Vertical stripes, called parr marks, help camouflage them from predators.

Salmon smolt (4) imprint on their natal streams and lakes while migrating to the

ocean. Along this journey, they undergo many physiological changes to prepare for a saltwater existence. Salmon prepare to enter a totally new environment, whose conditions they cannot know until they get there. Substantial changes to the kidneys and gills are required for these fish to survive the harsh transition from freshwater to the salty ocean.

Salmon spend one to four years in the ocean (5), depending on the species. Salmon in the ocean are bright and silvery in color to hide them from predators like orcas, seals, and sharks. In offshore waters, salmon are among the most abundant fish and use keen eyesight to find and catch prey.

Most salmon are between one and six years old when they begin migrating back to the watersheds where they were born (6). Sockeye salmon may travel 37 miles (60 km) or more each day during this long journey. Water temperature, ocean currents, day length, the earth's magnetic field, genetics,

and other factors may all determine the precise timing and pattern of the migration.

Upon returning to freshwater, salmon stop eating. 95-99% of spawning salmon return to the same lakes, rivers, and streams where they were born. They smell their way upstream following the odors of the water they imprinted upon as fry and smolt. Pigments from salmon flesh are transferred to the skin and eggs. Their bones soften and they develop a distinctive humped backs and elongated jaws (7).

Female salmon excavate several gravel nests, collectively called a redd. To do this, she fans the gravel violently with her tail to winnow away sand and silt which would smother her eggs. Males and females release milt and eggs simultaneously. Up to 1,000 eggs are laid in each nest. Salmon spawn across the Alaska Peninsula from mid summer to fall. They die shortly thereafter, and nutrients from their decaying bodies drive the cycle once again (8).

Alaska Geographic Association

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Katmai Book and Movie

A book and movie highlight the spectacular resources and history of southwest Alaska. Get them both from the Alaska Geographic bookstore.

Katmai National Park and Preserve by Andromeda Romano-Lax explores the fascinating story behind the world's largest volcanic eruption of the twentieth century. This cataclysmic event not only transformed a remote corner of southwest Alaska, it brought this dynamic and culturally rich landscape to the attention of the outside world.

Ends of the Earth: Alaska's Wild Peninsula, narrated by N. Scott Momaday, contains stunning high-definition footage of Katmai and Aniakchak, exotic lands of towering volcanoes and the greatest concentration of brown bears on Earth. The film captures the essence of southwest Alaska—both its wildness and its historic past.

Other books, guides, maps, and films are available online. Please visit <http://store.alaskageographic.org>.



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Explore Katmai's Human History

NPS/M. HORNER



Katmai Village was once a major center of trade on the Alaska Peninsula. Volcanic unrest forced residents to flee the area and abandon their homes in June, 1912. This is the village as it looked in 1913.

Learn about Katmai's People, Past and Present

THE ALASKA PENINSULA MAY seem like untouched wilderness, but when you visit Alagnak, Aniakchak, or Katmai, you are following in the footsteps of thousands of people. Certain places, like the Brooks River area and Katmai's Pacific coastline, have been a bustling hub of human activity for millennia.

People have used the rich resources available in the Brooks River for nearly 5,000 years. In *Story of a House*, archaeologist Don Dumond illuminates this rich history by recounting the discovery, excavation, and reconstruction of a semi-subterranean home site along Brooks River.

The human story of Katmai is also intertwined with geology of the land. In the past, volcanic eruptions disrupted and displaced people and even whole cultures on the Alaska Peninsula. The 1912 Novarupta-Katmai eruption irreparably altered the lives of the people who called this area home. Learn about their experiences in

Witness: First Hand Accounts of the Largest Volcanic Eruption in the 20th Century.

Download these books at http://go.nps.gov/katmai_ebooks and learn more about Katmai's human history at go.nps.gov/katmaihistory.



NPS

Katmai's Heartbeat

Every spring, the Bristol Bay region bustles with activity. After a long winter in dry dock, fishing boats are moved into the water and working women and men flock to the area. Why? Because the salmon will soon arrive.

Katmai National Park and Preserve and Alagnak Wild River protect critical spawning and rearing habitat for sockeye and other salmon. These fish are the foundation of a complex ecological system, and they are intricately woven into the cultural and economic fabric of the area. Salmon are the heartbeat of the ecology, economy, culture, and history of the Katmai region.