#### WELCOME TO THE KENAI.

This rugged peninsula, some 200 miles long and 100 miles wide, has been called "Alaska in min-Alaskan wildlife iature"—every habitat type except Arctic tundra is represented here. From the stately moose of the willow thickets to the Dall sheep of the crags... from the red salmon of the rivers to the otters of the oceans... from the shorebirds of the Kachemak Bay estuaries to the sandhill cranes of the vast Kenai wetlands to the puffins and auklets of the glacier-carved fjords...the Kenai offers a world of wildlife to discover.





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Photos see page 117 for credits and copyrights

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Steve Hillebrand, US Fish and Wildlife Service

## Wildlife Viewing Tips



### Wildlife Viewing Tips

The Kenai Peninsula Wildlife Viewing Trail is a tool to help you get the most out of your wildlife viewing adventure on the Kenai. It's a collection of 65 viewing sites located throughout the Peninsula. These sites encompass all of the Kenai's major wildlife habitats, and range from roadside platforms to backcountry trails. As you plan your visit, choose the sites that best match your interests, time, and budget—and season during which you're traveling.



#### SITE NOTES

- Notable species are listed to give you an idea of what you may see at a site; they are not all inclusive.
- The key to the site icons is located on the back cover flap.
- Land ownership details, with contact information, are found on pages 80-81.

In addition to site information, this guide contains viewing and safety tips, information about habitats and wildlife on the Kenai Peninsula, and a checklist of birds on the Kenai. You'll find more information by stopping at visitor centers along the way and asking others what wildlife they've been seeing.

Binoculars make wildlife watching much more fun. With binoculars, the stirring in the distant brush turns into a bull caribou with a candelabra rack. The reddish blob on a salmonberry branch becomes an iridescent rufous hummingbird.

Have binoculars for every member of your party, know how to use them, and keep them handy at all times. When wildlife makes its appearance you can be watching instead of fumbling or waiting your turn.



Federal Migratory Bird Hunting and Conservation Stamps are for wildlife watchers too. Ninety-eight cents of every dollar adds protected habitat to the National Wildlife Refuge system. www.fws.gov/duckstamps

**BINOCULAR BASICS** 

- The adjustable eyecups keep your eyes the right distance from the lenses. If you wear glasses, keep them on when using your binoculars. The eyecups should be folded or twisted down. If you don't wear glasses, keep the eyecups extended.
- Adjust the binoculars at the hinge so the two circles you see merge into one when looking through both lenses. For children and adults with smaller head sizes, some binoculars may not adjust close enough. Try others.
- 2. The adjustable eyepiece (usually the right and marked 0 + ) can be set for differences between your eyes. The neutral position is 0. For details on adjusting, ask an experienced wildlife watcher or search for how to use binoculars online.
- 3. Focus with the central knob.

EDGES The "edge" zones between different habitats can be among the best places to scan for wildlife. Edges contain elements of the neighboring habitats, attracting wildlife typical of both sides. For example, edges where forests transition to meadows. marshes or tundra can offer chances to see forest wildlife that might otherwise be hidden among the

dark branches.

#### A CLOSER LOOK

- Pre-focus for the general distance of the wildlife you are looking at.
- Without binoculars, stare straight at your subject.
- While continuing to stare, raise the binoculars to your eyes.
- Your subject should be centered in the field of view; however, this can take practice, especially with smaller and moving objects.

SELECTING BINOCULARS When shopping for binoculars, you'll see them described with a pair of numbers, such as 7x35 or 8x24. The first number is the magnification—the bigger the number, the closer the subject will appear. Powers above 10 are difficult to hold steady. The second number is the diameter of the aperture lens. A bigger lens lets in more light, but is heavier. Birders prefer binoculars with a ratio of at least 1:5, which allow more light to see colors and details; however, compact binoculars are handy for travel. You can get decent binoculars for under \$200. Invest more in good quality waterproof binoculars if you can afford them.



SPOTTING SCOPES

(small telescopes) provide higher magnification and greater light-gathering properties than binoculars, expanding the effective range of your viewing. Because scopes are affixed to tripods, once set up and focused on an animal, a group can take turns looking. This is great for younger

### SHARE THE **FXPFRIFNCF** Respect the experience of other human users of these lands and waters. Be aware of other wildlife watchers and avoid unnecessarily marring their enjoyment of the animals. Respect the culture and privacy of Alaska Native peoples and their land—recognize that fishing and hunting camps you may come across are essential to local residents' subsistence way of life. Respect those lawfully hunting and fishing within these multiple

use lands.

children and reduces the frustrations of finding animals. A basic scope and tripod setup can be purchased for around \$200.

There are some fixed scopes and binoculars at sites along the Kenai Peninsula Wildlife Viewing Trail for those who don't have their own; however, the wildlife isn't always where the scopes are.

#### SPOTTING WILDLIFE

To spot wildlife, think in terms of patterns. Observe carefully and make yourself familiar with the patterns of water, rocks, or vegetation, then be alert for subtle changes in those patterns that might indicate wildlife.



Scan landscapes slowly, watching for movement. Be alert for shapes that are just a little "out of place" in the texture of the environment. Horizontal lines, such as the line of a moose's back, often stand out among patterns of vertical light and shadow in forests. Colors can be clues too; some animals, such as Dall sheep or black bears, are significantly lighter or darker than their usual surroundings.

Watch for patterns on the water, too. Glass-calm water is ideal for spotting marine mammals, birds and fish, but animal activity can be visible even in choppy water. Ripples and splashes on the surface are signs of wildlife movements. Note anything that disrupts the pattern and texture of the water's surface. Watch for dimples, rings, or swells that indicate underwater movement. Keep an eye out for movement across the surface as well, such as the skimming flight of a murrelet.



Let the animals themselves be your viewing guides. A cluster of feeding gulls can indicate a school of baitfish, which might also be attracting humpback whales. You might be led to notice a prowling lynx or coyote by Steller's jays nagging from spruce branches above.

Use senses other than sight. Every once in a while, turn off the car engine or stop talking and listen for footsteps, splashes, breaths, calls or songs. Sniff the breeze—our human sense of smell is inferior to most animals, but we can still detect the musty scent of crow feathers or the barnyard odor of a porcupine's den.

WHEN TO LOOK Mornings and evenings are often the best times to watch, as many animals conduct most of their business in the hours at the edge of night. Remember—during an Alaskan summer, dawn comes early, so to catch the stirrings at first light, you might have to set your alarm for as early as 2 a.m.

Along the ocean, tides make a difference for wildlife and wildlife viewers. High tides concentrate resting shorebirds and allow spawning salmon better access into some streams. Low tides reveal tidepool creatures and draw a wide variety of animals into the intertidal zone. Check the internet, local natural resource agencies, or sporting-goods stores for tide tables.



GO DEEPER Spotting wildlife is just the beginning of the adventure. Once you've located an animal, settle in, observe it, and learn something about its life. Did that swooping eagle come up from the water with a fish, or did it miss? What kind of shrub is that moose munching on? Where is that yellow warbler going with its beak full of insects?

Familiarize yourself with the tracks and signs you might find in the field. Not only do signs such as these help you find and spot wildlife, they teach you more about

the animals' lives. Check your library or a bookstore for field guides to tracks. Participate in a tracking workshop and gain field experience with experts.

TAKE NOTES AND KEEP LISTS Keeping records of what you see can help make you a more careful observer and refresh your memory weeks or years later. These can range from checklists (some observers note how many as well as what species) to field notes with sketches and details on behaviors, weather and habitat.

A checklist of the birds of the Kenai is found on page 114 of this guide. Visit www.wildlifeviewing.alaska.gov for the statewide Wings Over Alaska bird list and the Eyes on Wildlife checklists and learn how to earn free certificates.

ebird.org/ak Learn what others have seen and share your own birding observations with Alaska eBird.

eBird documents the presence or absence of species, as well as bird abundance through checklist data. A birder simply enters when, where, and how they went birding, then fills out the checklist. All of the sites on the Kenai Peninsula Wildlife Viewing Trail are listed as a "Birding Hotspots." Each site name is preceded by KPWVT.



From this site you'll also find a link to All About Birds which provides you with online resources for bird identification and an introduction to birding.



eBird spans North America so you can continue to record your birding data throughout your travels and at home. And, you'll be helping to further our knowledge of birds by contributing to a massive database of birding information.

#### **WILDLIFE GUARANTEED**

The Alaska Zoo (off O'Malley Road in south Anchorage, watch for the zoo sign on the Seward Highway) and the Alaska Wildlife Conservation Center (Seward Highway milepost 79, near Portage) offer wildlife viewers the chance to see some of

the more elusive Kenai wildlife and to take a closer look at bears, moose and other species than is likely (or advisable) when viewing in the wild. Both are open year-round.

For more information, hours, and admission fees:

Alaska Zoo 907-346-2133

www.alaskazoo.org

Alaska Wildlife 907-783-2025

Conservation Center www.alaskawildlife.org



ETHICS

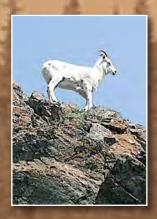
It's a tremendous privilege to observe wild animals in their natural environment. In return for that privilege, it's your responsibility to be respectful of both wildlife and habitats.

- Give wildlife plenty of space. Binoculars and spotting scopes allow you to view wildlife without getting too close. Approach animals slowly, quietly, and indirectly. Always give them an avenue for retreat, and never chase an animal.
- Learn to recognize signs of alarm. These are sometimes subtle, and they vary between species, but may include increased movements such as agitated flapping or pacing, heightened muscle tension, staring, or frequent vocalizations. If you sense that an animal is disturbed by your presence, back off. If it still does not resume its normal behaviors, leave it alone.
- Be respectful of nesting and denning areas, rookeries, and calving grounds. Well-meaning but intrusive visitors may cause parents to flee, leaving young vulnerable to the elements or to predators. Stay on designated trails whenever possible.
- Leave "orphaned" or sick animals alone. Young animals that appear alone usually have parents waiting nearby.
- Restrain pets or leave them at home. They may startle, chase, or even kill wildlife.
- Let animals eat their natural foods. Sharing your sandwich may get animals hooked on handouts; it may even harm their digestive systems. Feeding bears, moose, and some other wildlife is illegal in Alaska except under terms of a permit issued by the Alaska Department of Fish and Game.
- Tread lightly. If you choose to go off-trail, remember that you are a guest in the homes of the animals you seek. Try to avoid disturbing sensitive habitats such as wetlands, riparian zones, and fragile tundra.

WHAT'S HAPPENING in the wildlife world?	JANUARY	FEBRUARY	MARCH	APRIL	MAY	UNE	MY	4UGUST	SEPTEMOS	OCTOBES	NOVE	DECEMBER
Shorebirds such as rock sandpipers forage in winter flocks along rocky beaches.												
Waterfowl such as goldeneyes, scoters, loons, mergansers and grebes winter in nearshore marine waters and open freshwater.												
Swans winter in estuaries and open waters such as the upper Kenai River.												
Pine siskins, crossbills, pine grosbeaks, redpolls and other seed-eating birds travel in flocks, feeding on spruce and alder cones.												
Flocks of snow buntings feed along grassy dunes, estuaries, and shorelines.												
Owls establish territories, and can be heard calling at night.												
Ducks, geese, and swans migrate; some remain on the Peninsula through the summer to nest.												
Enormous flocks of shorebirds migrate through, stopping at estuaries; some remain on the Peninsula through the summer to nest.												
Sandhill cranes migrate through the Kenai Peninsula, stopping at estuaries, tundra areas, and wetlands. Some remain to nest.												
Courting spruce grouse display in early mornings and late evenings in mixed spruce/hardwood forests.												
Songbirds such as warblers and thrushes, plus swallows and hummingbirds, are in migration.												
Pelagic birds such as shearwaters can be seen offshore, migrating in large flocks.												
Resident waterfowl such as loons, grebes, mergansers, ducks, swans, and geese nest and raise young.												
Seabirds such as gulls, terns, cormorants, puffins, murres, and guillemots gather at breeding colonies, nest, and raise young.												
Alpine birds such as pipits, larks, redpolls, longspurs, and ptarmigan nest and raise young.												
Raptors such as harriers, sharp-shinned hawks and falcons migrate. They can be seen in passes and estuaries.												
Resident songbirds sing, nest, and raise young.												
Songbirds form mixed flocks to migrate south.												
Herring spawn (lay their eggs) on seaweed, drawing birds, fish and others to a spring feast.												
Eulachon (hooligan), small oily fish, swim upriver to spawn.												

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	My	AUGUST	SEPTEMBE	OCTOBED.	NOVEMBE	OECEMBE.
Salmon smolts migrate from fresh water systems to the sea, attracting a variety of predators.												
Chinook salmon return to spawn in larger rivers.												
Sockeye salmon return to spawn in lake/river systems.												
Pink salmon return to spawn in small streams and rivers.												
Chum salmon return to spawn in small streams and rivers.												
Coho salmon return to spawn in lake/river systems.												
Wood frogs chorus in freshwater wetlands.												
Beluga whales can be seen in Turnagain Arm and the Kenai River.												
Sea lions pup at rookeries.												
Harbor seals give birth, often on drifting ice from tidewater glaciers.												
Humpback whales feed in offshore waters.												
Black and brown bears are out of dens and active.												
Moose, dall sheep and mountain goats give birth.												
Dall sheep and mountain goats are most visible against snow-free mountain slopes.												
Dall sheep and mountain goats are in rut.												
Caribou calve.												
Caribou graze in tundra areas, sometimes in small herds.												
Caribou can be seen grazing on the Kenai Flats.												
Caribou are in rut.												
Moose are in rut; males spar with each other.												
Marmots are out of dens and active.												
Weasels, snowshoe hares and ptarmigan wear winter white.												
Marine mammals active and present year-round include killer whales, harbor seals, sea otters, harbor porpoises and sea lions.												
Land mammals active and present year-round include moose, caribou, wolves, and coyotes.												
Birds active and present year-round include bald eagles, gulls, ravens, gray and Steller's jays, magpies, and chickadees.												

Learn more about Alaska's wildlife in the Alaska Wildlife Notebook Series, online at wildlifeviewing.alaska.gov.

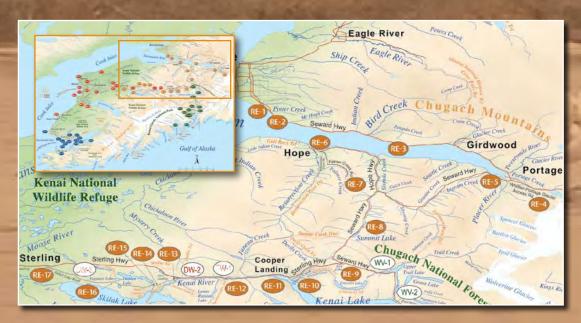




Raven's Earth As a raven flies, downtown Anchorage is only a few miles from steep sheep-ridden cliffs and marshes musical with bird song. City residents often escape their urban limits for a few days or hours along Turnagain Arm, where the Seward Highway rides the narrow boundary between mountains, glacier valleys, marshes and tidal flats. At some of the pullouts it's possible to view all these neighborhoods at once. Visitors can turn from watching trumpeter swans lead cygnets across a pond to viewing rare whales in the bay, then turn again to scan the green hills for nimble Dall sheep. A hike to the Byron Glacier will reveal miniscule ice worms.

This is just the gateway. Further down the road travelers find moose, caribou and a forest choir of songbirds on the Kenai Peninsula. The scenic Seward Highway is designated as an All American Highway, recognizing it's a road that's a destination in itself. The road climbs to alpine lakes and follows the salmon-filled streams back down toward the shore. The mileposts count down on the northbound side of the road, from mile 127 in Anchorage to mile 0 in Seward.

Seward Highway is worth the drive, but be warned—it's easy to become distracted by the scenery and wildlife. From mile 117 near Potter Marsh to mile 90 near Girdwood is designated as a traffic safety corridor. In this segment drive with the lights on and let passengers watch for wildlife while the driver concentrates on the road. Use designated pullouts to stop and enjoy Raven's World.



## Potter Marsh

This freshwater marsh, nestled between the foot of the mountains and Turnagain Arm where the Seward Highway leaves urban Anchorage behind, offers intimate views of migrating and nesting birds, spawning salmon and browsing moose.



Red-winged blackbird



Long-tailed duck



Canvasback duck
NOTABLE SPECIES

Chinook salmon
Coho salmon
Beaver
Moose
Muskrat
Trumpeter swan
Northern pintail
Green-winged teal
Canvasback
Red-necked grebe
Northern harrier
Sandhill crane
Arctic tern
Red-winged blackbird

FIELD NOTES At least 130 species of birds visit or breed in the coastal wetland that includes Potter Marsh. Hundreds of migrants arrive on the marsh in April and May, and rare travelers show up in fall. Watch for a wide variety of ducks and geese leading fuzzy offspring through the lacework of pools and channels in June and July. Red-beaked Arctic terns



nest here after making their annual 10,000-mile migration from the southern hemisphere. Trumpeter swans breed and raise cygnets; bald eagles soar over the marsh in search of prey, sometimes harried by terns and gulls. Male red-winged blackbirds declare their territories. Moose often forage in the brushy fringes toward the mountains and are especially active in May and June during green-up. Beavers work the ponds near the brush. Several species of salmon arrive in mid-summer and can be seen where the creek flows under the boardwalk. Watch them school in the clear water.

HABITAT Potter Marsh offers an extraordinary glimpse into multiple habitats at once: flowing fresh-water streams, shallow ponds, marsh, bog, brush and forest. The sedge-shrouded pools, fed by three streams, offer excellent nesting grounds for dozens of bird species. As the land rises—the result of glacial rebound—the wetland dries into open bog and black spruce, and then transitions into brushy alder. A forest of cottonwoods, birch and white spruce—a portal into woodland life—rims this open area.

#### **CULTURAL CONNECTION**

Potter Marsh was created in 1917 by construction of an embankment for

the Alaska Railroad. The 564-acre marsh marks the southern reach of Anchorage Coastal Wildlife Refuge, a state-managed protected zone that extends 16 miles to Point Woronzof.

VIEWING TIPS Spring and fall migrations attract scores of birds. Call the Anchorage Audubon's bird hotline for reports of unusual birds seen in the marsh. (907-338-2473).

HELPFUL HINTS Dress warmly while walking the boardwalk even on sunny days; you're exposed to Turnagain Arm's brisk wind. Leave dogs behind to avoid disturbing wildlife and viewers.

**GETTING THERE** Seward Highway milepost 117.4. Take the signed Potter Marsh exit to the east (toward the mountains), then follow the road south to a parking lot by the boardwalk.

For other views, there are two highway pullouts off Seward Highway along Potters Marsh between mileposts 116 and 117 and a parking area off Potter Valley Road at the south end of the marsh at milepost 115.6. Parking is limited to these pullouts. It is dangerous and illegal to park on the highway shoulder.



# Windy Corner

This trailhead into the Chugach State Park offers the best place to view Dall sheep in the Anchorage-Kenai region. A short climb reaches a sweeping view of Turnagain Arm and a taste of life on steep slopes.



Golden-crowned sparrow



Dall sheep

#### **NOTABLE SPECIES**

Beluga whale
Dall sheep
Bald eagle
Black-billed magpie
Golden-crowned sparrow

FIELD NOTES Dall sheep perch on the cliffs overlooking the Seward Highway all summer long. Scientists believe the sheep began visiting this site in the early 1980s, attracted to minerals exposed in the soil by blasting for highway reconstruction. The slope greens up in April and the brush may offer the animals some protection from predators. Although ewes and their offspring pioneered the area, rams have been seen in recent years, possibly after learning to use the site as youngsters. The sheep usually see human visitors first and will often be watching intently when first noticed. The trail climbs steeply from the gravel turnout, but levels on a series of benches and hollows.



Watch and listen for forest birds. Black-billed magpies and golden-crowned sparrows chatter in the trees, and bald eagles ride thermals. Beluga whales might be spotted on Turnagain Arm during rising tides.

HABITAT The dry, southwestfacing slopes harbor a microclimate that encourages early green-up. Stands of white spruce and birch mix with alders to dominate protected hollows. Exposed slopes get scoured by Turnagain Arm's strong winds, creating scrub and grass habitats.

HISTORIC CONNECTION Windy Corner marks the southern terminus of the Turnagain Arm Trail, which extends two miles to Rainbow Valley and 9.4 miles to McHugh Creek. This route partly follows the Old Johnson Trail, a wagon road that dates to the early 1900s.

VIEWING TIP The sheep don't always stand in clear view of the highway shoulder. Try walking slowly up the trail and then scan cliffs above you from different angles. More ambitious hikers can climb higher in the forest and may even find themselves eye-to-eye with sheep.

SAFETY Don't stop in the driving lanes of the highway. Stop and park only in pull-outs. Watch for traffic. Do not approach or attempt to feed the sheep.

GETTING THERE Seward Highway milepost 106.7. Park in the signed pull-through (water side) or trailhead parking (hill side). The trail starts from the mountain side parking area.

Alaska State Parks

Turnagain Arm's
narrowest point brings
both marine and land
creatures close to the
highway. Beluga whales
swim just offshore while
songbirds fly among
spruce branches.
Mountain goats and
black bears forage
far above.



Yellow warbler



Hermit thrush

#### **NOTABLE SPECIES**

Beluga whale
Harbor seal
Black bear
Mountain goat
Red squirrel
Bald eagle
Black-billed magpie
Hermit thrush
Varied thrush
Yellow warbler
Macoma balthica clam



FIELD NOTES Bird Point bulges a half mile out into Turnagain Arm, providing stunning views of white adult and gray adolescent beluga whales as they chase fish. Watch for the whales during hours just before and after high tide. The peninsula's bedrock shoreline retains grooves carved by glaciers and can be explored by careful hikers. Harbor seals occasionally enter



the more remote coves, and tiny shells from the Arm's sole clam species, Macoma balthica, can sometimes be found on beaches. Very rarely, gray and killer whales venture into the arm and can be watched from Bird Point and other turnouts. In cool weather, mountain goats forage on the 3,000-foot slopes of Penguin Ridge, the mountain wall that looms above the arm to the northeast. Watch for black bears and cubs in avalanche chutes and meadows throughout the summer. Forest songbirds and small mammals live in the woods. Dozens of bald eagles work the mud flats during fish runs.

HABITAT White spruce, hybrid Lutz spruce (a cross between white and Sitka spruce) and paper birch cover the interior of Bird Point and high ground along the shore. Salt marsh sedges have colonized wet areas along shoreline bedrock. Low tide exposes extensive mud flats with some patches of rocks and intertidal seaweed. This lowland forest gives way to alder brush and then alpine tundra on the way up Penguin Ridge.

VIEWING TIPS Beluga whales follow the fish: eulachon (small, oily

fish sometimes called "hooligan") in May, and coho salmon in August and September. The best viewing occurs early in the ebbing tide, when the current begins to quicken. Whale pods often exit the upper Arm by swimming toward Bird Point before passing from sight just off the bedrock reefs to the west.

HELPFUL HINTS Dress for Turnagain Arm's cold wind. Bring a bike to explore the paved trail along the mountains, where beavers have colonized pools at the bottom of avalanche chutes.

GETTING THERE Seward Highway milepost 96.5. There are several other viewpoints along Turnagain Arm between Bird Point and Girdwood.

Resist the temptation to walk out onto the intertidal mudflats. These expanses of gooey glacial silt can be sticky enough to grab and hold boots, feet and even legs. Quickly-rising tides complicate extraction efforts. Every year, emergency crews in this region are called out to help people who have become mired in intertidal mud. Sadly, some individuals have died when they were unable to escape the mud before the tide rose. For your safety, stay off mudflats.

## Portage Glacier Valley

Visit a land just emerging from the ice age. This wildlife—rich valley tucked into the isthmus between the Kenai Peninsula and mainland Alaska is home to one of the world's most unique creatures: the ice worm.



Greater yellowlegs



Rufous hummingbird

#### **NOTABLE SPECIES**

Chum salmon Coho salmon Pink salmon Sockeye salmon Beaver Black bear Moose Mountain goat Harlequin Common goldeneye Greater yellowlegs Rufous humminabird Ice worm



Moose thrive in the dense brush, with cows and newborn calves browsing along ponds throughout the valley in May and June. Both black and brown bears roam the valley, but black bears are more visible. Watch for sows and cubs eating greens in the meadows on the steep slopes



to the north. Mountain goats forage on the valley walls. Look for them in spring on the slopes overlooking the lake, usually near the green-up line. During spring and fall bird migrations, great flocks of geese, ducks, swans and cranes wing through Portage Pass, taking the short cut between Turnagain Arm and Prince William Sound. Summer fills the forest with songbirds, and harlequin ducks return to nest on fast-moving streams. Lucky viewers may be startled by the flutter of a hummingbird's wings. By August, four species of salmon start arriving in streams and ponds. A viewing platform and a bike trail at Williwaw Creek near milepost 4 provide intimate views of spawning coho, sockeye and chum salmon.

HABITAT Portage Glacier Valley is a mosaic of habitats. You can see stages of post-glacial plant succession—from bare rock to temperate rainforest — along several trails. The valley also contains many avalanche paths, filled with alders and other plants adapted to surviving snow slides. Humans have dredged ponds and channels in the valley to enhance salmon runs. The 750-foot Portage Pass, accessible from the Whittier side of the highway tunnel, is the lowest-elevation alpine habitat on the Kenai.

#### **CULTURAL CONNECTION**

Alaska Natives and prospectors used Portage Pass and the valley as a travel corridor between Prince William Sound and Turnagain Arm.

VIEWING TIPS A snowfield at the end of the Byron Glacier Trail offers the easiest place to view ice worms in the region. The tiny creatures surface en masse in the evening after the sun retreats and dusk deepens. Related to earthworms, the miniscule ice worms have evolved to live only at temperatures near 32 degrees Fahrenheit.

Stay off active glaciers and snowfields unless you're prepared for glacier travel.

HELPFUL HINTS The Begich, Boggs Visitor Center is an essential first stop for wildlife viewing advice, naturalist guided walks, and current alerts about any avalanche danger and bear activity.

The visitor center is open daily Memorial Day through Labor Day. Call 907-783-3242 or 783-2326 for the current hours of operation. Closed winters. www.fs.fed.us/r10/chugach/ chugach\_pages/bbvc.html

GETTING THERE Seward Highway milepost 78.9. The Whittier-Portage Glacier Access Road runs southeast about five miles toward the shore of Portage Lake and the highway tunnel to Whittier in Prince William Sound.

# Ingram Creek – K

This wetland area at the head of Turnagain Arm draws nesting waterfowl, browsing moose and spawning salmon.



Trumpeter swan



Cliff swallow

#### **NOTABLE SPECIES**

Pink salmon Black bear Moose Trumpeter swan Bald eagle Arctic tern Cliff swallow FIELD NOTES The brushy, water-saturated flats at the head of Turnagain Arm form a network of channels and pools that draw dozens of bird species. Terns, gulls and swans nest throughout the area. Geese and ducks visit during fall and spring migrations. Most years, trumpeter swans raise young in the pond on the southeast side of the Seward Highway as it approaches

Ingram Creek. A small colony of cliff swallows builds gourd-shaped mud nests under the bridge that spans the creek. Moose browse the flats, especially in winter. Pink salmon spawn in the creek beginning in August. Watch for bear tracks in the mud downstream from the bridge.



HABITAT Multiple habitats occur at the head of Turnagain Arm. Salt marsh rims the mud flats, but quickly merges with alders and other brush at higher elevations. Freshwater wetlands extend southeast of the highway. Lower Ingram Creek is an intertidal spawning site for pink salmon. The mountain slope immediately beyond the creek supports a patch of temperate rainforest with hybrid Lutz spruce towering over a dim, mossy understory.

#### GEOLOGICAL CONNECTION

In 1964, an enormous earthquake (approximately 9.2 on the Richter Scale) rocked southcentral Alaska. When it hit upper Turnagain Arm,

the land dropped more than four feet, radically changing some habitats. Evidence of this shake-up can be seen in the many large dead trees still standing on the flats near the highway. These trees were killed when saltwater flooded their oncedry roots.

VIEWING TIPS Take a walk along the creek after the tide has ebbed. In late summer you'll find swallows swooping from the bridge and pink salmon finning in the riffles. The exposed mud will be printed with animal tracks.

HELPFUL HINTS Bring rubber boots to explore the creek.

GETTING THERE Seward Highway near milepost 75. Large pullouts for Ingram Creek are on both sides of the highway on the north (Anchorage) side of the bridge.



#### Site 6 Raven's Earth

# Hope Main Street

Pink salmon spawn in the center of this snug town with gold-rush roots, bringing together birds, bears and people.



Black-billed magpie



Sandhill crane

#### **NOTABLE SPECIES**

Pink salmon Beluga whale Black bear Moose Bald eagle Sandhill crane Black-billed magpie FIELD NOTES Resurrection Creek merges with the rising tides of Turnagain Arm in a sedge and grass estuary, creating classic near-ocean spawning ground for pink salmon. The fact that their spawning stream gushes within yards of Hope's main street and a private campground popular with families adds to the site's charm. Once the run begins in late July or early August, the salmon are easy to watch in the clear water. Scan for gulls along the creek,

and bald eagles perched in trees. Shorebirds and waterfowl rest in the salt-tolerant sedges and grasses. Magpies and forest birds move amid the trees along the shore and creek. Black bears emerge from the forest to snack on salmon carcasses and are regularly seen along the creek. Beluga whales can sometimes be spotted passing offshore during high tides.



HABITAT The tidally-influenced stretch of Resurrection Creek creates excellent pink salmon spawning habitat. Mature forest stands line the slopes, but much of the area has buildings interspersed with trees, drawing human-tolerant species. A grassy meadow with sedges and salt-tolerant plants reaches from the creek and gradually transitions into Turnagain Arm's notorious mud.

#### HISTORIC CONNECTION

Hope was founded in 1896 as a mining camp and staging area on Resurrection Creek. Unlike so many other gold-rush sites, it was never abandoned.

VIEWING TIPS Come after the salmon start running in early August. If camping sites off Main Street have filled, try the USDA Forest Service's Porcupine Campground a mile up the road.

HELPFUL HINTS The tidelands and creek bottom belong to the State of Alaska, but the campsites adjacent to the creek are private. Campground reservations are recommended during August. This very small community can be overwhelmed with visitors. Respect private property and facilities.

GETTING THERE The Hope Highway begins at Seward Highway milepost 56. Take a left into the town site at Hope Highway milepost 16.9, just before the bridge over Resurrection Creek

CONTACT Hope Chamber of Commerce, P.O. Box 89, Hope, AK 99605, www.AdvenAlaska.com/Hope



Drive from sea level into a sweeping alpine valley deep inside the Kenai Mountains, where alpine birds fly amid the alders and across the tundra.



Wilson's warbler



Wolf

#### **NOTABLE SPECIES**

Black bear
Caribou
Wolf
Willow ptarmigan
Rock ptarmigan
Hermit thrush
American pipit
Wilson's warbler
Golden-crowned sparrow
Common redpoll

FIELD NOTES Palmer Creek Road climbs from a Lutz and white spruce forest only a few miles from Turnagain Arm into alpine tundra and brush. Old logging activities on the slope overlooking lower Resurrection Creek have left open areas with pullouts where you can scan for forest birds such as hermit thrushes. The road begins emerging from the forest about 1.5 miles up and transitions to open tundra after another 1.5 miles. Sparrows, thrushes and warblers work the alders along the road. From the pullouts, view tundra meadows that climb 2,000 feet to the ridge. Watch



for American pipits and rock ptarmigan in the grass. Golden-crowned sparrows and Wilson's warblers flit amid the alders in the creek bottoms. Black bears and wolves roam the area, but are rarely seen. The road narrows after reaching the Coeur d'Alene campground about six miles in, making it a good route for walking and biking while listening for birds.

HABITAT The road climbs through a succession of habitats, from mature spruce forest with a dim understory to willow and mountain hemlock, to thick stands of alder and then open alpine meadows. Forest alternates with alpine meadow, depending on exposure and proximity to creeks. Beavers have created ponds in the upper valley.

HISTORIC CONNECTION The Swetmann and Hirshey mines date from early 20th century, when gold mining boomed in Resurrection Valley. Ruins can still be found at the end of the road.

VIEWING TIPS Energetic hikers can view all three of Alaska's

ptarmigan species—willow, rock, and white-tailed—as they explore the tundra on the higher slopes.

HELPFUL HINTS Palmer Creek Road is not recommended for large RVs or trailers. Don't attempt to drive beyond the campground at milepost 6 without a high clearance vehicle and possibly four-wheel-drive. Come prepared for bugs. Coeur d'Alene Campground at milepost 6 of Palmer Creek Road has six walk-in campsites and restrooms, but no water.

This road is not maintained in winter; snow may be present on the road from mid-September to mid-May.

GETTING THERE From milepost 16.2 of the Hope Highway, head south on Resurrection Creek Road and turn left on Palmer Creek Road. Follow this road about six miles to the campground. A much narrower and more rugged jeep trail continues another five miles to the ruins at the Swetmann Mining Camp.

## Summit Lakes

Subalpine lakes with Dolly Varden and rainbow trout offer sweeping views of mountain slopes. Watch for forest birds and beavers.



Beaver



Moose



Common Loon

#### **NOTABLE SPECIES**

Dolly Varden Beaver Moose Trumpeter swan Common loon

FIELD NOTES Lower and Upper Summit lakes support alder-willow edge habitats next to white spruce forest and open alpine slopes. Songbirds swoop through the brushy thickets during spring and summer. Stop at one of several pull-outs overlooking the lakes to listen for songs and calls. Loons usually



nest on the lake edges and pairs can be seen from a long way off paddling on the surface. In spring and fall, watch for trumpeter swans resting on the lakes. Dolly Varden and stocked rainbow trout (in the upper lake) surface early mornings and late evenings. Scan for the white edges of Dolly Varden fins from the bridge over the outlet at Lower Summit Lake. Moose forage in the meadows and wet areas, and beavers have been reported building lodges and felling trees along the shore.

These two subalpine lakes with resident and stocked fish are surrounded by alder-willow brush. Alpine brush transitions into tundra on the facing mountains, while spruce forest dominates the creek bottoms.

#### CONNECTION RECREATION

Ski rope tows once operated above both Lower and Upper Summit Lakes. The area remains popular with skiers, snowmachiners, photographers and tourists.

VIEWING TIP Stop at the pullouts overlooking the lakes to listen and watch. Walk the loop through the USDA Forest Service's Tenderfoot Creek Campground by Upper Summit Lake or drive with windows open to listen for bird songs.

HELPFUL HINTS Avoid private property if exploring off roads. Bring rubber boots for crossing wetlands near lake edges.

**GETTING THERE** Seward Highway milepost 47.6—Lower Summit Lake pullout and access road.

Seward Highway milepost 46—Tenderfoot Creek Campground on Upper Summit Lake.



# Tern Lake (

This flourishing lake nestled in the Kenai Mountains offers amazing viewing of nesting and migrating birds, spawning salmon, bears, goats, sheep and moose.



Mew gull



Muskrat

#### **NOTABLE SPECIES**

Sockeye salmon
Beaver
Black bear
Dall sheep
Mountain goat
Muskrat
Trumpeter swan
Ring-necked duck
Common merganser
Red-breasted merganser
Common loon
Mew gull
Arctic tern
Alder flycatcher
Golden-crowned sparrow

FIELD NOTES Arctic terns, mew gulls, and trumpeter swans flock to this shallow lake in May and June to nest and feed on schooling fish. In September and October, watch for groups of 10–20 trumpeter swans gathering on open waters. Black bears forage for grass and berries in moun-



tain meadows overlooking the valley. Dall sheep and mountain goats roam mountain slopes, especially along the green-up edges. Moose forage in the marsh early and late in the day. Dusk will bring out beavers and muskrat. Although terns and many other nesting birds leave by late July, that's when sockeye salmon begin arriving in force to spawn. Look for salmon along Daves Creek—off the picnic area at the western shore of the lake or take a canoe to the feeder creek to the east. Bald eagles perch on trees overlooking the lake. Forest songbirds forage in the trees along an old campground access road on the lake's southwestern shore (the campground is no longer open).

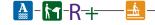
HABITAT The shallow productive lake has spawning gravels rimmed by marshland. Alder and willow thickets rim the shore. White spruce forest extends from the lake to subalpine brush. Alpine tundra sweeps across the slopes above.

VIEWING TIP Mountain goats are typically seen on the eastern side of the Seward Highway, just below the ridgeline of the mountains. Use a spotting scope to get the best views. The former campground loop and old Sterling Highway make great walking routes for bird watching.

GETTING THERE At the junction of the Seward and Sterling Highways, there is a parking area overlooking the lake. Follow signs to find access to a day-use picnic area, with viewing deck and restrooms, beside the lake off Sterling Highway.

#### MORE INFORMATION

www.fs.fed.us/r10/ro/naturewatch/southcentral/tern\_lake/tern\_lake.htm



### **Ouartz Creek and** Cresent Creek Campgrounds

Clear streams and a glacial lake create a salmon spawning haven, attracting birds, bears and fish to a mature spruce forest.



Black-capped chickadee



Downy woodpecker



Boreal owl

#### **NOTABLE SPECIES**

Sockeye salmon Wood frog Spruce grouse Great horned owl Boreal owl Hairy woodpecker Downy woodpecker Black-capped chickadee Boreal chickadee

Quartz Creek empties into the glacial Kenai Lake, producer FIELD NOTES of almost 20 percent of the sockeye salmon in this watershed. An average of 10,000 sockeye spawn in Quartz Creek gravels, and as many as 70,000 have returned in some years. Thousands of adults hold in the mouth of the creek at the lake before moving upstream. Viewing decks just outside the campground offer a good place to watch for salmon and Dolly Varden. The best place to observe spawning is along the creek at the Crescent Creek camp-



ground. The mixed forest along the lake draws black-capped and boreal chickadees, and hairy and downy woodpeckers. Black bears frequent the area, but are rarely seen. Watch along the creek edges early and late for browsing moose. Listen for owl calls in the evening hours.

HABITAT Riparian zones follow these clear-running creeks, extending to shallows where Quartz Creek flows into Kenai Lake. A mixed forest of white spruce and paper birch, fringed by marsh, bounds the creek close to the lake. A mature spruce forest surrounds the creek upstream at Crescent Creek Campground.

#### HISTORICAL CONNECTION

The Quartz Creek area is part of the Cooper Landing community, settled by gold miners in the late 19th century.

VIEWING TIP Take polarized glasses to see fish in the creek. Spend time along the boardwalk at Quartz Creek campground or the trails at Crescent Creek campground to listen for bird songs and watch for Alaska's most widespread amphibian species, the wood frog.

HELPEUL HINTS Bring rubber boots or waders to access or cross the creek.

GETTING THERE Sterling Highway milepost 44.9—turn south on Quartz Creek Road near the Sunrise Inn. The campground is on the right next to Kenai Lake. The road crosses the creek .8 miles ahead and reaches Crescent Creek Campground at milepost 3.3.





### Kenai Lake Outlet

This viewing platform is a great place to watch for Dall sheep, mountain goats, and a variety of birds.



Red-breasted merganser



Commom goldeneye

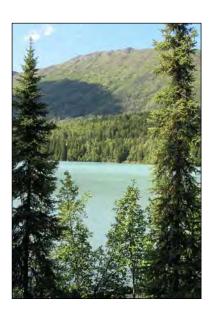


American dipper

#### **NOTABLE SPECIES**

Dall sheep Mountain goat Harlequin duck Common goldeneye Barrow's goldeneye Common merganser Red-breasted merganser Arctic tern American dipper Warblers

From the viewing decks at Cooper Landing boat launch, overlooking the very beginning of the Kenai River, viewers can spy Dall sheep on the alpine meadows to the north and mountain goats on the more rugged and steeper slopes to the south. Waterfowl and shorebirds appear along the river. Look for mergansers and other ducks paddling in the shallows, and for gulls, terns and bald eagles perched in the trees or soaring over the water. The alders and willows near the boat launch and wayside draw many species of forest songbirds including yellow-rumped, orange-crowned Wilson's warblers.





HABITAT Riparian zones follow the Kenai River and fringe the lower reaches of Kenai Lake. Mixed white spruce and paper birch forest with alder and willow thickets lines the shoreline. Alpine tundra and cliff habitat can be seen on the mountains overlooking the valley. The warmer waters of Kenai Lake keep the outlet area ice-free most of the year, supporting a late run of coho salmon.

VIEWING TIP Look for mountain goats and Dall sheep along the green-up line that progresses up the mountain as spring and summer unfold. Other pullouts in Cooper Landing also offer good mountain views. Bring a spotting scope if possible.

GETTING THERE Sterling Highway milepost 48, turn north into the Cooper Landing State Recreation Site Boat Launch. If coming from the east, the right turn into the boat launch and viewing site comes up fast on the right a few hundred feet west of the Kenai River bridge.





## Russian River Falls / — /

Witness the fabulous Russian River run. Sockeye salmon leap churning waterfalls and rest in foaming pools as they begin the last stage of their journey to spawning grounds.



Yellow-rumped warbler



Hairy woodpecker

#### **NOTABLE SPECIES**

Sockeye salmon
Black bear
Brown bear
Harlequin duck
Red-breasted merganser
Common merganser
Spruce grouse
American three-toed
woodpecker
Hairy woodpecker
American dipper
Bohemian waxwing
Townsend's warbler

FIELD NOTES During late June, pools within the stairstep falls on the Russian River swarm with thousands of green-headed, red-bodied sockeye salmon. From two decks on the riverside cliffs, you can watch the salmon attempt to leap the falls to reach spawning grounds upstream. Brown and black bears sometimes appear on the river to scoop salmon from the water. The two-mile, wheelchair-accessible trail to the falls and viewing decks traverses mixed spruce-birch woods filled with forest birds. Open areas might offer a view of moose. Look for American dippers in creeks and along the river, and watch and listen



for spruce grouse along the trail. On clear July evenings, Bohemian waxwings can be seen flycatching along the river below Lower Russian Lake.

HABITAT The falls tumble through a riparian canyon with a dense underbrush of alder, ferns and devil's club. Mixed white spruce forest interspersed with open areas can be seen along the lower trail. Further up the trail lie Lower and Upper Russian Lakes, and alpine areas.

#### RECREATION CONNECTION

The Russian River is the state's most popular sockeye salmon sports fishery. State managers maintain a counting weir and a fish ladder at the falls to ensure enough salmon reach spawning grounds. Sockeye salmon runs peak twice during the summer, in late June and in late July. State fishery managers release daily counts during the season (phone 907-262-9097).

VIEWING TIP In June and July, harlequin ducks nest near the turbulent waters around the falls, and there is often a brood or two near the junction of the winter trail and the Russian River. The ducklings are quite photogenic as they frolic boldly in the spray.

SAFETY Bears have the right of way on trails and streams. Due to careless behavior of some humans, many bears at Russian River associate people with food, making them particularly bold. Review and follow the principles of staying safe in bear country on page 92, and encourage others to do the same. Hike the trail only in daylight and in a group. Stay on the trail.

GETTING THERE The Russian Lakes Trail begins off the access road to the Russian River Campground, at milepost 52 of the Sterling Highway. Hike two miles to the falls and overlook.

# Jim's Landing

This boat launch opens a door into the lush bottom land of the Kenai River Canyon. Birds and mammals are abundant in this riparian area along the Upper Kenai.



Arctic tern



Harlequin duck

#### **NOTABLE SPECIES**

Harlequin duck
Bald eagle
Arctic tern
Belted kingfisher
Alder flycatcher
American dipper
Yellow warbler
Northern waterthrush
Wilson's warbler
Lincoln's sparrow

FIELD NOTES This recreation site offers good access to the Kenai River between the Russian River and Skilak Lake. Scan the trees for bald eagles and belted kingfishers, and watch for Arctic terns and gulls as they swoop for food. Harlequin ducks and other waterfowl



paddle along the edges. American dippers work the shallows, while fox, song and white-crowned sparrows and other songbirds forage through the alders and willows that line the river banks. Moose appear at the river edge early and late in the day. Brown and black bears, as well as bald eagles, can sometimes be spotted. Alder flycatchers and northern waterthrushes have been reported in the slough along Jean Creek on Skilak Lake Loop Road, about 30 yards past the Jim's Landing entrance.

HABITAT Wetland and riparian habitats are found here. A very strong main channel is rimmed by backwaters that change with rising or falling water levels. A mature forest dominated by white spruce lines the banks.

#### RECREATION CONNECTION

The landing was originally established by miners to access claims across the river. It's now a very busy boat launch for fishermen and guides working the upper Kenai River.

VIEWING TIP In the early spring isolated pools on the Kenai River floodplain often contain juvenile coho and Chinook salmon.

HELPFUL HINTS Parking areas close to the river can be full during the height of fishing season. Stay behind the fence that protects the riverbank revegetation in the area.

Cold, fast water leading to a narrow Class III river canyon is for experienced non-motorized boaters only.

**GETTING THERE** Sterling Highway milepost 58, take Skilak Lake Loop Road south. Jim's Landing is a few yards ahead on the left (south).

## Skilak Lake Road

This 19-mile gravel road winds through prime bear and moose habitat. Two overlooks show how the landscape regenerates after wild fire.



Coyote

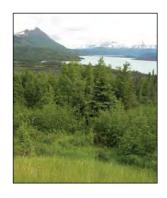


Snowshoe hare

#### **NOTABLE SPECIES**

Black bear Brown bear Coyote Lynx Moose Red squirrel Snowshoe hare Wolf Barrow's goldeneye Spruce grouse Red-throated loon Pacific loon Common loon Red-necked grebe Great horned owl Boreal owl Olive-sided flycatcher Western wood-peewee Alder flycatcher Varied thrush Pine grosbeak

FIFLD NOTES Skilak Lake Road winds 19 miles through lowlands and foothills overlooking Skilak Lake, skirting slopes now regenerating after wildfires. When the Kenai River and Hidden Creek are thick with spawning salmon, the area attracts brown and black bears. The riverside forest offers winter browse for moose and draws dozens of songbird and waterfowl species. Drive the road slowly early or late in the day. Watch for black bears foraging on roadside grass in June or crossing the road in late July and August to feed on salmon at



Hidden Creek. Inspect the mounds of bear scat dotting the road to reveal what bears are eating—look for berries, plants, bones and fur. Using binoculars, brown bears can sometimes be sighted from the Hidden Creek Overlook at milepost 5.1. Wolves and lynx inhabit the area but are rarely seen. Forest birds such as varied thrushes and alder flycatchers perch in the trees along the road, and spruce grouse strut along the roadway to gather gravel. Listen for woodpeckers tapping on dead trees at Pothole Lake Fire Overlook. Keep an eye out for nesting loons on the lakes adjacent to the road. Snowshoe hares may be spotted along the roadside.

HABITAT The road provides a long edge habitat with alders, and mixed white spruce and paper birch forest. The Pothole Lake Fire Overlook at milepost 2.5 offers a view of an 8,700acre region swept by wildfire in 1991, now a vast slope of young alder and willow.

CULTURAL CONNECTION Lower and Upper Skilak Lake campgrounds provide popular boat launching sites for people fishing the inlet and outlet of the Kenai River. The road is welltraveled by fishermen and tourists to access fishing, campgrounds, trails, and wildlife viewing.

VIEWING TIP In summer, listen for the loud, whistled "quick—three beers!" song of olive-sided flycatchers at Rock Lake near milepost 6. In early spring, listen for the hoots of great horned owls.

HELPEUL HINTS To maximize your chances of seeing wildlife and avoiding traffic, drive the road slowly at 10 to 15 mph early in the day (before boaters start driving the road with trailers), or late in the evening. If you hike, go during daylight hours, with company, and be bear aware.

GETTING THERE Skilak Lake Road runs for 19 miles, with entrances at Sterling Highway mileposts 58 and 75.2.

Kenai National Wildlife Refuge Visitor Contact Station at Sterling Highway milepost 57.8; stop for refuge information, June 10—August 15, 10am to 4pm daily.









## and Burney's Trail

A granite-rimmed wilderness lake in an ancient glacial valley draws loons, songbirds, salmon, bears and muskrats.



Red-breasted nuthatch



Pacific loon

#### **NOTABLE SPECIES**

Sockeye salmon
Pacific loon
Common loon
Red-necked grebe
Gray jay
Common raven
Boreal chickadee
Red-breasted nuthatch
Ruby-crowned kinglet
Swainson's thrush
Hermit thrush
Yellow-rumped warbler
(myrtle)
Dark-eyed junco

FIELD NOTES Hidden Lake extends eight miles into the foothills north of Skilak Lake. In June, sockeye salmon smolts gather in the lake by the hundreds of thousands before migrating down Hidden Creek to Skilak Lake. Up to 30,000 adults return to spawn in June July. Brown and black bears meander



through the dense growth along the creek south of the lake. Hike the 1.2-mile (round trip) Burney's Trail slowly with ears open for the songs and calls of hermit and Swainson's thrushes, boreal chickadees, and red-breasted nuthatches. Walk along the lakeshore to the mouth of Hidden Creek to catch a glimpse of muskrats and moose, and to watch yellow-rumped (myrtle) warblers snatch insects from the air.

HABITAT The trail and lake are surrounded by a young mixed forest of spruce and aspen. Pockets of marsh surround the deep, cold lake.

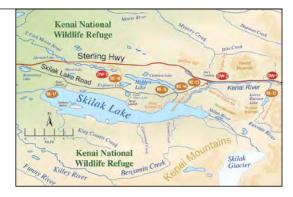
VIEWING TIP Common loons and red-necked grebes often paddle just off the campground boat launch.

#### **GEOLOGICAL CONNECTION**

The lake follows an ancient channel of the Kenai River.

GETTING THERE
Sterling Highway
milepost 58. Take

Skilak Lake Road, Hidden Lake Campground is about 3.6 miles ahead on the right (north).



# **Engineer Lake**

With camping and hiking opportunities, and a chain of beautiful lakes strung together by a hiking trail, this region offers wildlife viewing for an hour or a week.



Brown creeper



Rusty blackbird

#### NOTABLE SPECIES

Beaver Black bear Trumpeter swan Surf scoter Common loon Red-necked grebe Brown creeper Ruby-crowned kinglet Dark-eyed junco Rusty blackbird

FIELD NOTES Engineer Lake, tucked in the foothills north of Skilak Lake, draws a wide range of nesting waterfowl and forest songbirds. An overlook offers a great view of the wetlands and black spruce fringe along the lake's southeastern shore: look for trumpeter swans and rusty blackbirds. From the campground boat launch, the Seven Lakes Trail curves along the shore, offering a glimpse into the edge habitat between the young mixed forest of spruce, birch and aspen and the lake waters. This trail leads 4.4 miles northwest to other forested lakes. In the forest, listen and watch for spruce



grouse, ruby-crowned kinglets, white-winged crossbills and brown creepers. Be alert—black and brown bears also use the trail, and moose can be seen along the lakeside early and late in the day.

A young white spruce and birch forest dominates the hills above the lake. Wetlands are interspersed with black spruce patches.



TIP Use canoe or kavak to approach the wetland from the water.

HELPFUL HINTS The Kenai National Wildlife Refuge rents out a public use cabin on the north shore: advance booking is required.

GETTING THERE Skilak Lake Road runs for 19 miles, with entrances at Sterling Highway mileposts 58 and 75.2. Engineer Lake is about 9.5 miles from either entrance.





# Contract Kenai Float

This float down the middle stretch of the Kenai River might be described as the essence of Kenai wildlife viewing: ample opportunities to observe salmon, birds, moose and bears.



Red-throated loon



Northern goshawk

#### **NOTABLE SPECIES**

Chinook salmon Coho salmon Pink salmon Sockeye salmon Rainbow trout River otter Trumpeter swan Red-throated loon Common loon Osprev Bald eagle Northern goshawk Spotted sandpiper Belted kingfisher Tree swallow Violet-green swallow Bank swallow White-winged crossbill

The 12-mile float from the Lower Skilak Lake boat launch downstream to Bing's Landing traverses the wild middle stretch of the Kenai River. Almost half a million salmon spawn annually in the broad, meandering channel in the first four miles downstream from the lake outlet. Watch for the swirls and wakes of churning fish, especially in shallow gravel flats. This feast of protein draws out brown and black bears, especially sows with cubs, making this a potentially dangerous place to explore on foot in the fall and early spring. Lynx, river otters, coyotes, wolves and mink also venture out, particularly at night when fishing boats are off the river. In early winter and spring, open water draws 50 to 100 trumpeter swans—and similar numbers of bald eagles—to the sweeping oxbows downstream from the lake. During summer, bald eagles and ospreys scan for meals from overhanging trees. There are several active eagle nests in large cottonwoods, easily viewed from a boat. Loons and other waterfowl nest along the banks and large family groups paddle together in mid-summer. Watch for flocks of seed-seeking white-winged crossbills in the spruce tops. Bank swallows and belted kingfishers burrow their nests into the exposed dirt cliffs. Watch for Arctic terns in early summer and shorebirds through August.

HABITAT This trip offers an intimate view of lush riparian habitat. A mixed white spruce, birch and cottonwood forest with interspersed wetlands lines most of the shore. The river flows through oxbows, pauses in pools, and swirls past gravel bars.

#### CULTURAL CONNECTION

TRIPS

Private recreational cabins line sloughs and canals at Kenai Keys, about half way from the Skilak Lake outlet to Bing's Landing. The entire stretch is popular with fishermen.

VIEWING TIP Floating this section during May and June or October-December will be the most rewarding, due to lack of fishing boat traffic.

HELPFUL HINTS You must do this trip by water. Allow at least half a day for time to explore backwaters and watch animal activity.

A guided trip is essential for novices—and recommended for all but the most experienced river runners—and simplifies logistics for all.

Sudden winds can turn Skilak Lake into a froth of boat-flipping rollers. At the outlet of the lake, be prepared for a wilderness river with cold water, debris and submerged trees, sudden shallows, changing water levels and occasional strong currents. Be sure to exit the river at Bing's Landing to avoid Naptowne Rapids just downstream.

GETTING THERE Sterling Highway milepost 75.2—Take Skilak Lake Loop Road from the west entrance 5.3 miles, turn right on the Lower Skilak Lake Campground access road. The take-out is at Bing's Landing State Recreation Site, at Sterling Highway milepost 80.3.







Dena'ina's Way

Thousands of years ago the Dena'ina Athabascans discovered a wilderness buffet: a network of lakes and rivers where they could catch moose and fish, trap beavers and ptarmigan, and seek out swan eggs. The central Kenai Peninsula continues to draw wildlife and people, both year-round residents and seasonal visitors. Fishermen and birders flock to the estuaries where thousands of birds and salmon converge, just as they did when the Dena'ina first settled near the banks.

This drive along the Sterling Highway, starting with the K'Beq "Footprints" Interpretive Site at milepost 52.6, is still rich with wildlife and culture. It continues through the city of Kenai, the largest population center on the peninsula. For up-to-date birding information call the Central Peninsula's Birding Hotline at 907-262-2300.



Site 1 Dena'ina's Way

Put the Kenai's wildlife and plants into perspective with a glimpse of traditional Native ecological knowledge and culture.



Pine siskin



Red squirrel

#### **NOTABLE SPECIES**

Pacific salmon Human Red squirrel Bald eagle Dark-eyed junco Pine siskin

### Interpretive Sites

FIELD NOTES Make connections between wildlife and Alaska's original residents. The Dena'ina Athabascan Kenaitze Indian Tribe offers visitors a glimpse of its culture, plant lore, wildlife use and other traditional ecological knowledge at a visitor center and a riverside boardwalk with many



interpretive displays. Learn how Natives traditionally used the river and forest resources as their "grocery store," finding food, medicine, housing materials and tools in the region's wild resources. See the remains of a house pit and replicas of a fish drying rack. Alaska Native reverence for salmon and other animals is shared through displays. Explore a mixed white spruce, birch and cottonwood forest and view the Kenai River from inside the woods. Bald eagles nest in cottonwoods just across the river, and pine siskins, darkeyed juncos, chickadees and other forest birds wander the trees. Moose are sometimes glimpsed in the parking lot, feeding on willows and alders.

The

#### CULTURAL CONNECTION

Dena'ina Athabascan people lived in the Kenai River Valley, relying on its fish, game and plants for food and its trees for shelter for more than 1,000 years before European settlement.

#### **PRONUNCIATION**

Dena'ina = "Den-eye-een-ah" Kenaitze = "Ken-eye-tsee" K'beq = "Kuh-buq"



**GETTING THERE** Sterling Highway milepost 52.6, directly across from the Russian River Campground.

The site is open seven days a week, May through September, mostly in the afternoons. Call the Kenaitze Indian Tribe at 907-283-3633 for specific hours, tour schedules and special events. www.kenaitze.org/KBeq



# Fuller Lakes Trail

This pleasant trail winds upward through forest to subalpine lakes and tundra slopes.



Willow ptarmigan



Arctic grayling

#### **NOTABLE SPECIES**

Arctic grayling Beaver Black bear Dall sheep Spruce grouse Willow ptarmigan Boreal chickadee Golden-crowned kinalet Ruby-crowned kinglet Swainson's thrush Hermit thrush Varied thrush American pipit Townsend's warbler

Townsend's warblers and both species of kinglet nest in FIELD NOTES the forest around the lower portion of the trail. Compare the songs of varied,

Swainson's and hermit thrushes in the mixed forest in early summer. Moose browse in openings. Black and brown bears traverse the trail and may be seen at any time. Watch for scat with berries and grass stems in it. In Lower Fuller Lake, feeding grayling dimple the lake surface in the evening, while beavers leave v-shaped wakes. Glass the mountainsides for Dall sheep. Open tundra with easy offtrail hiking begins at Upper Fuller Lake, offering a chance to view Dall sheep more closely and to find alpine-nesting birds such as willow ptarmigan and American pipits.



HABITAT The trail packs several distinct habitats into its 1,400 foot climb in elevation: mature mixed white spruce forest with stands of mountain hemlock, wet brushy creek bottom sites with cow parsnip and devil's club, alder and willow brush on open slopes and lake edges, and a subalpine lake.

ANCIENT TREES Fuller Lake Trail, a popular but strenuous hike, leads to some of the oldest trees in the area. According to core samples taken by federal biologists, some of mountain hemlocks growing near tree line at Upper Fuller Lake sprouted in the 1500s.

VIEWING TIP Walk the trail slowly and listen for bird songs in the tall trees. Don't be put off by the initially steep stairway at the trailhead; the trail levels off gradually in the forest.

POISONOUS PLANTS

Wear long sleeves and pants in late summer to limit exposure to overhanging cow parsnip. Also called wild celery, this plant contains an oil that can cause burn-like skin blisters, especially when activated by sunlight. If you are exposed to these oils, wash the affected area as soon as possible to reduce your risk of blisters.

Fuller Lakes trailhead is on the north side of the Ster-**GETTING THERE** ling Highway at milepost 57.

These scenic lakes in the foothills north of the Kenai River system attract waterfowl, forest birds, beavers, moose, and river otters.



River otter



Ring-necked duck

#### **NOTABLE SPECIES**

Rainbow trout
Beaver
River otter
Ring-necked duck
White-winged scoter
Long-tailed duck
Common loon
Red-necked grebe
Gray jay
Dark-eyed junco

#### FIELD NOTES

These scenic lakes provide habitat for fish, birds, beavers and river otters. Walk along their shores and listen for bird songs in June and July. Loons, grebes, mallards and scoters



nest on the lakes. Long-tailed ducks make stopovers. Juncos, warblers, gray jays, spruce grouse and chickadees dart through the woods. River otters pass between the lakes, sometimes leaving smooth runs where their bellies slide across the ground. Beavers feast on aquatic vegetation, and on birch, willow and other hardwoods along the shore.

HABITAT Stands of young mixed white spruce, birch and cottonwood trees intersperse with marshes, black spruce bogs, and lakes. Willows and alders rim the shore.

VIEWING TIP Watch for fresh wood chips that indicate late-night beaver activity and green limbs piled in the water near lodges. Stay the night in one of the campgrounds to increase your opportunities to see and hear some of the shyer and more nocturnal wildlife.

HIKING CONNECTION The northern end of the 4.4 mile (one way) Seven Lakes Trail starts at Kelly Lake Campground and heads southeast to Engineer Lake and Skilak Lake Loop Road.



**GETTING THERE** Sterling Highway milepost 68.3—turn south to Kelly Lake (0.5 mile) and Peterson Lake (1.0 mile) campgrounds.

#### Site 4 Dena'ina's Way

# Moose & Kenai Rivers

See two worlds merge. Birds and salmon thrive where a meandering tributary from the Kenai lowlands meets the swift glacial Kenai River.



Barrow's goldeneye



Sockeye salmon



**Bufflehead** 

#### **NOTABLE SPECIES**

Sockeye salmon Trumpeter swan Bufflehead Common goldeneye Barrow's goldeneye Mergansers Gulls Arctic tern Swallows



FIELD NOTES The confluence of the teacolored Moose River with the blue-green Kenai River creates a major holding area for thousands of sockeye salmon migrating grounds spawning June and July. Watch

for rolling and jumping where the currents join. The channel broadens and encompasses wetlands in the first miles upstream from the Sterling Highway bridge, offering a vast staging area for swans, ducks, geese and other migrating birds in the spring. Look for juvenile salmon swimming in shallow water along the shore. During summer, the confluence draws activity by Arctic terns, swallows and gulls. Moose can sometimes be seen in the early morning.

HABITAT Mixed white spruce and paper birch forest and wetland run along the shore, creating a lush riparian zone alongside a clear-running river and a glacial river.

#### GEOLOGICAL CONNECTION

During glacial periods the Kenai River was diverted by ice into the Moose River drainage, creating the wide channel observed today upstream of the bridge.

VIEWING TIP Bring waders or boots to venture out to view salmon. Use a canoe or spotting scope to explore the slow-moving Moose River upstream.

HELPFUL HINTS Do not paddle in the Kenai River unless you're prepared for strong currents and cold water.



GETTING THERE Sterling Highway milepost 81.9—turn south to the Izaak Walton State Recreation Site.









## Swanson River Road

Site 5
Dena'ina's Way

Take a drive deep into a national wildlife refuge where birds nest on quiet lakes and slow-moving streams. This is a land of owls, thrushes, swans and woodpeckers.



Northern saw-whet owl



Blackpoll warbler

#### **NOTABLE SPECIES**

Beaver Black bear Lynx Moose Trumpeter swan Spruce grouse Common loon Red-necked grebe Spotted sandpiper Owls Woodpeckers Olive-sided flycatcher Alder flycatcher Hermit thrush Varied thrush Swainson's thrush Yellow-rumped warbler Blackpoll warbler Pine grosbeak White-winged crossbill Dragonflies

FIFLD NOTES The Swanson River road 17.5 reaches miles north into a forested. lake-rich section of the Kenai National Wildlife Refuge; the road ends at the Swanson River. Moose can often be seen feeding along the road early and late in the day. Roadside access



nine different lakes offers a chance to see common loons and other water-fowl. Look for a nesting pair of trumpeter swans on Dolly Varden Lake. Watch for beavers swimming across lakes late in the evening. Listen for thrushes, warblers, woodpeckers and other forest birds in the mature stands of spruce. In the early spring, boreal, great horned and saw-whet owls can be heard calling from the older stands of spruce and birch. Along the Swanson River, look for spotted sandpipers and other shorebirds, and waterfowl such as green-winged teal. Bears meander through the area, with black bears more frequently seen along the road. Look for scat laced with berries and grass stems. Emerald dragonflies thrive in the marshy lake and river edges.

HABITAT The road traverses a myriad of habitats, from a mature mixed forest of white spruce, birch and cottonwood to brushy stands of alder and willow. Wetland and bog fringe many lakes, punctuated by stands of black spruce. The interconnected lake system supports resident fish and waterfowl.

#### ECONOMIC CONNECTION

Modern Alaska's first major oil strike occurred in the Swanson River field just to the west in 1957, and the area remains a major producer of oil and gas. Oil field roads are closed to public vehicle access.

VIEWING TIP Drive the road slowly, early in the morning, and stop at pullouts and trailheads, or take side trips to lakes. Listen for owls in the early spring. One-half mile before the Swanson River, the Swan Lake Road continues another 12 miles to the east, offering an opportunity to go deeper into the refuge. Swanson River and Swan Lake Roads are primary gateways to the Swan Lake/Swanson River cance trails.

HELPFUL HINTS Watch for industrial traffic from the oil field from the access road at mile 14.7.

**GETTING THERE** Sterling Highway milepost 83.4—turn north on the Swanson River Road.





#### Site 6 Dena'ina's Way

# Funny River Road

A drive south of the Kenai River crosses a stretch of the Kenai National Wildlife Refuge and leads to a large lake with waterfowl.



Pine grosbeak



American wigeon

#### **NOTABLE SPECIES**

Caribou
Lynx
Moose
American wigeon
Surf scoter
Common merganser
Common loon
Pine grosbeak

Brown's Lake





Funny River State Recreation Site



Alaska State Parks

### to Brown's Lake





trip to the Funny River State Recreation Site offers access to a boardwalk at the confluence of Kenai and Funny rivers with easy viewing of shorebirds, terns, bald eagles and salmon. Brown's Lake, one of the most remote lakes with road access in the region, draws shorebirds, waterfowl, common loons and Arctic terns between May and August. Caribou are occasionally seen in hay fields on private lands near the road.

HABITAT Boreal forest lines much of the Funny River Road, and the roadside provides edge habitat that attracts animals. Lush riparian growth dominates the river edges. Brown's Lake is a large, shallow lake rimmed by stands of white and black spruce, hilly glacial moraines and a vast wetland.

#### HISTORICAL CONNECTION

The area along Funny River Road and Brown's Lake was homesteaded

in the late 1940s. Please respect private property—except for the immediate launch ramp area, all of the property around Brown's Lake is private, including the island.

VIEWING TIP For wildlife viewing, Brown's Lake is best visited in the stillness of early morning. The lake is very popular for swimming and water-skiing in the summer—activity picks up by about 10am.

#### **GETTING THERE**

Sterling Highway milepost 96.1 (just south of the Kenai River Bridge), turn east on Funny River Road. The state recreation site is at mile 11.2. To Brown's Lake, continue to mile 14, then turn right (south) on



Rabbit Run Road. One mile down the road, turn left (east) on Brown's Lake Road. The boat launch is at the end of the road, approximately 2.5 miles. Very large RVs might have difficulty turning around.

### Wildlife Refuge Visitor Center and Trails

This visitor center offers wildlife information, plus chances to view forest animals and lakedwelling birds on the adjacent "Keen Eye" and Centennial trails.



Threespine stickleback

**NOTABLE SPECIES** 

Brown bear Muskrat Spruce grouse Great horned owl Downy woodpecker Hairy woodpecker American three-toed woodpecker Olive-sided flycatcher Gray jay Black-capped chickadee Boreal chickadee Swainson's thrush Hermit thrush Varied thrush Dark-eyed junco Pine grosbeak Common redpoll Dragonflies

FIELD NOTES The visitor center provides displays about animals and habitat, plus brochures, maps and information. The Environmental Education Center located in a log cabin at the start of the Keen Eye Trail includes activities for kids and details about what critters have been active recently. Nearly three miles of well-maintained trails and boardwalks traverse woods and wetlands. More than 30 species of birds have been seen in this area's diverse habitats. Moose browse understory willows and alders in winter. The lake is home to threespine sticklebacks, dragonflies, and muskrat.



HABITAT The trail system meanders through a lowland white spruce and paper birch forest. Near Headquarters Lake and its surrounding wetland, a black spruce bog encroaches on the edge of Headquarters Lake. Bird species using the lake from spring through fall include common loon, arctic tern, bald eagle and trumpeter swan.

VIEWING TIP Walk the Keen Eye and Centennial trails slowly with ears tuned for bird song in June and July. Spend time at the viewing deck to scan for waterfowl. In winter, ski or snowshoe the trails and watch for lynx, covote, and ermine tracks.



#### **GETTING THERE**

Sterling Highway milepost 96.1 (just south of the Kenai River Bridge) turn east on Funny River Road. Immediately turn right on Ski Hill Road. The headquarters is less than one mile ahead, on the left. Follow signs.



#### Site 8 Dena'ina's Way

# Slikok Creek | Color

This quiet tributary to the Kenai River emerges from a thick white spruce forest to invite salmon and terns to a summer feast.



Common merganser



Caddisfly

#### **NOTABLE SPECIES**

Chinook salmon
Coho salmon
Dolly Varden
Waterfowl
Common merganser
Shorebirds
Arctic terns
Caddisflies
Mayflies

FIELD NOTES The confluence of placid Slikok Creek with the glacial Kenai River offers a glimpse of two overlapping migrations. Arctic terns that have flown 10,000 miles from South America arrive here to feed on salmon smolts moving toward the sea in a run five to 50



million strong. Bald eagles and gulls work the main stem of the river, filling the air with their cries. Adult Chinook and coho salmon return to the creek to spawn, feeding bears and replenishing lush bottomland with nutrients. Moose feed in the meadows across the river, while songbirds move through the forest. Rocks along the shallows hide invertebrates at the bottom of the food chain, such as mayflies and caddisflies.

HABITAT Along the trail to the river, a dense white spruce and paper birch forest blends to bottomland dominated by riverbank alders and willows and creekside marshlands. The rocky shallows and overhanging banks along the Kenai give protection to juvenile salmon and insect larvae. The north bank supports mature forest and meadows.

#### CULTURAL CONNECTION

Dena'ina Natives once used the creek's west bank for fishing.

RESEARCH The Alaska Department of Fish and Game uses sonar to track the number of returning adult

sockeye salmon. The sonar counter crosses the river just upstream and can be seen from the boardwalk.

VIEWING TIP The smolt migration to sea begins in late May and peaks in June, drawing the most activity by migratory birds. A culvert upstream along College Road offers close views of spawning Chinook salmon.

HELPFUL HINTS Bring a small net and hand lens for close-up looks at stream invertebrates. Caddisfly larva build protective casings from small rocks and twigs, grass and leaves.

GETTING THERE Sterling Highway milepost 96.1 (just south of the Kenai River Bridge)—turn west on Kalifornsky Beach Road and go 1.1 miles. Turn right on West Endicott Drive, follow to left onto Endicott Drive, follow—.8 mile to Park entrance on right (signed).



## The mouth of the Kenai River

Site 9
Dena'ina's Way

The Kenai River flows to the sea through a vast marshland and marine estuary that concentrates thousands of migrating birds and the region's premier salmon runs.



Short-billed dowitchers

#### **NOTABLE SPECIES**

Pacific salmon Beluga whale Harbor seal Caribou Greater white-fronted goose Emperor goose Snow goose Brant Green-winged teal Northern pintail Red-throated loon Bald eagle Northern harrier Sandhill crane Black-bellied plover Pacific golden-plover Greater yellowlegs Lesser yellowlegs Whimbrel Hudsonian godwit Semipalmated, western, least, pectoral sandpipers Dunlin Short-billed dowitcher Long-billed dowitcher Bonaparte's, mew, herring gulls Arctic tern Parasitic jaeger

Short-eared owl

FIELD NOTES Millions of young salmon smolt pass on their rush to sea. And wave upon wave of returning adult salmon enter the river in an incredible multi-species migration that lasts from spring to fall but peaks in July. The salt marsh and sedge wetland along the river draws immense flocks of waterfowl and



shorebirds from April through May. More than 100 species of birds have been logged. Many of them remain to nest. Some 5,000 to 10,000 herring and mew gulls—one of the largest breeding colonies in the state—hunker down in the saturated grassland west of the harbor area to lay eggs and raise offspring. Bald eagles, merlins, and short-eared owls prey on chicks, eggs, and small animals of the marsh, while Arctic and Aleutian terns hunt the river for smolts. Harbor seals regularly periscope when the salmon are running, while beluga whales occasionally venture upriver early and late in the season. Bald eagles, harriers, and peregrine falcons patrol overhead, and coyotes can sometimes be seen snatching a quick meal among the nests. Moose browse and caribou graze along the edges.

HABITAT The Kenai River meanders 12 miles through marshy flats on its final drift to the sea, creating an extensive estuarine community dominated by salt-tolerant grasses and sedges. Several distinct habitats converge here. spots dry out to grow alders, willow and birch with dense white spruce forest along the edges. The slowmoving water holds invertebrates and fish, and the mud banks are a storehouse of food for birds. With a tidal range of more than 15 vertical feet, the river mouth mixes fresh

and salt water into a rich soup that contains 31 families of worms, small invertebrates, crustaceans and fish. This environment eases the transition that salmon must make twice in their lives: from river to ocean and back again.

#### CULTURAL CONNECTION

The mouth of the Kenai River and its rich bounty of wildlife has drawn people and their settlements for thousands of years. It remains a regional focus for fishing, commerce and recreation.



VIEWING TIP Tour the different access points to find the best wildlife viewing of the day and the tide. Look for seals and whales at high tide. At low tide birds feed along the riverbanks.

#### Site 9A Dena'ina's Way

## The mouth of the **Kenai River**

The sweeping marsh at the Kenai River mouth shelters thousands of nesting gulls. Harbor seals chase migrating salmon miles upstream from the sea.



Emperor goose



Whimbrel

### A Cannery Road Kenai River Estuary

FIELD NOTES The road extends deep into the salt marsh, giving ground-level viewing for migrating birds and the gull colony that nests along the river. Access to the riverbank offers glimpses of harbor seals and rolling adult salmon during runs.



#### HISTORICAL CONNECTION

The Libby Company Cannery was built on a southward bend of the river in 1912 and operated under various owners for more than 80 vears.

VIEWING TIP In winter, watch for snow buntings in this area. During nesting season, watch for bald eagles, falcons and other predators. The low-tide mud spit just south of the river mouth has produced several rare bird sightings—including

marbled godwit, red knot, brant, emperor goose—in spring. Harbor seals sometimes haul out on the muddy beach northeast of the historic cannery waterfront.

HELPFUL HINTS Stay off the marsh during the spring and summer so you don't disturb the nesting birds. Drive carefully if you enter any of the cannery complexes to turn around. They are private property and working industrial areas.



GETTING THERE Turn off Kalifornsky Beach Road on Cannery Road to Kenai Landing. Continue straight on the gravel road to a pullout a few hundred yards short of a modern cannery complex.

The vast flats of the Kenai River, five miles upstream from the sea, bring birds, seals, moose and caribou within viewing distance of a busy highway.



Semipalmated sandpiper



Pacific golden-plover



Parasitic jaeger

## B Bridge Access Kenai River Estuary

#### FIELD NOTES

The small park at Warren the Ames Memorial Bridge aives foot access to the south bank of the Kenai River and the extensive marsh that reaches five river miles to the sea. In early May, thousands of sandhill cranes and



other migrating waterfowl feed in the sedge and grass communities to the west. Shorebirds work along the banks. Caribou forage in this area from June through August. Moose browse along the edges. Several species of owls patrol the flats. Watch for coyotes afoot and northern harriers aloft, both seeking avian snacks in the sedges. Parasitic jaegers are sighted annually in this area.

#### CULTURAL CONNECTION

The Kenai River Special Management Area begins here and extends upriver. The Dena'ina Kenaitze Indian Tribe operates an educational salmon fishery for tribal members at a traditional site on Birch Island a quarter mile upstream from the bridge.

VIEWING TIP The ebbing tide draws shorebirds to the newly exposed beach and stimulates salmon

to migrate upstream in the current. Moose browse early and late in the day. Watch for caribou crossing the flats, especially east of the highway on the north side of the river. Investigate the boardwalk and viewing scopes located north of the river on the west side of the highway.

**HELPFUL HINTS** Stay off the marsh during spring and summer to avoid disturbing nesting birds.

GETTING THERE In Kenai, turn south on the Bridge Access Road from milepost 10.8 of the Kenai Spur Highway. The Warren Ames Memorial Bridge crosses the river about 2.6 miles to the south, with viewing sites on the west side of the highway. The road continues another half mile to the Kalifornsky Beach Road.

#### Site 9C Dena'ina's Way

## The mouth of the Kenai River

The boat ramp and harbor at the heart of Kenai's busy waterfront can be one of the best places in town to view birds and wildlife in action.



Dunlin



Green-winged teal

## Public Boat Ramp Kenai River Estuary

#### FIELD NOTES

A huge colony of gulls stages just across the river to Watch west. for loons in the the river near launch. The dense forest rimming the harbor area also protects cow moose



and their calves in early summer. Caribou wander the nearby flats most often in spring and early summer. The freshwater pond on the south side of the access road and the wetland on the north side of the Port of Kenai road host many species of shorebirds. Arctic terns feed on coho salmon in the channels bordering the extensive marsh. Harbor seals regularly periscope just off the boat ramp, while beluga whales sometimes appear in the channels during rising tides.

#### ECONOMIC CONNECTION

The ramp area offers a glimpse of recreation and commerce at the Kenai harbor. It's home to the 600-boat commercial fleet and salmon processing plants that drive the local fishing industry.

#### CONSERVATION CONNECTION

The Conservation Fund purchased 25 acres of wetland north of the boat ramp road to convey to the Alaska Department of Fish & Game for wildlife habitat.

VIEWING TIP Stay in the car along the ponds; birds will ignore

the vehicle but take flight at people afoot. Best shorebird viewing occurs after low tide as birds are pushed up the beach along the river and into the marsh with the rising tide. During spring and fall, watch for rare shorebirds such as ruff, and rare qulls such as Sabine's gulls.

HELPFUL HINTS The parking area can become congested during the peak of fishing season in July, with commercial and personal use fishermen launching boats. Try again on the next tide cycle.

GETTING THERE In Kenai, drive south on the Bridge Access Road from milepost 10.8 of the Kenai Spur Highway. The entrance to the public boat ramp and harbor is about 1.6 miles to the south on the right (west) side of the highway.



The overlook in Old Town Kenai offers a panoramic view of the Kenai River mouth and estuary, where thousands of birds gather.



Northern pintail



Snow geese

## D Erik Hansen Scout Park

Kenai River Estuary

FIELD NOTES The overlook on the steep bluff at the mouth of the Kenai River provides an extraordinary glimpse of the river's bird, mammal and fish action—a crossroads for some of the region's great migrations. In spring, immense flocks of shorebirds and waterfowl shift and shimmer over the marsh in



avian clouds. Arctic terns and western sandpipers and other shorebirds gather on the bar off the south bank. In summer 5,000 to 10,000 nesting gulls dot the flats, occasionally preyed on by bald eagles and parasitic jaegers. Salmon converge in the river from June through August, dominated by the huge run of sockeye salmon that peaks in July. Watch for fish splashing and rolling in the ebbing tide. Harbor seals and beluga whales, drawn by the fish, can be tracked from the park's vantage point.

Ke-

#### CULTURAL CONNECTION

nai is one of the oldest continuously inhabited communities in Alaska. Dena'ina Natives lived in the blufftop village for centuries. Russian fur traders arrived in the 1740s and established a fort in 1791, leading to the second European settlement in Alaska. If you visit during commercial fishery openings, you may see the drift gill net fleet at work. This fishery dates to the 1940s.

VIEWING TIP Bring binoculars or a spotting scope to pinpoint cari-

bou, moose, seals and whales. The overlook is the best place to watch the gull colony and migratory flocks in motion.

HELPFUL HINTS Check in at the Kenai Visitor Center at the intersection of the Kenai Spur Highway and Main Street for wildlife viewing information.

Stay back from the bluff, which can be unstable and collapse without warning.

**GETTING THERE** In Kenai—from Kenai Spur Highway take Main Street south (towards the river). Turn right on Cook Avenue. The Eric Hansen Scout Park is on the left on Mission Avenue overlooking the river.

# Marathon Road

A sweeping expanse of tundra coaxes caribou into the open, offering one the easiest places to view the "wandering deer of the North" in Alaska.



Caribou



Savannah sparrow



White-crowned sparrow

#### **NOTABLE SPECIES**

Caribou Moose Sandhill crane Blackpoll warbler Savannah sparrow Fox sparrow White-crowned sparrow FIELD NOTES Once extinct on the Kenai Peninsula, caribou were reintroduced in the 1960s and 1980s in five areas. The Kenai Lowlands Herd that frequents the Marathon Road and Kenai Flats areas in spring and summer originated from 21 animals released near Sterling in 1966. By 2005, the herd numbered about 135 animals and had not been hunted in more than a decade. In spring, the animals



move from the Moose River-Skilak Lake area down the Kenai River valley. Although most groups number between 10 and 15 caribou, gatherings of more than 100 have been seen in the tundra off Marathon Road in June. Moose are also common in this area, and large flocks of sandhill cranes forage on the tundra in spring, with a few birds remaining to nest.

MABITAT The saturated tundra off Marathon Road is dominated by grasses, Labrador tea, dwarf birch and willow, and lichens and mosses, interspersed with patches of black spruce. Drier ground supports white spruce and birch forests.

#### **ECONOMIC CONNECTION**

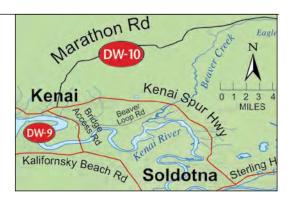
Marathon Road leads to industrial sites in what became Alaska's first modern oil field. The Kenai airport borders the site to the west.

VIEWING TIP Drive the road slowly in June and July, watching for caribou and moose in the open areas after emerging from the forest. Listen for blackpoll warblers in trees near the first gate.

HELPFUL HINTS Take binoculars or a spotting scope. Respect private lands. Watch for industrial traffic from the oil field. This area can be buggy.

#### **GETTING THERE**

Take the Kenai Spur Highway to Kenai and turn north on Marathon Road, which is the first road to the east of Airport Way, next to a car dealer.



### **Recreation Area Trails**

A quiet hike through a spruce and birch forest leads to a quiet isolated lake with loons.



Dark-eyed junco



Dragonflies

#### **NOTABLE SPECIES**

Black bear Moose Red squirrel Common loon Common raven Chickadees Varied thrush Warblers Dark-eyed junco Sparrows Dragonflies FIFLD NOTES well-established lowland forest casts a dim greenish light over meandering, well-maintained trails. Forest birds such as thrushes, sparrows and chickadees skitter and sing from the trees, while darkeved iuncos dart beneath devil's club and willow. The trails, also used for crosscountry skiing in winter, lead to a small lake with breeding loons, whose cries often echo through the forest. Moose find winter and summer food in the area, and black bears have been seen on the trails. floating bog surrounds



the lake, creating an edge between forest and lake that draws out animals. Alaska's common carnivorous plant, the sundew, can be found amid the moss, lichens and willows near the shore. Watch for black-billed magpies and ravens near the playing fields and the Nikiski Pool.

HABITAT A white spruce and paper birch forest interspersed with openings and brush dominates the trail system. Understory plants include devil's club, willow and alder. A wetland rims the lake with a floating bog close to the water and black spruce along the edges The lake itself contains sufficient fish to support a nesting pair of loons.

#### RECREATION CONNECTION

The North Peninsula Recreation Area of the Kenai Peninsula Borough offers a family friendly swimming pool with waterslide and warm wading area, sports, picnicking, and a community recreation center for the Nikiski community.

VIEWING TIP Visit early and late to see moose. Walk the trails slowly and listen for bird songs. Spend time at the lake and the loons will appear.

HELPFUL HINTS Be prepared for mosquitoes. Bring rubber boots if you want to explore the lake edge, but be careful not to damage wetland vegetation.

GETTING THERE Take Kenai Spur Highway/Road north to Nikiski, past the industrial facilities, to milepost 22. Turn left on Poolside Avenue at milepost 23.4 and park behind the Nikiski Pool.

CONTACT North Peninsula Recreation Area, 907-776-8800 www.borough.kenai.ak.us/NikiskiPool/



#### Site 12 Dena'ina's Way

It's Cook Inlet primeval: black bears, salmon, glacial erratics and towering devils club. Find them all in a birch and spruce forest on the remote northwest Kenai coast.



Wood frog



Gray jay

#### **NOTABLE SPECIES**

Coho salmon Rainbow trout Wood frog Black bear Moose Bald eagle Gray jay Black-billed magpie Varied thrush **Amphipods** 

# Captain Cook

### State Recreation Area

FIELD NOTES With its iungled understory and bia trees, this 3,460-acre park north of Nikiski along Cook Inlet offers a hint of the lush lowland forest that greeted explorer Capt. James Cook in 1778. The seldom visited woods hosts a range of Kenai Peninsula mammals: moose.



black bear, coyote, beaver, muskrat, red squirrel. Thrushes, warblers and jays fly through the trees, and mergansers and goldeneyes swim in the streams. The slow-moving Swanson River meanders to the sea, rainbow trout in its pools, its shorelines chirping with wood frogs. Coho salmon arrive in July and August. Along the beach, watch for bald eagles, gulls and shorebirds. Immense boulders dropped by melting glaciers dot the beach and mud flats offshore. Amphipods and other tiny invertebrates can be found beneath rocks after the tide has ebbed.

**HABITAT** Paper birch and white spruce forest, with an open understory of willow, alder, devil's club, cow parsnip (see page 30), and other low-growing plants, spread across the flat uplands. The Swanson River glides through a riparian wetland with floating bogs, through a marsh and into a shallow, silty estuary.

#### **CULTURAL CONNECTION**

Dena'ina Natives harvested fish and other foods in this area.

#### **ECONOMIC** CONNECTION

Today fishermen operate beach nets to the north and maybe half of Cook Inlet's 15 oil and gas production platforms can be seen from the beach.

VIFWING TIP Turn over rocks on the beach and watch translucent amphipods before they scurry away. Sit by the Swanson River estuary with binoculars and scan for birds, muskrats and beavers. Listen for common loons on Stormy Lake.



GETTING THERE Take the Kenai Spur Highway north; milepost 35.5 you enter the park; milepost 38.6 Swanson River; milepost 39 (the end of the road) turn left to Discovery Campground and the beach.











### North side of river mouth

This thriving estuary with a sweeping view of Cook Inlet volcanoes offers a chance to view salmon, bald eagles and shorebirds.



Peregrine falcon

#### **NOTABLE SPECIES**

Sockeye salmon Harbor seal White-fronted goose Snow goose Northern pintail Bald eagle Northern harrier Peregrine falcon Sandhill crane Black-bellied plover Pacific golden-plover Greater yellowlegs Lesser yellowlegs Whimbrel Hudsonian godwit Ruddy turnstone Semipalmated sandpiper Western sandpiper Rock sandpiper Dunlin Short-billed dowitcher Long-billed dowitcher Bonaparte's gull Mew gull Herring gull Arctic tern

FIELD NOTES The beach road emerges from the forest at a rivermouth lined by dunes, tidally influenced beach, a meandering estuary and broad salt marsh. The woods to the north and south offer a chance to view bald eagles and



moose. During migration, thousands of birds of diverse species can be seen on the wetlands and beach dunes, moving with the ebb and flow of tides. In the winter look for rock sandpipers foraging along the tide line on the beach. Thousands spend the winter here—one of only two places to view them on the Kenai Peninsula. Sockeye salmon return to spawn in June and July; millions of smolts migrate out to sea in spring. Harbor seals occasionally chase salmon into the river mouth. Beluga whales, once common here, are rarely seen due to a population decline.

HABITAT Several distinct habitats occur within a few hundred yards of the river mouth; some change dramatically with each 10 to 15-foot tide. An extensive salt marsh of sedges and dwarf shrubs sprawls along the river, interspersed with little ponds. The brackish estuary mixes the outflowing glacial water from Tustumena Lake with Cook Inlet's tides, concentrating both marine and freshwater species. Dense lowland forest rims the open areas.

#### HISTORICAL CONNECTION

The mouth of the Kasilof River was once used by Dena'ina Natives to gather and dry salmon. Canneries and packing plants were built in the early 20th century and several still operate nearby. A winter watchman's

house, built in 1891 and ;sheathed in tin cans, still stands along the road.

VIEWING TIP The smolt migration of May-June intensifies activity by migratory birds. This site has proven to be one of the best spots for rare shorebird sightings in recent years. Look here in the fall for sharptailed and stilt sandpipers. Avoid the site during the peak of the June-July salmon season unless you want to share the beach with hundreds of fishermen. Parking for large vehicles may be tight during fishing season.

HELPFUL HINTS Protect the dunes — don't drive on them. Avoid trampling vegetation. Respect private property.

GETTING THERE Sterling Highway milepost 96.1. Take Kalifornsky Beach Road 17.4 miles to Kasilof Beach Road. Drive almost one mile to a sandy parking area and primitive recreation site.

Or, from Sterling Highway milepost 108.8. Take Kalifornsky Beach Road 4.8 miles to Kasilof Beach Road.



#### Site 14 Dena'ina's Way

# Kasilof River south

With views of ocean, salt marsh, spruce bog, and lowland forest, this site offers opportunities to view shorebirds, cranes, and waterfowl—as well as marine mammals and moose.



Bonaparte's gull



Harbor seal

#### **NOTABLE SPECIES**

Sockeye salmon Harbor seal Sandhill crane Hudsonian godwit Shorebirds Bonaparte's gull Mew gull Herring gull Arctic tern Snow bunting

The FIELD NOTES south bank of the Kasilof River estuary attracts many of the same birds, fish and mammal species does the north shore. But a more extensive salt marsh reaches further into a bend of the river, and the shoreline



may be steeper and less sandy due to greater exposure to Cook Inlet. As the beach curves into the river mouth, the exposure changes from west to north, offering a chance to investigate whether birds have taken shelter during high surf and wind. Sandhill cranes stage and sometimes nest in the marsh, and migrating geese and ducks visit in spring and fall. Shorebirds work the tide line, refueling for migration. In winter, the extensive flats behind the dunes are a favorite haunt of snow buntings. Beluga whales have been seen moving a short distance offshore in pursuit of returning salmon.

HABITAT Several distinct habitats occur relatively close to each other. A tidally influenced beach rims the shore and curves into the river mouth. The estuary draws both marine and freshwater species. The salt marsh with sedges, grass, and brush transitions in a short span to black spruce wetland and then into a lowland forest dominated by white spruce, black cottonwood and paper

birch. Extensive edges between open and forested habitat are visible from the mouth.

#### RECREATION CONNECTION

Personal use salmon fishing by Alaska residents draws hundreds of people to the beach each July.

VIEWING TIP High tide concentrates the shore birds, as tides recede they spread out to feed.

Parking can be limited for big vehicles. 4X4 is necessary to drive to the river mouth. Vehicles are only allowed below the mean high water mark. Protect the dunes—don't drive on them. Avoid trampling vegetation. Respect private property.

GETTING THERE Sterling Highway milepost 111. Turn right on Cohoe Loop Road and drive west about four miles until the road dead-ends at the beach. The Crooked Creek State Recreation Site is on the right about 1.8 miles from highway.



# Crooked Creek Weir

Site 15 Dena'ina's Way

Watch Chinook salmon wend their way upstream, and observe salmon research in progress, at this roadside creek.



Bald eagle



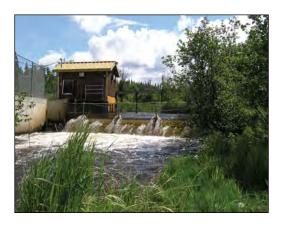
Chinook salmon



Dolly Varden

#### **NOTABLE SPECIES**

Chinook salmon Coho salmon Dolly Varden Bald eagle Gulls FIELD NOTES Teacolored Crooked Creek meanders from the foothills of the Kenai Mountains to empty into the silty glacial waters of the Kasilof River near the Sterling Highway, A state maintenance facility and weir are located on the creek off a gravel pullout milepost at 111 of the Sterling, just across the road from



Cohoe Loop Road. More than 110,000 Chinook smolts are released each June into Crooked Creek to augment wild runs for fishermen. When the 50-pound-plus adults return to spawn in May and June, they leap into the passage chute and weir where they are videotaped and studied by state biologists. A run of coho reaches the river in early fall. The small creek offers an intimate glimpse of returning salmon and the stirring sight of leaping fish. Dolly Varden and rainbow trout also swim in the creek. The scene can attract bald eagles and gulls, drawn by the prospect of fishy snacks.

HABITAT Crooked Creek is rimmed by dense alder brush, and surrounded by spruce forest. Fireweed, alder, and other transitional plants have colonized disturbed gravels along the road.

#### RESEARCH CONNECTION

The Alaska Department of Fish and Game developed Crooked Creek Hatchery in the early 1970's to augment commercial and sport fishing in the Kasilof River system including Tustumena Lake. The Department now uses the facility for maintenance as well as fisheries research and monitoring.

VIEWING TIP Visit May and June to catch sight of big Chinook salmon working their way toward the weir. Late July and August will offer views of coho salmon swirling in the creek. Walk the bank and listen for songbirds and bald eagles. Shorebirds skitter along the banks during summer.

HELPFUL HINTS Parking is limited near the weir and may not be suitable for large RVs. Although fishing is allowed in season in the Kasilof River, Crooked Creek is closed to fishing year round.

**GETTING THERE** Sterling Highway milepost 111. A gravel pull-out is directly across from the junction with Cohoe Loop Road. The weir lies just upstream of the pull-out.

## Site 16 Dena'ina's Way

# Tustumena Lake Road

A gravel road through boreal forest ends at the Kasilof River near ice-cold Tustumena Lake.



Yellow-rumped warbler

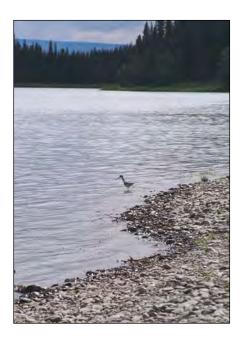


Double-crested cormorant

#### **NOTABLE SPECIES**

Beaver
Moose
Muskrat
Common merganser
Spruce grouse
Common loon
Double-crested cormorant
Bald Eagle
American three-toed
woodpecker
Boreal chickadee
Varied thrush
Yellow-rumped warbler
Dark-eyed junco

FIFLD NOTES Tustumena Lake Road winds 6.5 miles through lowland forest to a boat launch on the Kasilof River. Along the road, watch spruce grouse. Moose can be seen early and late in the day. Along the river, shorebirds and waterfowl forage from spring to fall. Black bears and brown bears rarely appear, but assume they are present and watch for prints in the mud. In May and June, millions of sockeye smolts swim downriver to the sea from their rearing grounds in Tustumena Lake. Returning spawners begin arriving in June and peak in July.



HABITAT Boreal forest with black spruce, white spruce and paper birch dominates the drive, transitioning in places to a more open forest due to beetle-killed spruce. The glacial river winds through the open woodland, with streamside wetlands and meadows. Willows and alders rim the open zones.

#### GEOGRAPHIC CONNECTION

Tustumena Lake is the largest freshwater body on the Kenai Peninsula. Stretching 25 miles toward the mountains, the 60,000-acre lake is notorious for its sudden dangerous winds and 45-degree water.

VIEWING TIP Drive the road slowly, early in the day, to watch for moose and black bears.

GETTING THERE Sterling Highway milepost 110.1. Turn left (east) on Johnson Lake Loop Road. After almost one half mile, turn right on Tustumena Lake Avenue. Follow the road until it ends at the boat launch.

# Deep Creek

Enjoy breathtaking views of Cook Inlet volcanoes at this estuary where bald eagles, migrating shorebirds and waterfowl gather.



White-winged scoter

#### NOTABLE SPECIES

Chinook salmon Coho salmon Steelhead Harbor seal Surf scoter White-winged scoter Black scoter Common goldeneye Barrow's goldeneye Bald eagle Sandhill crane Spotted sandpiper Gray jay Black-billed magpie Northwestern crow

### State Recreation Area

FIELD NOTES Deep Creek emerges from the forest to meander across a broad salt marsh rimmed by wooded hillsides. Chinook salmon return to the creek in June and July, while coho salmon return in August and September. In May, the marsh fills with migrating shorebirds and waterfowl, as well as sandhill cranes. Several migratory bird species stay to nest in the marsh or along the hillside. The air fills with cries from bald eagles, overlooking the creek from perches in the large cottonwoods and birches. As many as 30 eagles have been spotted at one time during June and July evenings, as youngsters try



their wings and adults watch for carcasses in the river. The edge between forest and marsh draws out sparrows, warblers, jays and magpies. Large numbers of gulls work the ocean beach to eat fish carcasses. Look for translucent, shrimp-like amphipods and other invertebrates under rocks along the sea shore. Cook Inlet's waters take on a much stronger marine character from here south.

HABITAT The rock-strewn beach offers a glimpse of the intertidal world. The estuary and marsh extend a half mile inland, where the creek bottom transitions to a freshwater riparian zone. Cottonwood and birch forest dominates the edges overlooking the scene.

#### RECREATION CONNECTION

The Deep Creek State Recreation Area is one of the most popular sites for launching boats in pursuit of Cook Inlet halibut and Chinook salmon. The campground offers stunning views

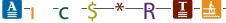
of the inlet and bird life. Canneries have operated along the creek since the early 20th century.

VIEWING TIP Pay attention to the rising tides. They inundate the lower river, dramatically altering the face of the beach and pushing shorebirds together. Visit during April and May to catch migrating birds, especially sandhill cranes. Northwestern crows seen here are part of the northernmost population of this species on the continent.

GETTING THERE Sterling Highway milepost 137.4. Turn at the Deep Creek State Recreation Area (signed).

















Eagle's Outlook Poised on high branches, eagles scan the shores, watching for easy meals in the fish-rich waters of Kachemak Bay and Cook Inlet. Their sharp eyes survey birds of every color and size which flock and forage along the beaches, bays and mudflats. Migrating mergansers, sandpipers, terns, plovers, yellowlegs, kingfishers, wigeons, geese, cranes, swans, swallows and harriers all stop to rest, some staying to nest.

Even without eagle eyes, it's possible to spot whales, seals and active volcanoes from a distance. A walk along the beach reveals the smorgasbord of invertebrates and fish that entice hungry birds to the area.

In May, when migratory birds crowd the shores, birders follow with their binoculars for the annual Kachemak Bay Shorebird Festival. For details visit www.homeral-aska.org/shorebird.htm. Whatever season birders visit Kachemak Bay, they'll find extensive resources. For dates and locations of recent sightings, call the Kachemak Bay Birding Hotline 907-235-7337 (PEEP). More information can be found online at www.birdinghomeralaska.org.



# State Recreation Area and river mouth

This clear-running river empties into the ocean at the most westerly point on the U.S. highway system. Across Cook Inlet, three volcanoes rise from the horizon.



Lesser yellowlegs

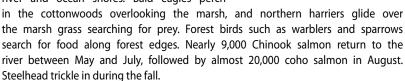


Black-bellied plover

#### **NOTABLE SPECIES**

Chinook salmon Coho salmon Steelhead Mink River otter Common merganser Red-breasted merganser Bald eagle Northern harrier Sandhill crane Spotted sandpiper Black-bellied plover Pacific golden-plover Greater yellowlegs Lesser yellowlegs Least sandpiper Belted kingfisher

FIELD NOTES Watch for beavers, river otters and muskrats early or late in the day along quiet stretches of the Anchor River. In spring, migrating shorebirds and waterfowl flock to this area, with many species remaining to nest. Look for mergansers and their broods in the river, and for Pacific golden-plovers, black-bellied plovers and greater and lesser yellowlegs along the river and ocean shores. Bald eagles perch



HABITAT The Anchor River passes through a mixed spruce-cottonwood forest with a lush riparian zone, then emerges into a broad estuary and marsh filled with salt-tolerant sedges and grasses.

HISTORICAL CONNECTION

English explorer Captain James Cook spent the summer of 1778 sailing Alaska's coastline in search of a Northwest Passage. The name Anchor Point commemorates the loss of one of his anchors at a point further north.

VIEWING TIP During fishing season, when the beach and river mouth can get crowded, check out other pullouts and recreation sites along the road.

HELPFUL HINTS Bring rubber boots for exploring the beach and river shallows. Avoid trampling sensitive wetland vegetation.



GETTING THERE Sterling Highway milepost 156.9. Turn west following signs to the Anchor River State Recreation Area. Several campgrounds along the 1.6-mile road provide river or beach access. The road ends at the beach.



## Site 2 Eagle's Outlook

# Baycrest Hill Viewpoint

Want to fit whales, sea otters, eagles, fishing boats and active volcanoes in the same photograph? This viewpoint on the bluff overlooking the Homer Spit and Kachemak Bay opens a vast window on the Lower Cook Inlet.



Tree swallow



Humpback whale

#### **NOTABLE SPECIES**

Harbor seal
Humpback whale
Sea otter
Bald eagle
Black-billed magpie
Common raven
Tree swallow
Cliff swallow

FIELD NOTES This hill wayside on the overlooking the Homer Spit and Kachemak Bay is the best place to take postcard snapshot of Augustine Volcano. panoramic lower Cook Inlet also offers a chance to scan for congregations of humpback whales, harbor seals. Steller



sea lions and sea otters from an almost aerial vantage. On calm days, watch for the white puffs of whale exhalations, called blows, and the dark figures of otters and seals. Use binoculars or a spotting scope. Watch for bald eagles drifting by on thermals and black-billed magpies fluttering in the trees below. In the spring, track flocks of migrating birds through binoculars as they wheel across the sky.

HABITAT The immediate vicinity features alders and brush typical of steep slopes and disturbed sites. The general area lies within an upland and somewhat dry spruce-birch forest. Kachemak Bay, spread out below, includes some of the most diverse and bountiful ocean habitat in the world.



#### GEOLOGICAL CONNECTION

Augustine Volcano is an active volcano, with ten eruptions in the 1900s. Information on Alaska's volcanoes, including the latest activity, can be found at www.avo.alaska. edu.

VIEWING TIP In spring and summer, ravens and eagles play in the updrafts along the cliffs here. It's a great place to watch flips and rolls and other avian aerobatics.

HELPFUL HINTS Be prepared for wind even on clear days. Stay away from the rim of the bluff.

**GETTING THERE** Sterling Highway milepost 169.6.

Watch for the signed wayside on the bay side of the road. Homer lies about two miles further down the hill.



Site 3 Eagle's Outlook

An intimate walk through upland woods and subalpine meadows offers a chance to view thrushes. warblers, sparrows, flycatchers, chickadees and other forest birds.



Steller's jay



Orange-crowned warbler

#### **NOTABLE SPECIES**

Moose **Porcupine** Red squirrel Alder flycatcher Gray jay Steller's jay Black-capped chickadee Boreal chickadee Varied thrush Orange-crowned warbler Wilson's warbler Song sparrow

### Nature Center

The Carl E. Wynn FIELD NOTES Nature Center offers a nature center and a network of well-maintained trails and wheelchair-accessible boardwalks in a 140-acre preserve on the top of a bluff 1,200 feet above Kachemak Bay. A selfguided nature trail helps you discover the forest and wetland habitats and the animals that call them home. Winter visitors can see snowshoe hares and moose.



An area fenced to keep moose out (called an exclosure) demonstrates the impact of winter browsing on willows. Owls are most active in early spring.

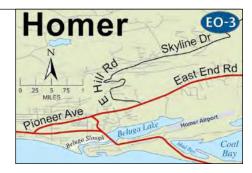
HABITAT The site is dominated by Lutz spruce, a hybrid between Sitka spruce of the coastal rainforest and white spruce of the boreal interior. A nature trail on the south side of the road leads to black cottonwoods. Stands of willows and alders rim subalpine meadows that feature wildflowers and berries in season. A creek bottom supports lush riparian growth, and an upland bog features peat moss and carnivorous sundew plants.

VIEWING TIP Call ahead to participate in a guided tour. Many programs are aimed at families with children. Once there, check in at the log cabin for up-to-date viewing news.

An 800-foot wheelchair accessible boardwalk and an interpretive trail for the visually impaired expand opportunities for everyone.

The trails are HELPFUL HINTS open year-round with a modest use fee requested. The center is staffed during summer from 10am to 6pm with guided tours at 10am and 2pm and a variety of weekly educational programs. Winter recreation begins in October.

**GETTING** THERE From Homer, take East End Road about .5 miles to East Hill Road (across from Paul Banks School). Turn up East Hill Road and follow the long, steep, windy road until it reaches East Skyline Drive near the top of the bluff. Bear right (east) and drive 1.5 miles. The entrance to the nature center is on the north side of the road.



CONTACT www.akcoastalstudies.org 907-235-6667

## Site 4 Eagle's Outlook

# Bishop's Beach Park

Explore the north shore of Kachemak Bay on foot. Shorebirds skitter along the receding tide, while clams squirt and burrowing sea anemones wave their stinging tentacles in hopes of passing prey.



Least sandpiper



Burrowing anemone

#### **NOTABLE SPECIES**

Harlequin duck
Bald eagle
Herring gull
Northwestern crow
Barnacles
Blue mussel
Burrowing anemone
Clams
Crabs

FIFLD NOTES sand-and-mud beach. by Kachemak swept Bay's 25-foot tides. extends from the end of a residential street in old Homer to the mouth of Beluga Slough. It can be thick with migrating shorebirds and waterfowl in



early May. Herring gulls and northwestern crows pick through the flotsam stranded by tides. Bald eagles soar overhead and call from tall trees on the shore. As the tide recedes, watch for the squirting jets of water from clams clearing their siphons. Rocky outcrops trap pools of water and form anchors for beds of blue mussels and barnacles. You may find jellyfish trapped in these tidepools, along with plankton, crabs and tiny shrimp-like amphipods. Burrowing anemones pucker the sand in places, visible as half-dollar-size disks almost flush with the surface.

HABITAT This beach features rocky, sandy and muddy intertidal and sub-tidal zones, inhabited by remarkably tough animals that have evolved to spend part of each day submerged and part exposed. Different intertidal habitats attract different animals: rocky areas offer structure for anchoring and shelter from currents, while sand and mud shelter burrowing animals such as clams.

#### RECREATION CONNECTION

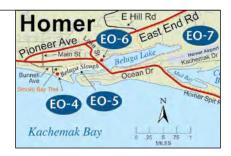
Bishop's Beach is popular among local residents for tide-pooling, dog walking and gathering coal. It's the

beginning of a coastal hiking route that continues 15 miles northwest to Anchor Point.

VIEWING TIP Visit on a day when the tide will drop to minus 1 foot or below. Begin exploring at least a half hour before low tide. More extensive tidepools can be found in the rocks to the west by Coal Point.

HELPFUL HINTS Wear rubber boots and dress for wind. Consult a tidebook for times and stay aware. The returning tide may rise faster than you expect.

GETTING THERE From the Sterling Highway in Homer, turn south on Main Street toward the bay. Go left on East Bunnell Avenue, then go right on Beluga Avenue until it dead-ends at the park.





Explore a bird hotspot at the edge of the sea. A boardwalk and trail traverse a waterfowl-filled salt marsh to tidal flats where shorebirds skitter across the sand.



Greater white-fronted goose



Northern shoveler

#### **NOTABLE SPECIES**

Greater white-fronted goose Canada goose Trumpeter swan Tundra swan Eurasian wigeon American wigeon Northern shoveler Northern pintail Green-winged teal Bufflehead Common goldeneye Bald eagle Merlin Sandhill crane Greater yellowlegs Lesser yellowlegs Western sandpiper Least sandpiper Northwestern crow Tree swallow Violet-green swallow

FIELD NOTES This trail takes you along lower Beluga Slough, salt marsh where the freshwater of Beluga Lake mixes with Kachemak Bay's foot tides. Along the 0.6-mile walk between Alaska Islands and Oceans Visitor Bishop's Center and



Beach parking lot, wildlife viewers descend a hillside and pass through a forest, skirt a meadow of salt-tolerant grasses, sedges and succulent plants, and finally come to a gravel/sand beach with shallow channels of flowing water. Salt water fills the slough only when the tide rises above 18 feet. During the spring, migrating shorebirds and waterfowl forage for invertebrates, small fish and sprouting marsh plants when the ebbing tide exposes the mud. Summer brings nesting cranes, eagles, and merlins. Listen for the calls of bald eagles from the trees along the marsh. Watch for violet-green and tree swallows and northwestern crows.

HABITAT An intertidal basin (where extreme high tides mix with freshwater flows) rimmed by a salt marsh defines the slough. At higher elevations. grasses, willows alders transition to spruce forest on the hillside.

VIEWING TIP Explore the boardwalk just as the tide begins ebbing, when shorebird flocks are most visible. Hike the beach as the tide ebbs further. Always take binoculars; this place draws birds in all seasons.

HELPFUL HINTS Wear rubber boots and carefully explore any areas off the boardwalk. The slough contains deep channels that should be avoided. Avoid trampling sensitive wetland habitats.

GETTING THERE Go to the Alaska Islands and Ocean Visitor Center at 95 Sterling Highway in Homer. The easy trail starts at the parking lot and leads downhill to Bishop's Beach.

CONTACT Alaska Islands and Ocean Visitor Center www.islandsandocean.org 907-235-6961













## Site 6 Eagle's Outlook

# Ben Walters Park

Get a close-up view of a lake and its waterfowl, and explore the boundary between mature forest and marsh.



Trumpeter swan



Red-necked grebe

#### **NOTABLE SPECIES**

Threespine stickleback Moose Trumpeter swan Nesting ducks Seabirds Red-necked grebe Shorebirds Emerald dragonfly

## on Beluga Lake



FIELD NOTES A short walk leads from parking lot beneath mature trees to a boardwalk across a bog adjacent to Beluga Lake with its rich bird life. Moose trails lace the dense forest on dry land. Sparrows, flycatchers chickadees flicker through the branches. The forest transitions quickly to marsh, where emerald dragonflies swoop past in summer, sometimes landing to rest on the planks. The boardwalk ends at a floating dock. Look into the shallow water for threespine sticklebacks, diving beetles and dragonfly larvae. Scan

the grasses rising from the water for emerging dragonflies. In less than an hour they can transition from swimming larvae to agile fliers. During spring migration, this vantage offers views of geese, ducks and other waterfowl. During summer evenings, red-necked grebes, trumpeter swans and ducks may paddle close.

HABITAT A dense, dim forest with Lutz spruce, black spruce and birch bounds the trailhead. Willow and alder grow along edges. A bog and marsh begins within a few yards and leads to a freshwater lake.

HELPFUL HINTS Check in with local birders for tips and sightings at www.birdinghomeralaska.org.

GETTING THERE Take the Sterling Highway south through Homer to the stoplight at Lake Street. Turn left, then take the first right—Ben Walters Lane. The city park is to the east, tucked behind a fast food restaurant.

# Beluga Lake (e

A freshwater lake and wetland inland from Kachemak Bay draws trumpeter swans and Aleutian terns. Forest birds forage nearby, while moose seek food to survive winter.



Wilson's snipe



Moose



Aleutian tern

#### **NOTABLE SPECIES**

Moose Muskrat Trumpeter swan Red-necked grebe Wilson's snipe Shorebirds Aleutian tern Songbirds

### and Wetlands



FIELD NOTES The Homer Airport Critical Habitat Area covers 280 acres of the Beluga wetlands and forest rimming Beluga Lake and Kachemak Bay wetlands. A viewing platform overlooks the area, offering a good vantage to scan lake, marsh, black spruce and forest at once. More than 100 species of birds visit the vicinity during spring migration or nest in summer, including shore-birds, waterfowl and songbirds such as golden-crowned and ruby-crowned kinglets. Aleutian terns sometimes raise young in the Beluga wetlands along Kachemak Drive. Owls, northern harriers and bald eagles take wing over the lake. Chickadees, kinglets and sparrows can be seen in the brush and forest. Many moose use this area, which offers important winter habitat.

HABITAT The extensive wetlands here are bounded by willows and black spruce. Beluga Lake is a low-land lake with resident fish and nesting waterfowl such as red-necked grebes and trumpeter swans. Drier sites transition to spruce forest.

#### RECREATION CONNECTION

The area is a popular with local residents for berry picking, hiking, skiing and wildlife viewing.

VIEWING TIP Visit the Beluga Wetlands Wildlife Viewing Platform early in the morning or late in the day. Bring a spotting scope to view birds on the lake from the platform.

HELPFUL HINTS You'll find additional access points from which to view the wetlands on the north side (accessible by a public foot trail across Kachemak Heritage Land Trust lands) and from the airport access road off Kachemak Bay Drive on the south side of the airport.

GETTING THERE Take the Sterling Highway south through Homer, cross the outflow of Beluga Lake and turn east on FAA Drive. The Beluga Wetlands Wildlife Viewing Platform is on the left, just across from the Homer Airport passenger terminal.

# Mud Bay

### and the Homer Spit Trail

This portal to Kachemak Bay is a birder's delight. Birds by the thousands—sandpipers, plovers, ducks, geese, terns and others—are drawn to the flats along the Homer Spit.



Pectoral sandpiper



Greater scaup

#### **NOTABLE SPECIES**

Harbor seal Sea otter Steller sea lion Greater scaup Sea ducks Whimbrel Western sandpiper Semipalmated sandpiper Pectoral sandpiper Sharp-tailed sandpiper Rock sandpiper Dunlin Aleutian tern Arctic tern Gray-crowned rosy-finch

FIFI D **NOTES** 

The density and variety of birds that feast on invertebrates and fish at Mud Bay in early May inspires the annual Kachemak Bay Shorebird Festival. More than 100 species of birds have been seen in Kachemak



during the April-May migration, many at Mud Bay itself. But good wildlife viewing is not limited to spring migration. Flocks of seabirds and shorebirds spend the winter seeking food along Mud Bay and the spit's shoreline. Watch for gray-crowned rosy finches in winter, foraging among the stacks of stored crab pots. Rafts of ducks drift along shore at high tide, and rock sandpipers forage as the tide drops. Marine mammals, including harbor seals, sea lions and sea otters, can occasionally be seen offshore.

**HABITAT** An ancient glacial moraine shaped by currents reinforced by people, the Homer Spit offers miles of sand, mud, and gravel beaches. Twice a day, the bay's tides expose hundreds of acres of flats.

VIEWING TIP Visit during late April or early May for the peak of the shorebird migration. High tide concentrates birds near shore and they forage most intensely as it begins to ebb.

HELPFUL HINTS Dress for wind. Parking can get congested at the Mud Bay viewing platform, so be prepared to walk from other locations. Be aware of the incoming tide.



**GETTING THERE** Follow the Sterling Highway south through Homer to the beginning of the spit. Parking for the Mud Bay viewing platform and Homer Spit Trail is off Kachemak Drive. There are other pullouts along the Spit road.







# Homer Spit 1

People and animals mingle at this busy working harbor.



Ruddy turnstone



Jellyfish

#### **NOTABLE SPECIES**

Harbor seal
Steller sea lion
Turnstones
Surfbird
Black-legged kittiwake
Northwestern crow
Fox sparrow
Gray-crowned rosy-finch
Jellyfish

### Harbor Area

FIELD NOTES The Homer Small Boat Harbor attracts human-tolerant birds and wildlife. Several species of gulls perch on floats, docks, and even boats, watching for discarded scraps of fish. Northwestern crows and bald eagles watch from light poles,



dock supports, boats and buildings. Black-legged kittiwakes and terns may wing back and forth overhead on their way to or from nest sites. Harbor seals sometimes periscope from the channels, and Steller sea lions haul out in winter on some of the jetties. Watch for marine life in the bay's deeper waters from the outside breakwaters and docks.

HABITAT The harbor is essentially a shallow marine lagoon with steep beaches and rock faces. Nesting and perching habitat for birds can be found on jetties and breakwaters, while the harbor channels provide rearing zones for juvenile fish. An intriguing element of the habitat is the noisy presence of humans and their equipment. This favors human-tolerant species while driving off more cautious animals.

#### **ECONOMIC CONNECTION**

During summer, the busy harbor offers interesting views of boats, ships and marine commerce. It is an important center for Kachemak Bay marine recreation, with water

taxis and private boats departing constantly for the bay's many beaches and coves.

VIEWING TIP The harbor pilings and floats support a colorful "garden" of attached marine life. To get a look at this fascinating world, do some "belly button biology"—lie down to peer at the undersides of the floats! You may see jellyfish and small schooling fish as well.

HELPFUL HINTS Don't approach Steller sea lions at any time; it violates federal law to do so, and the animals can be dangerous. Expect traffic congestion during summer.

GETTING THERE Take the Sterling Highway through Homer and follow the signs. The boat harbor is beside the highway near the end of the Spit.

#### Site 10 Eagle's Outlook

# **End of Homer Spit**

Take a pleasant drive out to sea and stop where the land ends and the world of seabirds and sea mammals begins.



Fork-tailed storm-petrel

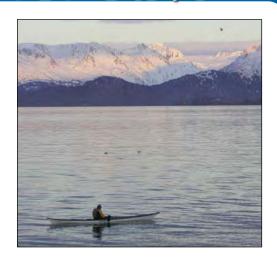


Black turnstone

#### **NOTABLE SPECIES**

Harbor seal Sea otter Steller sea lion Steller's eider Common eider Harlequin duck Red-necked grebe Fork-tailed storm-petrel Pelagic cormorant Bald eagle Black turnstone Surfbird Mew gull Herring gull Glaucous winged gull Black-legged kittiwake Common murre Kittlitz's murrelet

FIELD NOTES Homer Spit extends almost five miles into the marine world of Kachemak Bay, offering extensive viewing of seabirds, mammals and other off-shore critters from the security of land. Breakwaters harbor structures attract black-legged kittiwakes: cup-shaped their small. nests are easily observed. Four or five species of gulls mingle, offering a challenge to sort them out on



the wing. Common murres, red-necked grebes and surfbirds ride the swells at the entrance to the small boat harbor and the ferry terminal. Loons, sandpipers, sea ducks and bald eagles overwinter here. Look for Steller's and common eiders on the west side of the spit in the winter. Watch for harbor seals and sea otters cruising just offshore, especially during spring and summer. Steller sea lions also visit, and may be seen close to shore in January and February. A walk around the beach in front of the nearby hotel with binoculars and spotting scopes is a great way to scan miles of ocean for off-shore visitors.

HABITAT The end of the spit is a transition point between sea and shore, human and marine systems. Harbor breakwaters, rock jetties and navigation lights offer perches and nesting sites. Shallow water attracts fish and birds—and deeper, off-shore areas are always in sight.

#### GEOLOGIC CONNECTION

The Homer Spit is part of an ancient terminal moraine—a ridge of boulders, gravel, and sand deposited at the face of a glacier that filled Kachemak Bay some 15,000 years ago.

VIEWING TIP Park by the state ferry terminal and scan the entrance to the harbor. Walk the beach and boardwalks (park at the Seafarers' Memorial or the harbor). Bring binoculars or a spotting scope to observe off-shore activity.

HELPFUL HINTS The end of the spit can be congested with visitors June through August: expect to drive slowly.

Keep away from Steller sea lions—they are protected by federal law, their populations are declining in this region and they can be dangerous.

GETTING THERE Take the Sterling Highway through Homer and follow the signs. The highway ends on the spit.



This rugged islet in Kachemak Bay hosts one the most productive seabird colonies in the Gulf of Alaska.



Tufted puffin



Red-faced cormorant

#### **NOTABLE SPECIES**

Red-faced cormorant
Pelagic cormorant
Glaucous-winged gull
Black-legged kittiwake
Common murre
Pigeon guillemot
Marbled murrelet
Horned puffin
Tufted puffin

FIELD NOTES As many as 20,000 seabirds build nests in the craggy rock faces and cliffs of Gull Island, on the south side of Kachemak Bay about three miles from the Homer Spit. Most years, 8,000 to 10,000 black-legged kittiwakes dominate the rookery, building mud nests perched in clefts and on ledges.



5,000 to 8,000 common murres nest amid the kittiwakes. Other birds seen in smaller numbers include glaucous-winged gulls, pelagic cormorants, red-faced cormorants, puffins and pigeon guillemots. The effect stuns the senses—the air is saturated with the odor of fishy guano and vibrates with the cacophony of crying birds. The sky can fill when a thousand birds take wing at once. Watch for the fuzzy offspring peeking from the nests.

HABITAT The sculpted, scalloped rock of Gull Island offers outstanding nesting habitat for seabirds.

#### CONSERVATION CONNECTION

Owned by the Seldovia Native Corporation, Gull Island is the most visited seabird rookery in the bay. To protect the wildlife, the Seldovia Native Association does not allow the public to go ashore. The use of cameras for remote viewing of wildlife was pioneered on the island by the Pratt Museum.

HELPFUL HINTS Dress in layers for wind and rain.



GETTING THERE A variety of tours and operators visit Gull Island throughout the summer. Boat tours crossing Kachemak Bay often include a visit to Gull Island. Ask when making your plans. Homer tours depart from the Small Boat Harbor on the spit. Additional information at www.homeralaska.org or call Homer Visitor Information Center at 907-235-7740.

#### Site 12 Eagle's Outlook

# Peterson Field Station

#### It's a sea star spectacular here. Between old growth rainforest and marine lagoons stretches an extensive tide flat with a stunning menagerie of intertidal critters.



Hermit crab



Sea stars

#### **NOTABLE SPECIES**

Black bear
Bald eagle
Chitons
Christmas anemone
Decorator crab
Hairy Triton
Hermit crabs
Limpets
Moon snail
Octopus
Sculpins
Sea stars
Sea urchins

### and China Poot Bay

FIELD NOTES Nestled above a cliff on the south side of Kachemak Bay, the Peterson Field Station of the Center for Alaskan Coastal Studies offers access to both an old growth rainforest and a lagoon jammed with weird and colorful intertidal invertebrates. Guided tours explore rock piles and tide pools for sea stars, urchins, crabs, anemones, clams, chitons, limpets, snails, and tiny fish. Examine and gently touch a 24-armed sunflower star, a tidepool predator that grows as large as a pizza platter and can move 18 inches per minute

as it "pounces" on mussels and other stars. Decorator crabs covered with seaweed mingle with hairy tritons and moon snails. Grazing shellfish such as limpets and chitons cling to rocks. Trails also wend through the rainforest, offering glimpses of songbirds and bald eagles. Sundew, a carnivorous plant, lurks in the spongy bogs.



HABITAT Temperate rainforest—with a twist—covers the mountainsides above. Extensive die-offs of spruce due to a bark beetle infestation in recent decades have opened up the forest floor to light and spurred explosive growth. The strong tides of China Poot Bay shape intertidal life into distinct and colorful zones.

CULTURAL CONNECTION An ancient midden and house pit perch on the ridge above China Poot Bay, offering evidence of age-old use by Native Alaskans.

VIEWING TIP The Center for Alaskan Coastal Studies operates an educational program visited by hundreds of adults and school children each season. Arrange to take a guided hike with a naturalist from Peterson Field Station. If your schedule allows, watch for "minus" tides; these expose even more extraordinary sea life.

HELPFUL HINTS Wear rubber boots. Don rain gear to traverse the drippy forest. Wearing a bug net will enable you to slow down and listen for bird song.

GETTING THERE Both Peterson Field Station and China Poot Bay lie on the south side of Kachemak Bay about four miles from the Homer Small Boat Harbor. The Center for Alaskan Coastal Studies offers tours and transportation to the field station and tide pools. Water taxis will make drop-offs in China Poot Bay, which includes trailheads in the Kachemak Bay State Park.

#### CONTACT

www.akcoastalstudies.org; 907-235-6667



This 400,000 acre park offers a cross-section of the best of coastal Alaska: from the whales of the open sea to black bears slipping beneath dark spruce to shy birds nesting beside glacial ice.



King eider



Common eider

#### NOTABLE SPECIES

Humpback whale Killer whale Harbor porpoise Sea otter Steller sea lion Black bear Moose Mountain goat Steller's eider King eider Common eider Pacific loon Common loon Yellow-billed loon Fork-tailed storm-petrel Aleutian and Arctic terns Common murre Pigeon guillemot Marbled murrelet Kittlitz's murrelet Horned puffin Tufted puffin Intertidal creatures

### State Park

FIELD NOTES Alaska's first state park, located on the south side of Kachemak Bay, showcases a vast range of species, from ocean animals to mountain dwellers. the Bay, marine mammals such as sea otters, humpback whales and harbor



forage amid common murres, horned puffins and tufted puffins. Pigeon guillemots nest along the rocky shores, and fjords host flocks of sea ducks in winter. Along the shore, ebbing tides expose the colorful world of sea stars, anemones, crabs and clams. Bald eagles and merlins patrol from perches amid towering spruce. The dense understory of devil's club, willow and alder supports a symphony of sparrows, warblers, thrushes and other songbirds. Moose, black bears, coyotes and wolves pad along the trails, leaving their prints pressed into the mud. Mountain goats wander the alpine zone.

HABITAT This park is packed with different habitats. Deep marine waters give way to tidal lagoons. The 25-foot tidal range bathes a succession of distinct intertidal zones. The beaches are fronted with a forest of towering Lutz spruce, a hybrid of white and Sitka varieties. Uplands transition from temperate rainforest to muskegs and subalpine meadows to tundra. Receding glaciers trigger plant succession in mountain valleys. Lakes support their own ecosystems.

CULTURAL CONNECTION Native people have been living in Kachemak Bay for thousands of years, and it was one of the first areas of Alaska to be settled by Europeans.

VIFWING TIP Walk a beach at low tide. Hike up into the rainforest when the tide rises.

HELPFUL HINTS Extend vour stay by reserving one of the public use cabins or vurts in the park. For more information visit www.dnr. state.ak.us/parks/cabins/kenai.htm. These cabins are popular so plan well ahead and allow yourself at least two nights so you can settle in.

There are also lodges, bed and breakfasts, and a restaurant in the small community of Halibut Cove.

At times bugs are plentiful; a mosquito headnet and/or repellent will make it comfortable to slow down, watch and listen.

GETTING THERE Commercial water taxis and tours operate daily from the Homer Small Boat Harbor to the State Park's Halibut Cove Lagoon public dock. Boats can be chartered to one of the many Park trails or cabins; advance reservations are recommended but not always necessary.

www.dnr.state.ak.us/parks/units/kbay/kbay.htm







## Site 14 Eagle's Outlook

# Homer to Seldovia Passage

### Kachemak Bay Critical Habitat Area

See whales, otters, murres and puffins in a trip across one of Alaska's richest and most accessible ocean zones.



Pigeon guillemot



Marbled murrelet

#### **NOTABLE SPECIES**

Harbor porpoise
Harbor seal
Humpback whale
Killer whale
Sea otter
Sooty shearwater
Storm petrels
Cormorants
Black-legged kittiwake
Common murre
Pigeon guillemot
Marbled murrelet
Kittlitz's murrelet
Horned puffin
Tufted puffin

FIELD NOTES This 19-mile route crosses outer Kachemak Bay. One of the richest marine bodies in the world, this bay is protected as a Marine Reserve. The bay's big tides mix and swirl glacial runoff with deep ocean water,



while incoming and circulating currents concentrate plankton, creating a rich marine ecosystem of invertebrates, crabs, forage and bottom fish, marine mammals and vast flocks of birds. Whether on an Alaska Marine Highway ferry or a private tour, you can see diving seabirds such as common murres, pigeon guillemots and puffins, sometimes just off the boat rails. Watch for concentrations of active gulls—they may indicate schools of forage fish or krill that can also be the targets of feeding whales. Humpback whales are often sighted when they exhale and produce a white "blow" visible as a brief puff of fog across miles of sea. Harbor seals and Steller sea lions regularly forage in the area. Dozens of sea otters may be glimpsed in large groups off Seldovia and the Herring Islands.

HABITAT This route crosses rich, relatively shallow marine waters of outer Kachemak Bay and offers an excellent glimpse of the ocean ecosystem found throughout the Gulf of Alaska.

CONSERVATION CONNECTION
In 1993 the state designated 222,000
acres of tidal and submerged lands

as critical habitat, and in 1999 the bay's water and adjacent public lands were designated as a National Estuarine Research Reserve.

HELPFUL HINTS Hope for calm weather, but be prepared for rough seas. Bring rain gear and expect wind even on sunny days.



Instead of making Seldovia a day trip, consider staying a night or three. There are plenty of visitor services and wildlife viewing opportunities. Visit www.seldovia. com and www.xyz.net/~seldovia for information.

GETTING THERE The Alaska Marine Highway System ferries (www. ferryalaska.com), and private ferries, make regularly scheduled round trips between Homer and Seldovia. Tours are also available.

# Otterbahn Trail

Site 15
Eagle's Outlook

A walk through the forest and meadow climaxes on a rocky Kachemak Bay beach. Look for sea otters offshore and listen for songbirds.



Porcupine



Goose barnacles

#### **NOTABLE SPECIES**

Sea otter
Black bear
Porcupine
Bald eagle
Spotted sandpiper
Three-toed woodpecker
Pine siskin
Intertidal creatures



### Seldovia's outside beach

FIELD NOTES The Otterbahn Trail begins at the lush boundary between Seldovia's woodsy outskirts and a tract of undeveloped rainforest. Watch for Wilson's warblers, song sparrows and



chickadees. Within a few yards, the trail enters the dim, jungled forest with Lutz spruce trunks rising like columns over a mossy understory of devil's club and brush. To spot conifer-seeking forest birds such as three-toed woodpeckers, watch for motion in the boughs overhead and listen for tapping. Porcupines can sometimes be seen waddling near the trail. Black bears pad the same route as people. Though they are rarely seen, keep a lookout for their "cow pie"-like scats, laced with grass and berry husks. More birds can be spied where the trail traverses alder thickets, and then crosses a boardwalk over a salt lagoon. The route ends at the western section of the Outer Beach. Nearshore waters and rocky outcrops draw seabirds, bald eagles, northwestern crows and sea otters.

HABITAT The 1.2 mile trail traverses several distinct habitats as it descends to the coast. Old growth forest, dominated by western hemlock and Lutz spruce, shelters a diverse understory. Disturbed sites grow dense stands of alder. Beach and intertidal habitats stretch along the coast. Nutrient-rich marine waters draw birds and sea otters close to shore

HISTORIC CONNECTION Watch for "boat knee trees" where the curved bases of tree trunks were harvested to build boats.

VIEWING TIP To view the lush garden of seaweed and marine animals in the rocky intertidal zone, choose a calm day with an ebbing tide.

HELPFUL HINTS Walking the shore to the Seldovia Outside Beach can only be done when the tide is below 10 feet. Stay on the trail to avoid private property. Wear rubber boots or water shoes. Walk carefully in the slippery intertidal zone; a walking stick may be helpful.



GETTING THERE Ask locals or the boat crew to point the general direction. From the harbor on Main Street, take English Drive uphill to Winifred Avenue and walk a few hundred yards to the Susan B. English School. The trail begins behind the school.

Another access exists at Outside Beach Park about a mile out Jakolof Bay Road.





Whale's View The journey to the sea begins high in the hills, where salmon spawn. The small fry start their lives in small tree-lined streams frequented by beavers, moose and forest birds. But another world opens up when they reach Resurrection Bay at the city of Seward. Protected by rugged coves, bays and islands, this deep, glacier-carved fjord provides homes for many kinds marine life, including sea otters, Steller sea lions, seals and three species of whales — killer, humpback and gray. Puffins, murres and other diving birds move effortlessly between air and water.

Shoreline sites give views of the bay and saltwater lagoons, while trails wind through woods and around lakes. Boat launches and cruises open the way to exploring the bay and maritime parks, including islands where sea lions and seals haul out to rest, mate and raise their pups.







# Moose Creek

Returning sockeye salmon draw wildlife into view along a clear-running stream in the headwaters of the Kenai River system.



Western sandpiper



Salmon fry

#### **NOTABLE SPECIES**

Sockeye salmon Black bear Brown bear Common merganser Spruce grouse Bald eagle American three-toed woodpecker **Flycatchers** Boreal chickadee Brown creeper American dipper Hermit thrush Varied thrush Yellow warbler Yellow-rumped warbler

### <u>#</u>\_#

### at Trail Lake Hatchery

FIELD NOTES Moose Creek flows into Trail Lake, serving as one of the headwater streams for the Kenai River and its immense run of sockeye salmon. By late July and early August, hundreds of adult salmon have run the gauntlet of human and non-human predators to reach their final destination in this stream that crosses and recrosses the Seward Highway. From a viewing platform in the woods, salmon can be seen sweeping redds (shallow nest depressions) in the gravel with their tails. Watch for Dolly Varden and rainbow trout attending the spawners, seeking eggs and flesh. Bald eagles and common mergan-



sers feed on the rich bounty. Black and brown bears often work the creek for carcasses and can sometimes be seen from the platform. The spruce and birch forest along the creek supports forest birds, including thrushes, flycatchers, warblers, woodpeckers, and chickadees. The old bridge at the creek's mouth offers another view of the spawning stream and the lakeshore.

HABITAT Moose Creek is a typical Kenai River system spawning tributary, with clear water and gravel bottom. Riparian alder and willow growth transitions to mixed white spruce forest on the slopes.



#### ECONOMIC CONNECTION

The Cook Inlet Aquaculture Association's Trail Lake Hatchery is a central incubation facility that releases up to 19 million sockeye salmon and one million coho salmon to systems outside the Kenai drainage each season.

VIEWING TIP Stop by the viewing deck in late July and early August, after the fish begin arriving in high numbers. Visits in May and June might pay off with nesting bird sightings.

HELPFUL HINTS Wear polarized glasses to penetrate the glare on the creek surface.

GETTING THERE Watch closely for the unmarked turnout to the west at Seward Highway milepost 32.5. Park in the double ended pullout on the west side of the road and walk a few hundred yards along the path to the viewing deck

# Ptarmigan Creek

A creek jammed with red-and-green sockeye salmon anchors a lush forest bottomland thick with birds and bears.



Varied thrush

#### **NOTABLE SPECIES**

Sockeye salmon
Black bear
Brown bear
Dall sheep
Mountain goat
Spruce grouse
Merlin
Hairy woodpecker
American three-toed
woodpecker
American dipper
Varied thrush
Yellow-rumped warbler
Wilson's warbler
Golden-crowned sparrow

FIELD NOTES As many as 30,000 sockeye salmon spawn in the lower reaches of this Kenai River system tributary. From the viewing platform at the creek, watch for their distinctive green heads and red bodies as they do their swirling spawning dance: females dig out redds (shallow depressions) in the gravel, males sidle alongside. Look for American dippers in



the creek. Above the water, warblers, sparrows and other songbirds search for bugs in the alders and cottonwoods, and conifer-seeking birds such as varied thrushes can be seen in the Sitka spruce. A pair of merlins often nests in the black cottonwood across from the trail parking lot. Black bears and brown bears inhabit the valley, but rarely make appearances—though you may find scat and prints on trails. The 7.5-mile trail to Ptarmigan Lake climbs through spruce forest to reach views of alpine slopes along Ptarmigan Lake. Spruce grouse emerge early in the morning and late in the day. Mountain goats and Dall sheep can sometimes be spotted on the slopes above.

HABITAT Ptarmigan Creek offers ideal spawning habitat for sockeye salmon, just upstream from rearing habitat in Kenai Lake. The riparian area supports black cottonwoods in transition to Sitka spruce, with alders and willows growing along the edges. The trail into the mountains traverses a mature Sitka spruce forest before shifting to subalpine brush and then alpine meadows above Ptarmigan Lake.



#### HISTORICAL CONNECTION

Ptarmigan Creek flows into Kenai Lake only a few miles from the community of Moose Pass. Gold miners pioneered the trail to the lake and the remains of a cabin can be seen along the shore.

VIEWING TIP Explore the creek bottom for bird and animal sign along the first third of the 3.5-mile trail to the lake. Bring polarized glasses to view salmon attended by Dolly Varden and rainbow trout.

HELPFUL HINTS This trail is considered unsafe for winter travel due to avalanche danger and ice.

GETTING THERE Seward Highway milepost 23.



USFS
www.fs.fed.us/r10/chugach/seward/rec/
trails/ptarmigan

Explore the headwaters of the Kenai River/Kenai Lake drainage with salmon-spawning streams, migratory birds and foraging mammals.



Mountain goat



Spotted sandpiper



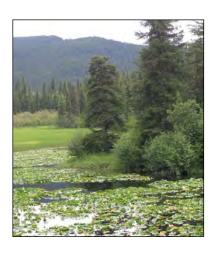
Moose scraping

#### **NOTABLE SPECIES**

Black bear Brown bear Moose Mountain goat Red-necked grebe Bald eagle Spotted sandpiper Mew gull Black-billed magpie

### and Snow River area

FIFLD NOTES Primrose Creek flows into the head of Kenai Lake along a gravel shore, drawing shorebirds and gulls. Watch for the most activity in late summer after salmon begin reaching the area on their journey to spawning grounds. Mountain slopes rimming the Snow River valley host goats and black bears that can be spied with binoculars and spotting scopes. Forest birds dart through the trees along



the campground road. The eight-mile Primrose Trail traverses a mature Sitka spruce forest to alpine areas. Traveling south along the Seward Highway gives access to the Snow River, a little visited drainage with migrating salmon and lots of bird life.

Primrose Creek and HABITAT Snow River feature Sitka and Lutz spruce with riparian edges of alders and willows. Kenai Lake is a cold glacial system. Wetland marshes and subalpine brush and meadows can be found off trails.

#### HISTORIC CONNECTION

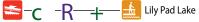
Iditarod National Historic Trail stretches 938 miles from Seward to Nome. Constructed by the Alaska Road Commission in 1910-11, by the late 1920s most of the trail had fallen into disuse because of the introduction of air travel and the decline in gold mining. Largely a winter trail, the

Iditarod ran up the Snow Valley and traversed the shore of Kenai Lake.

VIEWING TIP Lily Pad Lake Viewpoint, located on the east side of the Seward Highway at milepost 14.7, offers a boardwalk overlooking a lush marsh and forest edge habitat. Watch for moose early and late in the day, and nesting waterfowl such as grebes during summer.

HELPFUL HINTS Dress for wind along Kenai Lake and Snow River; this can be a wind tunnel between the Gulf of Alaska and Cook Inlet. Don't venture onto Kenai Lake unless you're prepared for icy water, wind and waves.

**GETTING THERE** Seward Highway milepost 17. Turn northwest and drive 1.5 miles to the Primrose Campground. There are signed trailheads in the campground.



# **Lost Lake Trail**

Hike through a coastal rainforest dense with ferns and mosses into the mountains for a stunning view of alpine life.



Rock ptarmigan



Hoary marmot



American pipit

#### **NOTABLE SPECIES**

Black bear
Brown bear
Hoary marmot
Mountain goat
Spruce grouse
Willow and rock ptarmigan
American pipit
Gray-crowned rosy-finch

FIELD NOTES The first four miles of this seven-mile trail climb through temperate rainforest before emerging into open country. Look for forest birds such as fox chickadees, sparrows, thrushes, gray jays and spruce grouse. Alpine tundra draws out graycrowned Rosy finch, ptarmigan and American pipits. Black and brown bears use the habitat, along with moose. Marmots bask and feed in rocky areas above tree line—listen for their sharp, whistled alarm calls. Mountain goats forage on steep slopes of Ascension Peak overlooking the lake.



HABITAT The trail begins in a mossy low-elevation Sitka spruce forest only a few miles from the sea and then climbs through a succession of habitats until it breaks out into subalpine tundra. The valley surrounding Lost Lake is known for its meadows of flowers.

#### RECREATION CONNECTION

The Lost Lake Trail connects to the Primrose Trail (see page 69) for a possible 15-mile through hike. It traverses one of the most accessible tundra valleys and alpine lakes on the Kenai Peninsula.

VIEWING TIP Begin early in the day with enough time (the Forest Service suggests 6-8 hours round trip) for a leisurely visit to the world above treeline. Watch closely for animals in transition zones between habitats: the shift from forest to brush, brush to tundra.

HELPFUL HINTS Prepare for backcountry travel with appropriate clothing, water and food.

GETTING THERE Seward Highway milepost 5. Turn west at the Lost Lake subdivision, turn left on Heather Lee Lane, right on Hayden Berlin Road. The road ends at a broad parking lot.

www.fs.fed.us/r10/chugach/seward/rec/trails/lost.htm

# Bear Creek Weir

Beneath a rainforest of spruce and ferns, ripe spawning salmon jostle and swirl in clear pools as they struggle to reach spawning grounds.



Golden-crowned kinglet



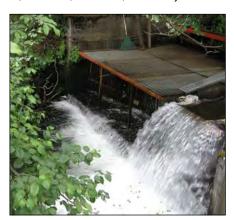
Ruby-crowned kinglet

#### **NOTABLE SPECIES**

Coho salmon
Sockeye salmon
Black bear
Mew gull
Glaucous-winged gull
Brown creeper
American dipper
Golden-crowned kinglet
Ruby-crowned kinglet
Varied thrush
Townsend's warbler

FIELD NOTES During May and June, millions of smolts are released into Bear Lake and swim down Bear Creek to salt water at the head of Resurrection Bay. Between July and September, some 10,000 to 20,000 sockeye salmon

swim seven miles up the creek, peaking in June-July. Coho salmon arrive between late July and September. Cook Inlet Aquaculture Association monitors the migrating salmon at the weir. A viewing spot offers families a great place to watch modern salmon management techniques and to see adult fish attempt to leap the artificial falls. Watch for American dippers along and in the stream below the weir.



HABITAT Bear Creek is a lush riparian habitat running through a temperate Sitka spruce rainforest.

#### ECONOMIC CONNECTION

Bear Creek weir is an important link in the regional salmon management scheme. Cook Inlet Aquaculture As-sociation operates the weir, under a cooperative agreement with the Alaska Department of Fish and Game, as part of a project to

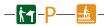


increase sock-eye and coho runs in Resurrection Bay. More than four million young salmon of both species were released into the system in 2006.

VIEWING TIP Visit in June and July for spawning sockeye, and late July to September for spawning coho. Watch for ruby-crowned and golden-crowned kinglets in the trees. American dippers, which nest upstream of the culverts, can sometimes be seen zipping through the culvert instead of over the road.

HELPFUL HINTS The weir compound has very limited parking and a tight turnaround. Just downstream there is a pullout area next to the creek.

GETTING THERE Seward Highway milepost 6.6. Turn east on Bear Lake Road. The weir is just over a half mile ahead on the left. Park on the right (south) side in the unpaved pullout.



# Exit Glacier

A river of ice from the region's largest ice field has undergone a drastic retreat, creating new habitat that attracts songbirds, moose and bears.



Snow bunting



Western screech owl

#### NOTABLE SPECIES

Black bear
Hoary marmot
Mountain goat
Western screech-owl
Great horned owl
Boreal owl
Northern saw-whet owl
Steller's jay
Black-billed magpie
Horned lark
Violet-green swallow
Warblers
Snow bunting
Ice worms

FIELD NOTES The most accessible glacier on the Kenai Peninsula dominates this viewing site in the Kenai Fiords National Park outside of Seward. A 3/4-mile trail leads up the valley through stages of plant succession to the outwash plain and bare bedrock along the glacier's rim. As each habitat blends into the next, the mix of birds and mammals shifts slightly. Watch for violet-green swallows over the river. Steller's jays and black-billed magpies chatter among the alders. Warblers, sparrows and other songbirds forage on forest edges. Mountain goats, black bears, and brown bears emerge into view along the avalanche chutes on



each side of the valley. Moose winter in the valley bottom, where they browse on willow and cottonwood. A strenuous 3.5-mile climb up the Harding Icefield Trail leads to alpine areas and snow fields where you may find snow buntings, horned larks, mountain goats and hoary marmots—or even iceworms, tiny nocturnal worms that live in the surface layers of glaciers.

HABITAT The newly exposed landscape at the foot of Exit Glacier progresses from bare rock into temperate rainforest as plants reclaim the barren glacial till. Lichens and pioneer plants colonize rock and silt close to the ice. Thick stands of alder with some willow come next, followed by black cottonwood forest that slowly gives way to shade-tolerant mountain hemlock.

#### GEOGRAPHIC CONNECTION

Exit Glacier is the only area of Kenai Fjords National Park accessible by road (summer only). Trailside signs mark the glacier's location over the previous century, illustrating its dramatic retreat.

VIEWING TIP Give yourself enough time to walk to the glacier overlook. Stop in each plant zone and scan for birds. Stop at pull-outs along the road to watch for birds and moose. Listen in the evenings for owls.

HELPFUL HINTS Tune into information radio 1610 AM near Exit Glacier. Dress for cold wind off the glacier. Check on conditions at the Nature Center before attempting the steep Harding Icefield trail.

GETTING THERE Seward Highway milepost 3.7, turn on Exit Glacier Road (signed). The Nature Center (open summer only) is about 8.5 miles ahead. In winter, the road is not maintained, however the gate does allow for the passage of skiers, dogsleds and snowmachines.

# Nash Road

Wetlands and beaches rimming the northeast shore of Resurrection Bay attract waterfowl, migratory birds and marine mammals.



Kittlitz's murrelet



Marbled murrelet

#### **NOTABLE SPECIES**

Harbor seal Sea otter Steller sea lion Trumpeter swan Harlequin duck Surf scoter Long-tailed duck Barrow's goldeneye Common loon Horned grebe Bald eagle Belted kingfisher Varied thrush Townsend's warbler Pine grosbeak Crossbills

FIELD NOTES Nash Road skirts the lowland fringe at the head of Resurrection Bay and crosses several freshwater lands and streams that draw swans, ducks and salmon. The roadside wetland at mile 1 is a special spot for nesting trumpeter swans, ducks, swallows, sparrows, and raptors.



After winding past homes and businesses, the road climbs the mountainside and then descends to the Seward Marine Industrial Center with access to the beach at Spring Creek Campground and Fourth of July Beach. Watch for sea otters, harbor seals, and the occasional whale or sea lion offshore. Look for peregrines, merlins, and goshawks hunting. In winter, watch for loons and sea ducks.

HABITAT Nash Road crosses low-lying forest, alder thickets and wetlands along the upper reach of Resurrection Bay and emerges at the beach across from the community of Seward. Near-shore marine waters rim a beach swept by the bay's tides.

HISTORIC CONNECTION Mile 2.1 marks the start of the Iditarod National Historic Trail, a historic mail and supply route through the interior of Alaska to the goldfields of Nome.

VIEWING TIP With very few visitors during winter, your chances of spying sea ducks and loons close to the beach increase.

HELPEUL HINTS Watch for traffic as workers commute from the industrial areas at the end of the road. Dress in layers for Resurrection Bay's chilly wind and rain. Wear rubber boots for beach walking. Pay attention to the tides.



Belted kingfisher

GETTING THERE Turn east on Nash Road at Seward Highway milepost 3.2, just north of town. For Spring Creek Campground, turn right at mile 5 towards the beach just before the marine industrial area. Public access to Fourth of July Beach is seasonal: turn left on Jellison Avenue by the tank farm, take the first right on Olga Street, and then right on Sorrel Road to the beach parking area.







# **Seward Small Boat Harbor**

Scan the boundary between human and marine systems for birds and marine mammals at the head of Resurrection Bay.



Steller sea lion



Common murrre

#### **NOTABLE SPECIES**

Harbor seal
Sea otter
Steller sea lion
Common goldeneye
Barrow's goldeneye
Mergansers
Double-crested cormorant
Pelagic cormorant
Glaucous-winged gull
Black-legged kittiwake
Arctic tern
Common murre
Northwestern crow

FIELD NOTES Human-tolerant, fish-eating birds are easy to find at this harbor, where the local fish processing plant pipes ground-up fish scraps just outside the harbor, serving as a kind of birdfeeder for gulls, kittiwakes, terns and more. Scan breakwaters and navigation struc-tures for attentive bald eagles. Watch for sea otters floating just outside the harbor entrance. Vast flocks of gulls land on breakwaters, floats and vacant gravel lots. Many seabirds find sanctuary here in the winter; watch for goldeneyes, mergansers, murres, murrelets, cormorants, and loons. Ravens, Northwestern crows and gulls

feed along the shore, and harlequin ducks dive at the tide's edge. Kingfishers often rattle from poles and swoop over the scene. In summer, watch for tree, violet-green, and cliff swallows swooping gracefully above, and listen for song sparrows year-round.



HABITAT The Seward Small Boat Harbor essentially encloses a salt-water lagoon along the edge of the deep marine waters of Resurrection Bay. Breakwaters and structures provide nesting and perching habitat for a wide range of birds. Human activity limits visiting birds to human-tolerant species.

#### GEOLOGIC CONNECTION

1964, the great Alaskan earthquake, magnitude 9.2, triggered 30-foot waves that devastated Seward's waterfront, causing 12 deaths and millions of dollars in damage. The boat harbor was relocated here after the quake.

VIEWING TIP Winter is an especially good time to spot rare birds and watch sea ducks.

HELPFUL HINTS Stay off private boats without permission; watch your step on the ramps and floats. Be careful of footing if you explore slippery breakwater rocks. Do not approach or attempt to feed Steller sea lions or sea otters: it's dangerous and it violates federal law.

GETTING THERE Seward Highway milepost 1.6. The small boat harbor anchors Seward's commercial district across from Seward Lagoon. There are several paid public parking lots located off Fourth Avenue in the harbor area.

In

# Seward Lagoon

## and Benny Benson Memorial Park

Take a short walk along the lagoon boardwalk to watch bald eagles, gulls, ducks, dippers, and pacific salmon.



Belted kingfisher



Glaucous-winged gull

#### **NOTABLE SPECIES**

River otter
Mallard
Double-crested cormorant
Great blue heron
Glaucous-winged gull
Bald eagle
Belted kingfisher
Northwestern crow
Common raven
Tree swallow
Violet-green swallow
American dipper
Yellow warbler
Fox sparrow
Song sparrow

FIELD NOTES Nestled at the north end of the Seward Jagoon. the Benny Benson Memorial Park features a quarter-mile-long boardwalk along the lagoon. Look for kingfishers and swallows on the powerlines, and eagles in the spruce trees. Watch and listen for warblers and sparrows in the dense alder and willow thickets (this is a great place to view these tiny, fast-moving birds up close). American dippers forage along the edges. Watch for returning adult salmon from mid-summer to late fall. If you're lucky, you may spot the V-shaped wake of a swimming river otter.



HABITAT Coastal temperate rainforest dominated by Sitka spruce rims this shallow lagoon. At the water's edge is a fringe of cottonwood, alder and willow. Spring-fed and mountain streams flow through a privately-owned wetland to the north, providing a rich salmon spawning area, food, and nesting habitat for many species of birds. The close presence of people, vehicle traffic and small-town noise impact the site too.

HISTORIC CONNECTION The memorial remembers Benny Benson, who designed Alaska's flag in 1927 while living at Seward's Jesse Lee Home for Children. He was 13 at the time.

VIEWING TIP The park and boardwalk are worthy stops while walking to other locations in Seward. The south end of the boardwalk links up with the bike/walk path along the beach.



Great blue heron

HELPFUL HINTS Try visiting very early, before vehicle noise picks up on the highway.

GETTING THERE The park is across from the Seward small boat harbor, and is visible from the Seward Highway milepost 1.6. Turn west on Dairy Hill lane. The boardwalk runs north-south between the highway and the lagoon.



# Alaska SeaLife Center

Soar with a puffin on its submarine flight. Stare down a goggleeyed bottom fish. Watch the underwater acrobatics of one-ton sea lion bull. Pet a sea star's rough hide.



Crab



Shrimp

#### **NOTABLE SPECIES**

Steller sea lion
Harbor seal
Steller's eider
Spectacled eider
Giant Pacific Octopus
Alaska king crab
Walleye pollock
Pacific cod
Atka mackerel
Wolf eel
Sunflower star
Sea anemone
Common murre
Horned and tufted puffins
Black oystercatcher

FIELD NOTES Alaska's premier cold water aquarium combines with wildlife marine research rehabilitation. conservation public education. While scientists work behind the scenes to unlock the secrets of the ocean ecosystem and its creatures, hundreds of species swim behind huge windows within view of visitors. The center's Steller sea lions take turns in a massive 185,000 gallon tank



with a 2,000 square-foot haul-out above the waves. A diving bird habitat allows seabirds like common murres and horned puffins to chase fish through a tank more than 20 feet deep in full view of visitors. Harbor seals also have a two-story tank. Smaller tanks hold bottom fish, king crabs, wolf eels, salmon, halibut and shrimp. Visitors are allowed to handle sea stars, anemones and other intertidal critters at a touch tank. Live video from Chiswell Island shows Steller sea lions at one of the region's most important rookeries. Visit the outdoor viewing deck over Resurrection Bay, where you can see Steller sea lions "porpoising" (leaping clear of the water) just offshore.

HABITAT Alaska SeaLife Center employs a large staff of aquarists and scientists, who monitor, manage and study life in a dozen separate tanks and habitats. The water in the tanks comes directly from Resurrection Bay. In a sense, the SeaLife Center offers an authentic glimpse of the marine world just offshore.



#### CONSERVATION CONNECTION

Since this \$56-million research center opened in 1998, its staff has investigated the decline in Steller sea lions and spectacled eiders, and pioneered remote tracking of marine mammals.

VIEWING TIP Visit the SeaLife Center before going out to view the bay. Give yourself a couple hours and spend time sitting at each tank. Afterward, walk along the shore and scan for the same animals in the wild.

HELPFUL HINTS The SeaLife Center offers a wide range of programs and tours. Visit www.alaskasealife. org or call 907-224-6300 for details.

GETTING THERE Take the Seward Highway through Seward to milepost 0. The SeaLife Center overlooks Resurrection Bay to the left at 301 Railway Avenue.



# Lowell Point

Drive to the brink of the Gulf of Alaska and explore Resurrection Bay's forested shore to find birds, mammals and intertidal life.



Red-necked phalarope



Chestnut-backed chickadee

#### **NOTABLE SPECIES**

Sea otter Steller sea lion Harlequin duck Common goldeneye Barrow's goldeneye Horned arebe Red-necked grebe Cormorants Bald eagle Black oystercatcher Red-necked phalarope Glaucous-winged gull Black-legged kittiwake Common murre Pigeon guillemot Marbled murrelet Kittlitz's murrelet Chestnut-backed chickadee Red-breasted nuthatch

### State Recreation Site

FIELD NOTES Lowell Point south Road reaches from Seward along Resurrection Bay to this beach with campgrounds, services and a trailhead. From the beach, watch for sea otters and Steller sea lions cruising offshore, especially during high stages of the tide. A salt marsh transitions to intertidal areas and is a good place to spot shorebirds. Seabirds such as common murres. cormorants, kittiwakes and gulls may paddle or raft near the beach and fish processing plant. Bald eagles perch in the trees along the slope. A mature coastal temperate rainforest of



Sitka spruce and hemlock covers the mountainside and attracts forest birds: chickadees, nuthatches, thrushes, sparrows and warblers. Watch for black oystercatchers on open beaches near Lowell Point.

HABITAT Resurrection Bay beaches and intertidal flats are rimmed by a coastal temperate rainforest of towering Sitka spruce. Deep marine waters begin within a few hundred yards of shore.

#### HISTORIC

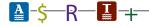
#### **CONNECTION**

The Caines Head State Recreation Area contains the remains of World War II-era Fort McGilvray gun emplacement.

VIEWING TIP Visit the 19-acre Lowell Point State Recreation Site during high tide to catch sight of marine mammals and shorebirds. Return at lower stages or minus tides to view intertidal life.

HELPFUL HINTS Consult tide tables before hiking toward Caines Head; a portion of the trail can only be crossed during low stages of the tide. Stay on the trail to avoid cliffs and private property. Take a flashlight if you plan to explore the Fort McGilvray site. Cabin information at www.dnr.state.ak.us/parks

GETTING THERE Take the Seward Highway—which becomes Third Avenue—through Seward until it ends (facing the SeaLife Center). Turn right on Lowell Point Road, drive 3.5 miles.



# **Resurrection Bay**

Take a look at the North Pacific's charismatic marine wildlife while exploring the protected coves of a deep glacial fjord.



Black-legged kittiwake



Killer whales

#### **NOTABLE SPECIES**

Chum salmon Coho salmon Pink salmon Sockeye salmon Harbor seal Humpback whale Killer whale Sea otter Steller sea lion Black bear Mountain goat Bald eagle Black-legged kittiwake Common murre Pigeon guillemot Marbled murrelet Kittlitz's murrelet Rhinoceros auklet Horned puffin Tufted puffin

FIELD NOTES The outer reach of Resurrection Bay encloses a rich marine ecosystem with rugged coves, bays and islands. The protected relatively waters and shoreside state parklands attract a broad selection of North Pacific marine wildlife. Back-floating



sea otters and the round heads of harbor seals can appear almost anywhere. Steller sea lions and harbor seals haul out on rocks in several locations, including Mary's Bay, Rugged Island and near Cape Resurrection. Watch for humpback whales and pods of fish-eating resident killer whales. On rare occasions, the more secretive marine-mammal-eating transient killer whales visit. Common murres and puffins float on the swells and perch in cliff nests. Scan for pairs of pigeon guillemots on the waves. Kittiwakes and gulls wing over head. Mountain goats sometimes visit headland cliffs just above the sea.

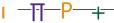
HABITAT This region contains deep fjords, shallow coves, estuaries and beaches. The hillsides and slopes are covered with the tangled understory and towering Sitka spruce of the coastal temperate rainforest.

HELPFUL HINTS Dress in warm layers, including rain gear (which also breaks the wind). If you are cruising and prone to motion sickness, you may wish to take precautions.



TRIP PLANNING Most people explore Resurrection Bay with a half day boat tour or as part of a longer Kenai Fjords cruise. Book tours at the Seward Small Boat Harbor or in advance.

For the adventurous, you can take guided sea kayaking tours or go on your own. You can also arrange for a water taxi to ferry you to a Resurrection Bay campsite or one of the public cabins at Thumb Cove State Marine Park. For information and cabin bookings visit www.dnr.state.ak.us/parks.



# C Kenai Fjords S

It's a bird-and-mammal show here. Venture into the wild Gulf of Alaska along a wilderness coast of glaciers, islets, cliffs and fjords—home to Steller sea lions, puffins, humpback whales and



Gray whale

#### **NOTABLE SPECIES**

Dall's porpoise Gray whale Harbor seal Humpback whale Killer whale Sea otter Steller sea lion Black bear Mountain goat Petrels Shearwaters Red-faced cormorant Black-legged kittiwake Gulls Common murre Pigeon guillemot Murrelets **Auklets** Horned puffin Tufted puffin

# National Park and Alaska Maritime National Refuge

FIELD NOTES The fjords and rugged islands of Kenai Fjords National Park and the Alaska Maritime National Wildlife Refuae showcase the best of Alaska's marine world in a compact package. kittiwakes, puffins Murres, and other seabirds perch and nest along cliff faces just



above the swells. Sea otters float belly-up eating mussels and clams. Harbor seals haul out on icebergs off Aialik and Northwestern glaciers. Humpback whales spend the summers fattening on forage fish such as herring. Gray whales pass in April on their epic migration to the Arctic. Steller sea lions mate and raise pups on Chiswell Island. In early and late summer, pods of fish-eating resident killer whales roam the region in pursuit of salmon.

HABITAT The park contains shallow bays and estuaries, and deeper marine habitats. Regional currents drive nutrients into outer Resurrection Bay, making that area especially rich in fish and an early location for spring bloom of plankton and algae. Cliffs and rocky shores create nesting sites for birds and haul-out areas for marine mammals.

#### CULTURAL CONNECTION

Aialik Bay was the site of a village of the Pacific Eskimos. The village was abandoned in 1880 when the residents moved to nearby English Bay.

VIEWING TIP Scan for concentrations of birds as an indication of

schooling fish. Often humpback whales and other marine mammals will surface nearby.

HELPFUL HINTS Take rain gear on any tour—it will block wind and allow you to remain on deck if the weather turns bad. Bring binoculars. Be prepared for rough seas.

AVID BIRDERS Make your interests known when booking your trip and to the naturalist on your cruise. Some cruises specialize in birders and most naturalists know a lot more about the birds than they share in their general presentations.

GETTING THERE Several companies based in the boat harbor offer half-day and full-day excursions to the Chiswell Islands and Kenai Fjords National Park. Charter boats, water taxis and sea kayak tours offer options to spend more time in remote areas.

Cruises are offered throughout the fall, winter and spring, but on limited schedules. Spring cruises target the gray whale migration.

www.nps.gov/kefj/

Who Owns the Land? Wildlife-viewing sites in this guide are managed by a variety of entities, for a variety of uses. Almost all are on public lands. Being familiar with the ownership of the lands you are visiting will help you know what to expect in terms of regulations, allowed uses, fees, and contact information.

#### State of Alaska Lands

State Wildlife Refuges and Critical Habitat Areas Alaska Department of Fish and Game (ADF&G) www.wildlife.alaska.gov These lands are established to protect and preserve natural habitat and wildlife populations. There are 12 refuges, 17 critical habitat areas (five on the Kenai Peninsula), and 3 sanctuaries statewide. Hunting and fishing are allowed within most refuges and critical habitat areas.

Alaska State Parks Alaska Department of Natural Resources www.dnr.state.ak.us/parks These are lands recognized and managed for their scenic, wildlife, and cultural values. They are designated and managed for public recreational use. State Recreation Sites are developed areas, such as campgrounds and wildlife viewing sites, within State Parks. State Marine Parks are lands that border marine waters of high recreational, scenic, and cultural value.

Facilities within State Parks and State Marine Parks may include campgrounds, public access cabins, boat launches, and wildlife viewing platforms and trails. Access and uses vary by park.

Use fees apply. In 2007 the day use parking fees on the Kenai are \$5/day. An annual day use parking pass is \$40. Passes may be purchased at the following:

- Alaska Public Lands Information Center Corner 4th & F, Anchorage
- Chugach State Park Office
   Mile 115, Seward Hwy (just outside of Anchorage)
- Kenai/Prince William Sound Area Office Mile 85 Sterling Hwy, near Soldotna
- Most Alaska State Parks Campgrounds

Tidelands & General State Lands Alaska Department of Natural Resources The State owns and controls almost all tidelands (areas with a tidal influence). This includes, for example, all of Kachemak Bay's shorelines up to the reach of high tides. With few exceptions, these lands are reserved for public recreation and for fish and wildlife protection.

#### Federal Lands

National Forest (USFS) www.fs.fed.us/r10/chugach

In Seward, 334 4th Avenue 907-224-3374

In Girdwood, off Alyeska Hwy. 907-783-3242

Begich, Boggs Visitor Center on Portage Road 907-783-2326 (summer only) National Forest lands are managed by the US Department of Agriculture, Forest Service. They are not just forests; much of the Chugach National Forest, which extends onto the eastern Kenai Peninsula, is bog, alpine tundra, and ice. National forests are managed for multiple uses, so depending on the area of the forest you are visiting, you may see activities such as small-scale mining operations, timber management, hunting, fishing, and guided recreation. There are fees associated with some Forest Service sites.

#### National Wildlife Refuge (FWS)

In Soldotna kenai.fws.gov Ski Hill Road 907-262-7021

In Homer Islands & Oceans Visitor Center alaskamaritime.fws.gov 95 Sterling Highway 907- 235-6546 National Wildlife Refuges (NWRs) are public lands that are managed to preserve quality wildlife habitat and healthy wildlife populations. NWRs are managed by the US Department of the Interior, Fish and Wildlife Service. Wildlife viewing is welcomed on NWR lands. Fishing and hunting, during legal seasons, are allowed in some sections of NWRs. There are two National Wildlife Refuge units in the Kenai Peninsula region: the Alaska Maritime National Wildlife Refuge, which includes the Chiswell Islands off the southern coast, and the 2 million acre Kenai National Wildlife Refuge, which stretches from the northern tip of the Peninsula to the south side of Kachemak Bay, and includes part of the Harding Icefield. There are fees at some Kenai NWR campgrounds.

National Park (NPS) www.nps.gov/kefj

In Seward 1212 4th Ave. (summer only) 907- 224-7500

Near Seward Exit Glacier (summer only) Managed by the US Department of the Interior, National Park Service, National Parks are federal lands that are preserved and protected for their outstanding scenic, recreational, and cultural values. Wildlife viewing is welcomed on all park lands. Hunting is not allowed. The Kenai Peninsula hosts Kenai Fjords National Park, an enormous, remote, and spectacular park. There are no entrance or camping fees at Kenai Fjords National Park.

#### Borough and City Lands

The Kenai Peninsula Borough, a level of government similar to a county, has public lands, including Dena'ina's Way Site 11. Within the borough are five cities (Homer, Kenai, Seward, Seldovia and Soldotna) with public lands owned by the local governments.

#### **Private Lands**

A few of the wildlife viewing sites in this guide are owned or managed by private entities. The K'Beq 'Footprints' interpretive site near the Russian River is managed by the Kenaitze Indian Tribe. Gull Island in Kachemak Bay is owned by the Seldovia Native Association. The Seward Sea Life Center is a private non-profit corporation. The Cook Inlet Aquaculture Association runs a system of salmon hatcheries throughout the peninsula, including Trail Lake Hatchery and the Bear Creek weir, under contract with Alaska Department of Fish and Game.

There are also private lands adjacent to some of the wildlife viewing sites. Please respect land ownership and do not trespass on private property.

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# Kenai Peninsula Wildlife Habitats

Habitat is home for wildlife. Habitat provides the food, water, shelter and space that animals need to live. Understanding a little about the varied habitats of the Kenai Peninsula makes it easier to find and watch animals, and to appreciate their lives.

SETTING The Kenai Peninsula lies at the junction of two major ecosystems: temperate rainforest and boreal forest. On the rainy east and south coasts, the shorelines are lined with mossy rainforest and wetlands. On the drier north and west sides of the peninsula, shrublands, wetlands, and boreal forest dominate. In between rise the rugged Kenai Mountains, with peaks that reach 5,000 and 6,000 feet—where higher elevations and huge snowfalls create glacial and cold tundra habitats.

TEMPERATE RAINFOREST The fringe of dense, dripping evergreen forest along the eastern side of the Kenai Peninsula is the northernmost reach of the largest temperate rainforest on Earth, a band of habitat that stretches from Southcentral Alaska to Northern California. And it does rain! Whittier, in the heart of this wet zone, gets 200 inches of precipitation (rain and snow) each year. In the coastal rainforest, September and October are the wettest months, and April and May are the driest. That rainfall supports a forest of predominantly Sitka spruce trees with some western hemlock.

A walk in the temperate rainforest on a summer day is a rich experience. The shady forest floor is dappled by patches of sunlight, or splashed by dripping rain, and it seems that every inch of ground, every stump and decaying, fallen tree is covered with moss and vegetation. Enormous leaves of skunk cabbage rise from damp areas. Platter-size devil's club leaves, studded with splinter-like thorns, spread above blueberry and highbush cranberry bushes. Mosses and lichens hang from trees.

Fire is rare in the rainforest, and wind storms take out far more trees than do wildland fires. Many trees in this region grow in thin, poorly drained soil and have shallow root systems. Winter storms can set up a chain reaction where falling trees topple their poorly anchored neighbors. This opens up the forest canopy and allows sunlight to pour in, accelerating the growth of adjacent trees and vegetation.



The rainforest is home to a number of forest-loving bird species, such as Townsend's warblers, chest-nut-backed chickadees, flycatchers, and crossbills. Porcupines feed on bark, needles, and tender understory plants. In summer, bears bed down among the roots of streamside trees. Red squirrels are masters of this habitat, dashing and chattering among the branches overhead.

Here and there within the rainforest, you'll come across openings that look like meadows dotted with tiny dark pools. The wet "soil" in these bogs is

largely an accumulation of dead moss and other organic matter, which creates an acidic, low-nutrient environment that few forest plants can tolerate. Tannins leached from vegetation color the water brown. Tiny insect-eating sundew plants trap bugs with sticky hairs. Aromatic heath-family plants such as Labrador tea grow as low bushes, and hardy conifers known as shore pines (a variety of lodgepole pine) grow into fascinating bonsai-like stunted forms. Few animals rely completely on these bog habitats, but ground-nesting birds such as juncos often raise their broods in hollows in the moss, and bears and other animals make frequent visits.



Climate, water, fire and insects shape the boreal forest.
Trees are adapted to cold temperatures, low sun angles, low precipitation, wet soils, and short growing seasons.

BOREAL FOREST On the northwest side of the Kenai Peninsula, across the mountains from the rainforests that fringe Prince William Sound, the climate is colder and drier, producing a forest very different from the wet coastal one. This boreal forest (sometimes called "taiga") is part of one of the world's largest biomes, extending across North America from Alaska to Newfoundland and across Eurasia from Norway to Siberia. It consists of mixed evergreens and hardwoods, interspersed with wetlands and lakes.

Climate, water, fire and insects shape the boreal forest. Trees are adapted to cold temperatures,

low sun angles, low precipitation, wet soils, and short growing seasons. Periodic fires and large insect infestations kill most of the overstory spruce trees, allowing deciduous trees such as aspen and birch to remain a significant part of the forest.

In the Kenai Peninsula's boreal forest lands, well-drained uplands are dominated by white spruce and birch stands. Dead snags—the results of fire and insect damage—form gray pillars, mined by woodpeckers. Willow, cranberry, currant, rose, and bearberry shrubs grow in patches on the forest floor. As you walk, thick mosses and lichens crackle underfoot, and jays and red squirrels announce your passing.

In wet areas such as valley bottoms and glacial plains, where soils are soggy, acidic and cold, the primary overstory trees tend to be Lutz and black spruce.



These slender, scruffy-looking trees rarely exceed a foot in diameter. The Lutz spruce, a hybrid between white and Sitka spruce, occupies small hills left by glaciers and other relatively drier areas. Willows and alders form thickets, and many areas have lush grass understories. The landscape is sprinkled with bogs, ponds, and small lakes.

Climate Change Impacts

On the Kenai Peninsula there are more than 3,000 lakes of two e (a football field is cre). Recent research

acres or more (a football field is about one acre). Recent research using aerial photographs field surveys has shown that the Kenai Peninsula's lakes and ponds are drying up. As the water bodies shrink, the vegetation around them changes, altering the habitats significantly. Researchers noted a temperature increase of one to two degrees Celsius on the Kenai lowlands in the past 50 years.

Mammals of the boreal forest include mice and voles, snowshoe hares, red squirrels, lynx, martens, and short-tailed weasels (ermine). Moose, and occasionally caribou, wander between forest and nearby wetlands to forage. Wolves, coyotes and wolverines follow prey into the trees. Gray jays, black-billed magpies, spruce grouse, boreal chickadees, woodpeckers, and owls are among the birds that nest and forage in the boreal forest.

The boreal forest is a land of dramatic seasons. In autumn, brilliant orange-and-gold deciduous trees burn like cool fires among the somber spruces. In winter, lakes and ponds are locked in ice, and the movements of lynx and hares, ermines and mice are revealed in tidy tracks across the snow. Spring brings a burst of bird songs and the smell of budding trees, and summer is a season of long daylight hours and intense growth.

LAKES AND FRESHWATER WETLANDS Lakes and ponds—shallow or deep, large or small, cold, glacial and silty or black as strong tea—serve as important habitat for many of the Kenai Peninsula's animals. Wetland birds such as grebes, loons, swans and ducks nest on lake fringes and rear their chicks on the lakes. Beavers and muskrats make their homes in and alongside lakes and wetlands. Moose forage heavily on aquatic plants in the summer months.

Lakes and ponds are particularly abundant in the flat glacial plains of the western side of the peninsula, where thousands checkerboard the landscape. Most of these water bodies are dark

with tannins and lignins leached from slowly-decomposing plant material in nearby forests and wetlands. Many are surrounded by thick mats of waterlogged moss that quake as you walk across them.

Freshwater wetlands are among the most widespread of Kenai Peninsula habitats. They're incredibly important ecosystems, buffering floodwaters, filtering runoff, and providing shelter for nesting birds and wetland mammals such as beavers, muskrat, mink, and voles. Moose forage in wetlands during both summer and winter. Juvenile salmon shelter and grow in

wetland channels. Wetlands in the Kenai River area are important summer feeding and calving grounds for the Kenai Lowlands caribou herd.

There are many different types of wetlands on the peninsula. Depending on water flow,



a wetland may look like a lush meadow, a moss blanket, or a shrub thicket. Some wetlands are easy to traverse on foot, while others are downright treacherous. Some are tiny openings within thick forest, while others are enormous, tundra-like expanses. Characteristic plants vary with the site,

but some common wetland plants on the peninsula are sphagnum mosses, grasses, sedges (including the puffball-topped "Alaska cotton"), horsetail, pond lily, dwarf birch, and sweetgale.



Rivers shape terrestrial habitats. Glacial rivers carry large amounts of sediment, which is deposited as the water slows, forming shifting patterns of braided channels and islands where cottonwood, willow, and alder dominate.

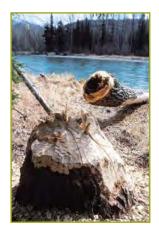
RIVERS The Kenai Peninsula has thousands of small rivers and streams that collectively produce millions of salmon. Some rivers are crystal clear; others are milky, tan or gray with glacial silt; and others are brown.

Different types of rivers support different species of wildlife. Tumbling mountain streams are the homes of American dippers and harlequin ducks, while slow, placid oxbows shelter trumpeter swans and bank-nesting beavers. Bears patrol shallow streams where spawning salmon mill. The different species of salmon rely on different types of rivers for spawn-

ing and rearing. Chinook lay eggs in the gravels of fast-moving, large rivers. Pink and chum salmon spawn in small coastal streams. Sockeye rely on

rivers that flow from lake systems. Coho use a wide variety of river types, from tiny side channels to beaver ponds to lakes.

Rivers also shape terrestrial habitats. Glacial rivers carry large amounts of sediment, which is deposited as the water slows, forming shifting patterns of braided channels and islands where cottonwood, willow, and alder dominate. Migratory and resident birds are drawn to these riparian forests and thickets to nest and forage, and bears sleep off big meals of salmon in the shelter of the leaves. In winter, moose clip riparian willow thickets into stunted hedges.



**ESTURARIES** Where rivers and streams join the sea, estuaries are created. Flooded by the twice-daily high tides, estuaries are mixing areas where fresh and salt water meet.

Life is abundant in estuaries. Marine worms, small crabs, insects, small clams and shrimp-like crustaceans thrive in the mud and silt, and are eaten by birds, fish and other wildlife. Kelp, green algae, eelgrass and other aquatic vegetation feed waterfowl and serve as rearing areas for young salmon. The meadow-like areas above all except the highest tides are characterized by salt-tolerant plants such as sedges, beach rye and goose-tongue. Sloughs meander through these wetland meadows, filling and draining as the tides change. Sculpin and flounder share these sloughs with salmon fry and threespine sticklebacks, small fish tolerant of fresh and salt water. Estuaries are important feeding areas for migrating waterfowl and shorebirds, and are year-round home to a variety of birds and animals. Estuaries are so fertile and productive that they export nutrients to the surrounding areas, enriching the ocean.



#### WORLD BETWEEN THE

On the shores of the Kenai Peninsula, there's wildlife viewing at your feet! The region's dramatic tides and nutrient-rich waters create productive, beautiful, and fascinating intertidal zones—the regions between the low and high tide lines. As you explore the shore, you'll discover hermit crabs with chili pepper-red claws, graceful anemones, weird armored worms, and much more.

Intertidal animals are adapted to a world that changes twice every 24 hours, as a saltwater blanket of tide moves back and forth across their

home. When the tide is in, animals are bathed in a nutritious soup. When it's out, they're exposed to air. Those that are most capable of withstanding exposure live highest on the beach, and those that can stand only a short period of exposure live lower down. This often produces a series

> of distinct intertidal zones that, from a distance, appear as bands of color and

texture on the shore. The upper level of the intertidal zone is home to the hardier creatures—barnacles, snails and limpets—which can withstand the longer twice-daily exposure to air. Limpets are mollusks with a single, coneshaped shell they pull tight against the

the tide is up, combing the water with a feathery appendage. The mid-level abounds with mussels—filter feeders that siphon the water when

rock when the tide is out. The familiar

crusty white shell of the barnacle protects

a tiny crustacean that filter-feeds when

the tide is in and close up tight when the tide is out. Chitons (small, flat mollusks with shells of eight overlapping plates) slowly creep through the

zone rasping algae off the rocks. Sea slugs and anemones find shelter in cracks and puddles.

The lower intertidal level supports the greatest variety of life. This is where brightly colored sea stars prowl. These "starfish" prey on mussels, snails and slow-moving intertidal creatures. Sea urchins, polycheates (segmented marine worms), snails, clams and mus-

sels, and a myriad of more mobile creatures such as fish, shrimp, crabs and octopus thrive here. Kelp and other seaweeds flourish at this level as well.

Know the Tides

When exploring below the high tide line (including estuary wetlands), be aware of tides. Cook Inlet has the second largest tides in the world. The mean tidal range is 27 vertical feet—enough to completely flood a two story house in less than six hours. Twice daily tides rise and fall quickly, and if you don't plan carefully, a pleasant outing can turn into a soggy slog or even an emergency situation. Always know when low and high tides are before venturing out below the high tides' reach. Tide tables can be found in local newspapers, on the internet and in local sporting-goods stores.

The most important and abundant life forms in the sea are plankton, tiny, free-floating plants and animals that form the basis of the food web for virtually all life in the ocean.

UNDERSEA REALM The glacial fjords of the Kenai Peninsula are deep watery valleys inhabited by a vast array of marine life. Sharks, whales,

salmon and teeming schools of herring swim in these waters. Crabs, octopus and shrimps live on the sea floor, a murky realm also inhabited by rockfishes, cods, skates and halibut. But the most important and abundant life forms in the sea are plankton, tiny, free-floating plants and animals that form the basis of the food web for virtually all life in the ocean.

Phytoplankton are, basically, plants—tiny algae that make food from sunlight. Zooplankton are tiny animals; some are single-celled, and others are larval forms



of crabs, sea stars and fish that eventually transform into free swimming or seafloor-dwelling creatures. Zooplankton feed on each other, bacteria, phytoplankton, fish waste and dead animals. Some plankton are phosphorescent and can make the water glow at night, especially when agitated by a boat wake or wave action.



Plankton feed copepods, tiny, incredibly abundant crustaceans, which in turn feed euphausiids— shrimp-like crustaceans often called krill. They also feed small fish such as herring, smelt, sticklebacks and sand lance. Juvenile salmon, cod, hake, and pollock feed on the herring and krill, and giant humpback whales filter krill—and any fish that happen to be nearby—from the water by the ton.

Much of the life in the sea makes daily (and seasonal) migrations up and down through the water column. Zooplankton tend to be deeper by day than at night. Some animals, like sleeper sharks, hunt and swim in an oscillating pattern, ranging between the sea floor and the surface.

The sea floor can be rocky, sandy or muddy. Corals, sponges, shellfish, sea pens and other life grow on the bottom. Many sea floor dwellers feed on the rain of detritus (sinking plankton, dead animals and waste) that falls from above.

Different conditions affect the fertility of the ocean waters: the salinity, depth and temperature of the

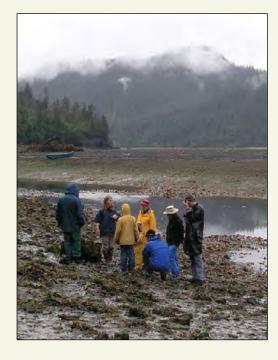
water, the season of the year, silt content and the proximity to the open ocean, rivers, glaciers and wetlands. Currents and upwelling mix water and create places, such as Kachemak Bay, that are especially productive. These can be hot spots for fishing and wildlife watching.

#### Respect and Protect

To get the most out of your beach trips—and to respect

and protect intertidal animals—keep the following in mind:

- If possible, visit the intertidal zone on a minus tide (check your tide table to find one). This way you'll have a rare opportunity to see some of the deeper-dwelling intertidal animals.
- You can see a good diversity of life by visiting a rocky shoreline. Look for places where ocean water remains in pools among the rocks at low tide, forming small marine refuges. Take time to wait and watch at the edges of these tidepools—with patience, you'll see dozens of tiny dramas playing themselves out among the animals of the pool.



- Start your explorations as the tide descends, and follow the water's edge as it reveals lower and lower zones.
- Every once in a while, scan the ocean for seals, whales, and birds.
- Walk with care. As much as possible, avoid stepping on intertidal life.
- Try gently turning over a couple of rocks to discover animals sheltered below. Choose medium-sized to small rocks, as larger boulders can crush animals when you turn them back over.
- Return overturned rocks to where you found them. Leaving them "belly-up" will kill animals both on top of the rocks and underneath them.
- Pick up animals gently. If an animal clings tightly to the surface, don't force it loose.
- If you do pick up an animal, make sure you return it to the place you found it. Intertidal animals are adapted to specific zones and sites, and if put back in the wrong spot may die.
- Don't take live animals or seaweed from the beach unless they can be legally harvested.
   Permits are required from the Alaska Department of Fish and Game for scientific and educational collections.
- Avoid the temptation to remove shells or rocks from the intertidal zone. A seemingly empty shell or rock may shelter a hidden animal, and even a truly empty shell could provide a home for an animal in the future.



MOUNTAIN HABITATS The temperate rainforests and boreal forests of the Kenai Peninsula climb from sea level to an elevation of about 2,500 feet, although the treeline varies depending on the aspect or direction of slope. At about 1,500 feet, subalpine trees such as mountain hemlock begin to appear in the forest. At about 2,500 feet, trees thin out and become scraggly, and the forest gives way to sub-alpine meadows, and then open alpine tundra.

Just above the treeline, patches of ferns and stands of scrubby mountain hemlock and spruce are interspersed with lush meadows. Bear, ptarmi-

gan and others visit this sub-alpine habitat, feeding on the abundant and nutritious herbs, flowers and forbs. Crystal-clear streams course through the meadows, and lakes and shallow ponds are nestled into pockets.

Above the sub-alpine zone, a rocky, green-gray land-scape stretches across the upper slopes and runs along the ridges. This is referred to as alpine, or alpine tundra. In winter, the alpine is a cold, windy and inhospitable place, but in summer it is visited by a number of birds and mammals. Alpine tundra features a ground cover of hardy, low-lying plants such as heather, moss campion and crowberry. Lichens cling to the rocks.

Golden eagles, which favor open environments, are sometimes seen in the alpine zone. Ravens and bald eagles ride thermal air currents three and four thousand feet upslope and circle and soar along the ridges. Wolves, bears, and wolverines visit this high country and cross over passes or follow ridges as they move to different areas.

A few animals make their homes on these open ridges and slopes. Flocks of ptarmigan—hardy, chicken-like birds—are fairly common in this high country and nest on the ground in early summer. Marmots dig their dens in talus slopes and under rock

Stop Invasives — You Can Help

Invasive plants can alter habitat and displace the native plants that wildlife

depend upon for survival. More than 20 species of invasive plants have been found on the Kenai Peninsula. The most invasive of these are Canada thistle, bird vetch. brittlestem hempnettle. spotted knapweed, oxeye daisy, white sweetclover, yellow sweetclover, purple loosestrife. narrow-leaf hawkweed. common tansy, Western salsify, butter and eggs, orange hawkweed, and reed canary grass.

Many of these plants have showy flowers and invite picking. This can lead to the spreading of seeds into areas previously unaffected by invasive species. Please do not contribute the spread of invasive plants to the Kenai Peninsula. Leave all plants where you find them. Clean your shoes and clothes of seeds before leaving an area where you've hiked, and avoid walking through flowering invasives. For more information visit www.fs.fed.us/r10/spf/fhp/weed\_book or stop at a Forest Service office for a free guide to invasive species.

Beating the Bugs

If you're visiting the Kenai Peninsula in summer, you may encounter a hatch of biting insects. Although the Kenai isn't notoriously buggy, a swarm of bloodthirsty mosquitoes, no-see-ums or blackflies can make misery out of any pause and get in the way of enjoying scenery and wildlife. Carry repellent or, better yet, bug-deterrent clothing. This can simply be loose fitting tight woven long-sleeve pants and shirts or include head nets and bug jackets. These materials will help you stop to view wildlife, eat lunch, or take a breather in peace.

outcrops, fattening on the summer vegetation and hibernating during the winter. Mountain goats and Dall sheep are the masters of this realm, and their white coats may be spotted against the green slopes or dark cliffs. Winter storms may force them down to the shelter of the upper treeline (and occasionally even farther downslope), but otherwise they generally prefer the exposed, open, high country, where their agility helps them outmaneuver predators.



The likelihood of an avalanche any given year varies. The condition of the snow when it falls and weather between snowfalls are as important as the quantity.

AVALANCHE SLOPES As you explore the Kenai Peninsula, you may notice open slopes on the mountainsides extending downhill from the alpine. Brushy deciduous vegetation such as alder and berry bushes, and clumps of fern cover these bright green slopes, but there are no large spruce and hemlock trees. These are avalanche slopes, swaths of the mountainsides that are bull-dozed in late winter and early spring by tons of moving snow.

The mountains of this region are buried in dozens of feet of snow each winter. Some areas with just the right slope are especially

conducive to avalanches. The likelihood of an avalanche any given year varies. The condition of the snow when it falls and weather between snowfalls are as important as the quantity.

A typical avalanche buries the slope under tons of snow. But life is waiting to emerge. Flexible alders, bent over and pinned to the ground, will leaf out and thrive as soon as the melting snow exposes them to the sun. Fern root balls, torn up and transported down hill, will sprout fiddle-heads. Blueberry and salmonberry bushes will leaf out and bloom.

In early summer, wildlife watchers scanning avalanche slopes are rewarded with views of bear and porcupine, which are drawn to the slopes to feed on emerging vegetation. Bears, hungry after their winter hibernation, are especially fond of the lower reaches, and mountain goats and Dall sheep work the edges of the slopes at the higher elevations. Ravens flock to these areas, and the air is filled with the courtship songs of thrushes, flycatchers and warblers.

By midsummer avalanche slopes have dense thickets of vegetation. The warm, 18-hour days trigger explosive growth. The slopes are tangled mazes of branches and prickles, where game trails have become tunnels, often teeming with mosquitoes and biting gnats called "no-see-ums."

Spend any time in this land of glaciers and you can't help but think about ice ages. In particular, you'll hear about two of these: the Wisconsin Ice Age and the "Little Ice Age."

The Wisconsin Ice Age was a massive ice advance that covered much of North America, from Alaska to Nova Scotia. It reached its maximum about 18,000 years ago, at the end of the Pleistocene era. As the massive ice sheets melted, plants and wildlife began colonizing the land. Here on the Kenai Peninsula, a few pockets of land were not overrun by glaciers and served as "refugia," harboring life that later dispersed throughout the region.

After the Wisconsin Ice Age waned, the Kenai Peninsula gradually became covered with coastal forest, boreal forest, tundra and wetlands much like we see today. Then, 3,000 years ago, cooling climate resulted in the advance of many Alaska glaciers. This small, recent advance, called the "Little Ice Age," occurred also in Canada and Europe. Little Ice Age glaciers reached their greatest extents in the mid-1700s, and since that time have been mostly receding.

GLACIERS AND ICE FIELDS Glaciers have worked like carving tools on the landscape of the Kenai Peninsula, profoundly shaping the area. They are the scenic jewels of the region, and hundreds of glaciers can be counted in the mountains and valleys.

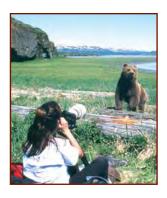
Many of these glaciers spill from the Harding Icefield. This vast plain of ice and its tendrils of glacier cover 1,100 square miles of the ice-chiseled Kenai Mountains.



The higher reaches of this region accumulate snow each year. Successive layers of snow weigh down on lower layers, and the compressed snow gradually forms glacial ice, which oozes down valleys. The Harding Icefield, which is thousands of feet thick in places, feeds more than 35 glaciers, including the tidewater glaciers of Kenai Fjords National Park and the enormous Tustumena Glacier at the head of Tustumena Lake.

Most of the Kenai Peninsula's glaciers are receding—melting back faster than they flow forward. As they

recede, glaciers leave behind scoured, rocky landscapes, scraped bare by ice and rocks imbedded in the bottom of the glacier. Patches of rubble, sand and silt offer a foothold to wind-borne seeds and spores. Moss and lichens are the first plants to grow on the landscape, and produce acids that help to break down the rocks. Over the course of a few years, other plants begin to sprout. Plants such as lupine and alder help "fix" atmospheric nitrogen to the mineral soil, making it more fertile. Decomposing leaves contribute to the developing soil, and shrubs or trees become established. Over time, this succession of colonizing plants transforms the landscape. Depending on the location, the area may develop into a temperate rainforest, boreal forest, tundra, or bog.



# Safety

Common sense and respect for wildlife will keep most wildlife viewers safe; however, the Kenai offers opportunities to have closer wildlife encounters than intended and to find oneself in wildlands within a short distance of well-traveled highways. Investing a few minutes before heading out to review this safety information may help you to be better prepared to avoid uncomfortable or even dangerous situations.

### Safety in Bear Country

ALL OF THE KENAI IS BEAR COUNTRY Most people who see a bear in the wild consider it a highlight of their trip. The presence of these majestic creatures is a reminder of how privileged we are to share some of the country's dwindling wilderness.

Bears are curious, intelligent and potentially dangerous animals, but undue fear of bears can endanger both bears and people. Respecting bears and learning proper behavior in their territory will help so that neither you nor the bears will suffer needlessly. Keep the following "bear facts" in mind:

BEARS DON'T LIKE SURPRISES If you are hiking through bear country, make your presence known—especially where the terrain or vegetation makes it hard to see. Make noise, sing, talk loudly or tie a bell to your pack. If possible, travel with a group. Groups are noisier and easier for bears to detect. Avoid thick brush. If you can't, try to walk with the wind at your back so your scent will warn bears of your presence. Contrary to popular belief, bears can see almost as well as people, but trust their noses much more than their eyes or ears. Always let bears know you are there.

Bears, like humans, use trails and roads. Don't set up camp close to a trail they might use. Detour around areas where you see or smell carcasses of fish or animals, or see scavengers congregated. A bear's food may be there and if the bear is nearby, it may defend the cache aggressively.

DON'T CROWD BEARS Give bears plenty of room. Some bears are more tolerant than others, but every bear has a personal "space" — the distance within which a bear feels threatened. If you stray within that zone, a bear may react aggressively. When photographing bears, use long lenses; getting close for a great shot could put you inside the danger zone.

CLOSE ENCOUNTERS: WHAT TO DO If you see a bear, avoid it if you can. Give the bear every opportunity to avoid you. If you do encounter a bear at close distance, remain calm. Attacks are rare. Chances are, you are not in danger. Most bears are interested only in protecting food, cubs, or their "personal space." Once the threat is removed, they will move on. Remember the following:

Yourself Identify Let the bear know vou are human. Talk to the bear in a normal voice. Wave your arms. Help the bear recognize you. If a bear cannot tell what you are, it may come closer stand on its hind legs to get a better look smell. A standing



Female bears can be fierce defenders of their young. Getting between a female and her cubs is a serious mistake. A female bear may respond aggressively to any threat she perceives to her cubs.

bear is usually curious, not threatening. You may try to back away slowly diagonally, but if the bear follows, stop and hold your ground.

Don't Run You can't outrun a bear. They have been clocked at speeds up to 35 mph, and like dogs, they will chase fleeing animals. Bears often make bluff charges, sometimes to within 10 feet of their adversary, without making contact. Continue waving your arms and talking to the bear. If the bear gets too close, raise your voice and be more aggressive. Bang pots and pans. Use noisemakers. Never imitate bear sounds or make a high-pitched squeal.



If Attacked If a bear actually makes contact, you have two choices: play dead or fight back. The best choice depends on whether the bear is reacting defensively or is seeking food. Play dead if you are attacked by a brown bear you have surprised, encountered on a carcass, or any female bear that seems to be protecting cubs. Lie flat on your stomach, or curl up in a ball with your hands behind your neck. Typically, a bear will break off its attack once it feels



the threat has been eliminated. Remain motionless for as long as possible. If you move, and the bear sees or hears you, it may return and renew its attack. Rarely, lone black or brown bears may perceive a person as potential food. Fight any bear that follows you or breaks into a tent or building. Fight any black bear regardless of circumstances.

In most cases, bears are not a threat, but they do deserve your respect and attention. When traveling in bear country, keep alert and enjoy the opportunity to see these magnificent animals in their natural habitat.

BEARS ARE ALWAYS LOOKING FOR SOMETHING TO EAT Bears have only about six months to build up fat reserves for their long winter hibernation. Don't let them learn human food or garbage is an easy meal. It is both foolish and illegal to feed bears, either on purpose or by leaving food or garbage that attracts them.

Cook away from your tent. Store all food away from your campsite. Hang food out of reach of bears if possible. If no trees are available, store your food in airtight or specially designed bear-proof containers. Remember, pets and their food may also attract bears.

Keep a clean camp. Wash your dishes. Avoid smelly food like bacon and smoked fish. Keep food smells off your clothing. Burn garbage completely in a hot fire and pack out the remains. Food and garbage are equally attractive to a bear

so treat them with equal care. Burying garbage is a waste of time. Bears have keen noses and are great diggers.

If a bear approaches while you are fishing, stop fishing. If you have a fish on your line, don't let it splash. If that's not possible, cut your line. If a bear learns it can obtain fish just by approaching fishermen, it will return for more.



Give moose plenty of space—at least 100 feet. When you encounter a moose, make sure both you and the animal have options for a digni-

fied, safe retreat.

### Safety in Moose Country

Moose are common year-round throughout the Kenai Peninsula. In addition to roaming the backcountry, they often venture into towns—where they munch on ornamental trees, stroll down suburban streets, and bed down beside houses. Local residents have learned to live with and (usually) enjoy the presence of these magnificent critters.

Moose are not inherently aggressive. However, an angry or frightened moose—weighing hundreds of pounds and equipped with a repertoire of powerful kicks and stomps—can be a lethal

force. Each year in Alaska, more people are injured by moose than by bears.

Enjoying moose safely means understanding some basic rules of etiquette.

- Give moose plenty of space—at least 100 feet. When you encounter a moose, make sure both you and the animal have options for a dignified, safe retreat.
- If a moose doesn't yield as you approach, give it the trail.
- Never get between a cow moose and her calf.
- Watch carefully for signs that a moose is upset: if it raises its hackles (the hairs on the top of its shoulders), pins its ears back like an angry horse, or licks its lips repeatedly, you're too close. Back away slowly, keeping your eye on the animal.
- If you are charged by a moose, keep a tree or other large object between yourself and the animal. If you are in the open, run away—moose do not usually chase for very far.



Although it's not nearly as remote as some regions of Alaska, the
Kenai Peninsula is a much "wilder" driving experience than many are accustomed
to. Many roads—even the major highways—are narrow, steep, and winding. Some
sections have no services for dozens of miles. Weather conditions, especially in fall, winter and spring,
can change guickly and dramatically, and roads can be extremely icy or snowy in the cold seasons.

To ensure a safe trip, plan ahead. Familiarize yourself with your route ahead of time, and carry good maps. It's a good idea to bring along an emergency kit that includes food, warm clothes, some sort of signal device, and first aid materials. A cell phone can be a lifesaver, but be aware that cell phone coverage is not uniform on the peninsula. If you're traveling in winter, add a shovel, blankets, ice scraper and extra warm clothes to your kit.

Riparian Conservation An important issue in wildlife conservation—and a particularly prominent issue on the Kenai Peninsula—is streambank and riverbank conservation. As more and more people are drawn to the region's waterways for fishing and recreation, the impacts of thousands of boot-prints and boat hulls add up. When streamside vegetation is lost, erosion increases, shelter disappears, and the

ability of the stream to support life is weakened.

As you explore the peninsula's streams and rivers, you'll come across efforts to stop, or even reverse, the effects of trampling. You may see temporary fencing or revegetation projects, or encounter areas that have been closed to public access to give the stream a chance to heal itself. Please respect these areas—they're in place to ensure that Alaska's rivers will continue to provide healthy homes for wildlife.

As you walk along any stream, try to minimize your impacts: walk on established trails or choose hard surfaces such as rock or sand for your off-trail expeditions. Avoid trampling riverbank plants. Avoid muddy banks whenever possible.

## **Hiking & Paddling Safety**

The Kenai Peninsula is a backcountry travelers paradise. Hundreds of miles of trails stitch across a vast array of landscapes. Lakes, rivers and waterways invite paddlers. Here, you have the opportunity to step into a true wilderness—sometimes within just a mile or two of highways and houses. As you set out to explore, take some time to make sure your journey through this wild country is a safe and comfortable one.

#### Be prepared



- If possible, let someone know your planned route and estimated time of return.
- Carry plenty of gear to keep you warm, dry, fueled and hydrated. Always pack extra gear in case you are delayed.
- Carry a small emergency kit, with waterproof matches, fire starter, a space blanket, and a small knife, in a separate place from your main backpack.
- Know your own limitations and don't push them. When traveling with a group, keep to the pace and comfort level of the slowest member.
- If you're planning to explore off-trail, a map and a compass are essentials, and a GPS unit is a good idea as well. But navigation equipment is only as useful as your understanding of it—make sure you're thoroughly familiar with how it works before you start your hike.

Hypothermia is a lowering of the body's core temperature. It's brought on by exposure to cold with insufficient protection, such as when a lightly-dressed hiker gets drenched in a cold rainshower and has no extra clothing to put on. Temperatures don't need to be in the freezing range to cause hypothermia; temperatures in the 40s or even the 50s can contribute. Hypothermia is made worse by fatigue and stress. Untreated, a hypothermic person spirals into ever-lower body temperatures and will eventually die.

#### Signs of hypothermia:

- Uncontrolled shivering
- Loss of motor skills (clumsiness)
- Numbness and chilling of extremities
- Slurred speech
- Dullness of perception/attitude

#### To treat hypothermia:

- GET WARM. Add dry layers, increase physical activity, drink warm liquids.
- In case of advanced hypothermia (victim is conscious but losing mental clarity and motor skills), shelter the victim from wind and weather. Wrap him/her in a dry sleeping bag or a space blanket along with another warm person. Give warm liquids.
- If conditions worsen, get help immediately.

Giardia Alaska's mountain streams and lakes may seem pristine and pure, but some contain microscopic organisms called Giardia lamblia. A Giardia infection can cause severe diarrhea, cramps, nausea, and fatigue, ruining your vacation in a hurry. It only takes a few individual Giardia cysts to cause an infection.

To avoid this very unpleasant disease, don't drink "wild water" straight from the source. If you do need to partake of water from a stream or lake, use purification tablets or a water filter designed to remove or kill Giardia pathogens.

#### Staying Comfortable

The Kenai Peninsula's climate is probably best described as "variable," but one constant is chilliness. Although July temperatures can

occasionally range into the 80s, average summer temperatures at sea level hover in the 40s and 50s. Temperatures are usually lower at higher elevations. Frequent precipitation and winds add to the chill factor. Equipping yourself to stay warm, dry, and safe will allow you to spend more time watching animals, whether along the roadside or in the backcountry.

- Dress in layers, including "warm when wet" materials such as wool and fleece and an outside layer that blocks wind and water. Avoid cotton; it's a very poor insulator. As you warm up, remove layers, and as you cool down, add layers.
- Bring a hat. Keeping your head warm can go a long way toward preventing hypothermia.
- Keep yourself hydrated and fed.
- Don't over-exert yourself. Save energy for the return phase of your outing.

## Kenai Peninsula Wildlife





Both black and brown bears spend six to eight months a year feeding heavily, and the rest of the year fasting. They store this food energy as fat, and summer in Alaska is a critical feeding time.

#### LAND MAMMALS

#### **Bears**

Both black and brown (grizzly) bears are found on the Kenai Peninsula. Overall, black bears are more abundant, although in some areas and times brown bears predominate.

Black bears are about two and a half feet tall at the shoulder and are about five feet long. They are considerably smaller than brown bears and lack the brown bears' distinctive shoulder humps. Black bears average about 200 pounds, but some older bears may reach 300 to 350 pounds or more. Brown bears average between 500 and 900 pounds, and some older males can reach 1,400 pounds.

Both black and brown bears spend six to eight months a year feeding heavily, and the rest of the year fasting. They store this food energy as fat, and summer in Alaska is a critical feeding time.

Bears are omnivorous, eating meat and vegetation according to season and location. In spring, they feed on a wide variety of green vegetation, supplemented by moose calves and carrion. In summer and fall, bears with access to salmon streams gorge on fish. Berries—cranberry, currant, blueberry, devil's club and others—provide a critical carbohydrate boost. Throughout the summer, bears will dig up marmots, till meadows for roots, and tear apart logs for insects.

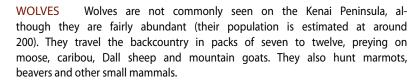
Don't look for bears in the late fall and winter; they are almost always tucked away in dens hibernating. Hibernating bears are biological wonders. They don't suffer bone loss, muscle atrophy or bedsores the way an inactive, bedridden person would. They don't eat or drink water, but their nutritional needs are met. Bears lose about 20 percent of their body weight during hibernation, and regain this over the summer. Physiologists and medical researchers are studying bears for insights into osteoporosis, kidney disorders and human sleep.

Bears are among the few animals that gestate young—a high-energy-demand state—while denned up and fasting. Bear cubs are born mid-winter, tiny and blind, and nurse through the winter, sharing their mother's fat reserves through her rich milk. Litters range from one to four cubs; two are most common. Mother bears are famously protective of their cubs. Cubs typically separate from their mothers as two-year-olds. Some brown bear cubs stay with their mothers for three to five years.

Some adult female bears live to be more than 20 years old. Except for females with cubs, they are usually solitary animals and avoid other bears. Exceptions occur where food sources are concentrated, such as salmon streams. Bears develop a social hierarchy in these situations.



In the early 1980s, Kenai Peninsula wolves began to show signs of being infested with dog lice.



In the 1800s and early 1900s, the Kenai Peninsula's wolves were exterminated by miners, prospectors, and homesteaders. Between 1915 and 1965, wolves were only occasionally documented in the region. Between the late 1960s and mid-1970s, however, wolf populations increased as the animals moved into suitable habitats, reproduced, and established territories.

Wolves are social animals. Packs are usually family groups that include parents and young of the year, but larger packs may include pups for two or three litters, from more than one female, and some yearlings that stay with the pack.

In the early 1980s, Kenai Peninsula wolves began to show signs of being infested with dog lice. Despite efforts at treatment, the animals continue to struggle with lice, which damage their fur and cause severe itching.



What to look for: Wolves are very elusive, but it may be possible to see wolves in the early morning or evening. If you are hiking, look for dog-like scat filled with hair.



What to listen for: Wolves may also be heard howling, most often in the evening or at night.



COYOTES Coyotes are also fairly abundant on the Kenai Peninsula, but their presence here may be a fairly recent event. After the extermination of wolves on the peninsula around the turn of the 20th century, the region's coyote population began to rise. This expansion was part of a continent-wide increase in coyote numbers. Today, these human-tolerant canids are particularly abundant at the edges of the human world—a place that wolves avoid.

Weighing between 20 and 40 pounds, coyotes are about one-third the weight of wolves. They average around two feet high at the shoulder, and, including tail, are about 4 feet long. In winter, their grayish-tan coats are usually lighter than they are in summer.

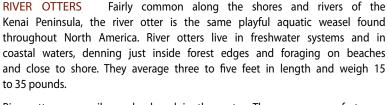
In general, coyotes are small-game specialists, feeding on hares, marmots, small rodents, muskrats, and even insects, berries and fish, although they do occasionally kill a large mammal such as a moose calf or a Dall sheep. They also scavenge carrion from wolf kills or winter-killed animals. Coyotes are not social to the extent that wolves are, although they do sometimes hunt cooperatively, and family groups stay together through the summer. Young of previous years will occasionally help care for pups.



What to listen for: Coyote howls are higher-pitched than those of wolves.



River otters can run as fast as a human, and on snow they can reach speeds of 15 miles per hour by alternately running and sliding on their bellies. They can swim about six miles an hour—faster for short distances by porpoising at the surface.



River otters are agile on land and in the water. They can run as fast as a human, and on snow they can reach speeds of 15 miles per hour by alternately running and sliding on their bellies. They can swim about six miles an hour—faster for short distances by porpoising at the surface. Otters eat fish, shellfish, shrimp, sea urchins and virtually anything else aquatic that they can catch.

Otters may live in close proximity to humans, but they tend to be wary. They are delightful to watch when foraging and will usually come ashore or climb on a dock to eat their catch. They're very social, sometimes seen in groups of five or more. Otters play often, wrestling, hiding and chasing each other on land and in the water.



What to look for: River otters are smaller and darker than sea otters and much smaller than harbor seals. Like other members of the weasel family, they are slender and slinky. They may roll at the surface, but they don't swim on their backs like sea otters. Their dives are briefer than those of sea otters.



What to listen for: Otters are vocal and have a range of sounds. They growl and whine, and when alarmed will snort a sneezing, "hah." They often call back and forth with bird-like chirps when separated.



RED SQUIRRELS Wherever you find spruce trees on the Kenai Peninsula, you'll find red squirrels. The small, oil-rich seeds of the spruce provide a critical food for these hardy arboreal rodents, especially in winter, when other foods such as berries and fungus are scarce. In fact, red squirrels spend most of the late summer and early fall cutting green spruce cones for winter, and stashing them in semi-subterranean caches that are sometimes made up of piles of previous-years' discarded cone scales.



What to Look For: Red squirrels do not hibernate, so watch for their tracks and cone cuttings throughout the winter.



What to listen for: Like most other species of squirrel, red squirrels are noisy. Your entrance into a squirrel's personal space (which can be quite big!) will often elicit indignant squeaks and loud, rattling chatter as it perches on a branch stub out of reach and flicks its tail in alarm. In time, especially if you retreat a bit, the squirrel will often go back to what it was doing before, giving you a chance to observe its behavior.





Dall sheep and mountain goats share the same general range of distribution on the Kenai; they are primarily found in the high Kenai Mountains in the northeastern part of the peninsula. Bird Point and Cooper Landing are good places from which to look for them.

DALL SHEEP AND MOUNTAIN GOATS The Kenai Peninsula hosts two species of white, mountaineering ungulates (hooved mammals): the Dall sheep and the mountain goat. Both species share the same general range of distribution on the Kenai; they are primarily found in the high Kenai Mountains in the northeastern part of the peninsula. Bird Point and Cooper Landing are good places from which to look for them.

So when you spot a group of white critters grazing on a mountainside, how can you tell if they're goats or sheep? One clue is habitat. Although both species can occasionally be seen together on the same mountainside, sheep tend to prefer drier south-facing slopes. Goats can tolerate deeper snows on the wetter north-facing slopes.

A closer look reveals more clues. Mountain goats (both females and males) have black, sharp, slightly curving horns, while Dall sheep horns are lighter in color and, on the males, can curve in full circles. Mountain goats are more yellowish in color and "squarer" in appearance, and seen from the front are much narrower than Dall sheep. Mountain goat hair, especially in the winter, is considerably longer than that of Dall sheep, and unlike sheep, goats have distinct "beards" under their chins.

Both sheep and goats rely on their agility and strength to clamber through the steep, rocky terrain that protects them from predators such as wolves. Both will graze and rest on moderate slopes but generally keep an escape route to steeper terrain.

Dall Sheep Dall sheep are closely related to bighorn sheep, and are part of the global genus (Ovis) that includes the domestic sheep.

Like mountain goat nannies, Dall sheep ewes flock in spring to rugged "lambing cliffs" Here, the young lambs can gain strength and agility among the precipices, where the danger of a fall is offset by the protection from predators. Rams form their own groups that travel together, meeting up with ewe flocks only in mating season.

In winter, Dall sheep move to "winter ranges"—windswept areas where snow does not drift too deep and the animals can reach the dry grasses and sedges that make up their winter diet.

Mountain Goats Mountain goats are only distantly related to domestic goats. They evolved in the Old World and migrated to North America about 100,000 years ago when Alaska and Asia were connected during the ice age. They're the only living representatives of their genus (Oreamnos) in the world.

Nanny and billy mountain goats segregate in spring and summer. Nannies with newborns band together and form "nursery flocks." These groups may include 20 or 30 animals, but tend to break into smaller groups of five to 10 goats that separate and regroup. Billies are found solo or in bachelor groups of a half-dozen animals.

In winter, mountain goats head down the mountains to the protection of the high forests, where they feed on rough forage such as mountain hemlock and blueberry bushes.



Alaska averages about 500 moose-vehicle accidents per year, with many of those on the Kenai Peninsula. Analysis of collision data shows that most vehicle-moose accidents occur at dawn and dusk when moose are on the move. Drivers should slow down and pay close attention to the road and roadside. being alert for moose. If you spot a moose on the side of the road. watch out for more. Calves will often run after cows across roads.



MOOSE Huge and imposing, gangly yet oddly graceful, moose are among the quintessential animals of the north country around the globe. Moose are abundant on the Kenai Peninsula, where they're not restricted to backcountry habitats—they often venture into suburban areas and are even known to stroll city streets. Since they're common, human-tolerant, and active year-round, it would be unusual to spend more than a couple of days wildlife watching on the Kenai Peninsula without seeing moose.

Moose haven't always been so abundant here. In the early to mid 1900s, populations were declining. In 1947, a huge wildfire burned 300,000 acres of spruce forest near Sterling. In the years following the fire, willow, birch, and alder brush—excellent moose habitat—grew in the burned area. Moose populations increased in response.

In summer, moose can seem almost aquatic. They spend a great deal of time wading and swimming in lakes and ponds, foraging for tender aquatic plants such as horsetail, sedge, and pondweed; they'll even submerge completely to get at a particularly tasty mouthful. Other summer foods include birch, aspen and willow leaves, and grasses.

Winter is a challenging time for moose. It isn't the cold that daunts them—their huge bodies and thick pelts keep them plenty warm—it's predators and food shortages. Heavy snow can make moose vulnerable to wolves. And their winter food, consisting mostly of coarse browse such as willow, birch and aspen twigs and bark, has a very low calorie-to-weight ratio. Moose must browse constantly in the winter. In some densely-populated sites, their busy teeth clip brush into a hedge. The hedge height varies, depending on how deep the snow was when the moose was browsing.



What to Look For: Alaskan moose are the largest moose in North America, and Kenai Peninsula moose are known as some of the largest in Alaska. Prime-condition bulls can weigh over 1,500 pounds and stand over seven feet tall at the shoulders. Cows are smaller, weighing 800-1300 pounds. Only the males have antlers, but both sexes have dangling "dewlaps" of skin under their chins. The long, brown and gray hairs that make up their coats are hollow, giving them insulation and buoyancy.

CARIBOU Symbols of the wild north, caribou are a sought-after species for wildlife viewers on the Kenai Peninsula. These "wandering deer" are native to North America, Europe, and Asia.

Although native to the Kenai Peninsula, caribou were absent for about 50 years between the 1910s and 1960s. Releases of breeding stock in the 1960s established two herds: one in the mountains near Hope and one in the Kenai River flats area. In the 1980s, additional caribou were released in the Tustumena Lake/Caribou Hills region, eventually establishing three additional herds. They are generally most accessible for viewing in the Kenai/Soldotna area.

Caribou spend most of their lives in open country such as tundra, with occasional trips into boreal forest. They are superbly adapted to cold, wind, and snow. Their coats are thick with hollow hairs, which provide outstanding

insulation. Their large feet act as both snowshoes and shovels, helping them to travel efficiently, and also to dig down to their chief winter forage plants such as lichens (reindeer moss), dried sedges and grasses, and small shrubs. In summer they feed on willow, sedges, herbs, and mushrooms.

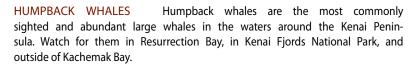


What to look for: Weighing 175-400 pounds, caribou are larger than black-tailed deer, but much smaller than moose. Their natty coffee-and-cream coats and magnificent summer racks are very distinctive, as are their oversized, splayed feet. Both male and female caribou grow antlers (males' antlers are much larger). Pregnant females keep their antlers, while males and unpregnant females shed theirs in the winter or early spring.



What to listen for: If you're fortunate enough to be close enough to a group of caribou on the move, listen for the loud clicking noises made by tendons rubbing on bones in their ankles.

#### MARINE MAMMALS



Most of Southcoastal Alaska's humpback whales migrate, spending summers in food-rich northern waters and wintering in the warm waters off Hawaii, where they mate and give birth. Gestation takes about 11 months, so a female that mates one winter will return to the tropics the next year to have her calf. The 3,500-mile migration takes about a month each way. The whales feed heavily in Alaska, eating almost 1,000 pounds of food a day. This food energy is stored as blubber. In the winter the whales generally fast, living off their fat reserves.



What to listen for: The "whoosh" of the exhaled breath (the spout or blow) of a humpback can often be heard across the water. The smack of a whale's tail and flippers on the surface and the splash of a breaching whale can also carry across the water.



What to look for: The distinct white puff of a spout is usually the first sign of a humpback whale and can be seen more than a mile away. The spray from the exhalation may linger for 10 or 15 seconds, standing out against the water as a misty plume about 10 feet high. The whale's blowhole is located on the top of its head, and the low, dark shape of the head and the knobby blowhole can be seen as the whale spouts.

In Southcoastal Alaska, feeding humpback whales usually surface, spout and breathe four or five times over a one to two minute period, then make a longer dive. The amount of time a feeding humpback spends submerged varies, depending on how deep it is feeding and the type of feeding activity. About five minutes is com-



mon. However, it's not unusual to wait 15 minutes for a whale to surface, and an adult whale may stay down for over 30 minutes.

Whales rarely show their flukes when cruising just under the surface, but they often show them when making longer, deeper dives. When a whale first surfaces, note its direction of travel and try to anticipate where it will come up next. You will likely have several good opportunities to see the animal before it makes a longer dive. When it finally makes the deep dive you see its entire length—the rounded, rolling curve of the back, the small triangular dorsal fin, the tail stock or peduncle, and finally the massive flukes of the tail.

BELUGAS Belugas are small toothed whales that are adapted to life in ice-choked Arctic and subarctic waters. Their dorsal fin has evolved into a tough dorsal ridge that is used along with their head to break ice for breathing holes. Belugas are very gregarious, sometimes traveling and foraging in groups of more than 100.

The Cook Inlet belugas are geographically isolated and genetically distinct from other belugas. Their numbers and range have declined dramatically in the past couple of decades and in 2006 they were added as candidates for listing under the Endangered Species Act.

Unlike most other whales, belugas frequently venture up rivers in pursuit of prey such as salmon and eulachon (a type of smelt common in coastal Alaska). They're known to eat a very wide variety of foods, including crustaceans, squid, and clams.



What to look for: Adult belugas are unmistakable: about 13 feet long, ivory white, with finless backs, they roll gently to the surface like smooth icebergs. Their heads are rather small, their necks are flexible, and their pectoral fins are long and pointed. Calves are born dark gray, and gradually whiten as they age. A beluga will be completely white by its 5th or 6th year.



What to listen for: Belugas are very vocal animals, producing a variety of grunts, clicks, chirps, and whistles that are used for navigating, finding prey, and communicating. Because of this, they have sometimes been called "sea canaries."

KILLER WHALES Killer whales, also known as orcas, are found in all the world's oceans. They are the largest members of the dolphin family. They live in small groups called "pods," which are usually made up of family members from juveniles (called calves) to adult males (called bulls).

Like other dolphins and porpoises, killer whales are capable of navigating and hunting under water in complete darkness using sound and echolocation, much like sonar. They emit a series of clicking sounds that they direct forward in a focused beam. They listen for the echoes of their sounds bouncing off objects in their surroundings and can judge the size, distance and speed of swimming prey.



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Killer whales in Alaska waters are either residents or transients (a third group, called off-shore, has rarely been documented in Alaska waters).

Killer whales in Alaska waters are either residents or transients (a third group, called off-shore, has rarely been documented in Alaska waters). These groups are genetically different and have distinct foraging and social behaviors and vocalizations.

Resident killer whales feed on fish, primarily salmon. They are very vocal and have sophisticated calls. Resident pods are more stable than transient pods. They often number more than 10 animals and can be as large as 50 animals.

Transients feed on marine mammals. Because marine mammals can hear echolocation sounds and whale vocalizations, transient killer whales tend to be very quiet and usually vocalize only after making a kill. Transients live in small, dynamic pods of three to seven animals.



What to look for: Killer whales are 25 to 30 feet in length. They will often cruise at the surface, spouting every few seconds as they swim. The black back, white eye patch, and striking triangular dorsal fin (the large fin in the center of the whale's back) are characteristics of the killer whale. Adult males' dorsal fins—dramatic triangles that can be six feet tall—are much larger than those of adult females. To identify individual whales, biologists use identifying characteristics—size, shape and distinctive scars or marks—of the dorsal fin and the gray "saddle patch" on the back behind the dorsal fin.



**PORPOISES** Two species of porpoise are regularly seen in the waters off the Kenai Peninsula: Dall's porpoises, and harbor porpoises.

Dall's porpoises are usually the more visible of the two porpoises of this region. They typically travel in groups of two to 20 animals. These compact, muscular porpoises rival killer whales as the fastest creatures in Alaska waters. Their black backs and white bellies and flanks resemble the markings of killer whales, but they are much smaller, averaging about six feet in length and weighing about 300 pounds.



What to look for: Dall's porpoises often "bow ride," a behavior that is ideal for wildlife watching. The bow of a moving ship creates a pressure wave in the water, something akin to the blast of wind that follows a passing truck. Porpoises sidle up to a boat and swim just below the surface, riding in the pressure wave.

Harbor porpoises are dark gray or dark brown, with noticeably smaller dorsal fins than Dall's porpoise fins. They are the smallest cetaceans in Alaska, averaging about 120 pounds. Although often described as shy, it may be more appropriate to say they are indifferent to boats and human activities. They do not bow ride.



What to look for: Fairly common in Southcentral waters, harbor porpoise are most often spotted when their round backs gently break the surface with rolling motions.



STELLER SEA LIONS Steller sea lions are among coastal Alaska's most watchable marine mammals. They are vocal, social, and fairly common around the Kenai Peninsula. Sea lions are fast swimmers and are graceful and powerful in the water. Because they can rotate their rear flippers forward to use as "hind legs," they are fairly agile on land. They "haul out" in large, noisy groups at traditionally used rock outcrops and beaches. They also haul out on buoys, where they may be seen bellowing and jockeying for the best spots.

Sea lions eat a variety of fish, from bottom-dwelling rockfish to salmon and herring. They also feed on squid and octopus. They forage from the intertidal zone to deep offshore waters. Although they have been documented diving as deep as 1,000 feet, feeding dives average about 60 feet.



What to look for: A splash at the surface may be your first indication of a sea lion—look for the large, triangular brown head and external ear flaps. You may also see a puff of breath as the animal exhales. Steller sea lions are brown or tan with large, prominent flippers. Averaging seven to nine feet in length and 600 to 1,500 pounds, sea lions are much larger than harbor seals. Seals are gray, spotted, and have a much rounder head profile without external ears.



What to listen for: When sea lions are hauled out on rocks, they can be quite vocal. They bellow, roar and growl, but do not bark. Haulouts can also be smelled up to a mile away. When sea lions are swimming, their breathing is audible, especially the exhalations.



HARBOR SEALS Visitors to Southcoastal Alaska from coastal cities across the Northern Hemisphere may recognize the round head, big dark eyes and spotted gray coat of the harbor seal. Also known as common seals or hair seals, these marine mammals inhabit northern coastal waters around the world.

Harbor seals feed on fish, clams, mussels, and crustaceans such as shrimp. They are hunted and preyed upon by sharks and by transient killer whales. In May and June they tend to move to sheltered waterways such as the deep bays of Kenai Fjords National Park, where each female gives birth to a single pup, often on an iceberg. Harbor seals favor nearshore water and will also swim up rivers.



What to look for: Harbor seals are most often spotted as their round heads pop quietly above the water surface in a motion somewhat like that of a submarine periscope emerging for a quick look around. Curious but cautious, they are very quiet and rarely vocalize. They tend to swim solo, but concentrations of food can draw them together, and they often haul out in groups on sandbars, beaches or ice floes near glaciers. Ungainly on land, they look like fat sausages when they are at rest.



SEA OTTERS Unlike their cousins, the river otters, sea otters are marine mammals and very rarely come ashore. They are most often seen floating on their backs amid kelp beds. Adult males weigh 70 to 90 pounds and are about four-and-a-half feet long. Females are about one-third smaller.

Sea otters eat almost any fish or shellfish they can catch. They consume the equivalent of about 20 percent of their body weight every day and can dive as deep as 250 feet when foraging. Tool-users, they sometimes lug rocks to the surface to use as anvils on which to bash and break shellfish. Because they have voracious appetites, sea otters have a profound effect on their environment, significantly reducing the numbers of prey animals, such as sea urchins, in an area.

In the late 1700s and early 1800s, Russian, American and British fur traders virtually wiped out sea otters in Alaska and along the Pacific Coast. By 1850 just a few isolated groups remained, mostly in the Aleutian Islands. Their habitat remained intact, so once protected from hunting, their populations rebounded.



What to look for: Sea otters are usually seen swimming or floating on their backs while grooming, resting or eating. They seldom swim on their stomachs, except just before they dive. Sea otters tend to be lighter in color than the smaller land otters. Look for the round head, significantly smaller than a seal's, with triangular nose.

#### **BIRDS**

BALD EAGLES Big, powerful, sharp-eyed and dominating, bald eagles are perhaps the most famous members of the Kenai Peninsula's bird world. You may find them year-round, anywhere on the peninsula, from the high alpine to the river valleys, but they are most concentrated along the coast.

Most bald eagles are primarily fish hunters and carrion scavengers. Although they do make spectacular swooping flights to snatch small fish and unwary marmots, eagles are just as likely to steal other eagles' food or scavenge a winter-killed mountain goat as they are to catch their own prey.

For the best eagle viewing, visit a salmon stream during spawning season, when scores at a time gather to feast. With a wingspan of up to 90 inches (7.5 feet) and weighing up to fourteen pounds, they will be the largest raptors (birds of prey) you'll see. Females are slightly larger than males.

Eagles are monogamous and generally pair for life. They prefer to nest along rivers, lakes, or the ocean, and usually choose a large, prominent tree for a nest site. A pair will use the same nest year after year, repairing and adding to the nest platform—which can grow to the weight of a pickup truck.

Eagles can be seen on their nests in late May and early June, and they care for the chicks over the summer. The chicks fledge in August and September, just in time for autumn salmon runs.



Young bald eagles go through a gradual color change as they mature. In their first year, they are dark brown, with brown eyes and a brown bill. Second- and third-year birds develop a white "bib" that stands out against their dark belly feathers. The bib darkens over the next one to two years. The white head and tail develop around the fifth year. As an eagle matures, its bill and eyes gradually turn yellow.



What to look for: The striking white head of the mature bald eagle stands out like a white softball in the trees. A prime perch will often draw several birds, so look in the surrounding trees as well for white-headed adults and dark-headed youngsters. These birds may be scoping out a productive stretch of water or resting after feeding.

GULLS For Kenai Peninsula wildlife watchers, gulls seem to be everywhere. Often gathered in large, raucous congregations, they are frequently dismissed as "just seagulls." Gulls are among the most challenging of birds to identify, but because of their abundance they offer lots of opportunities to practice—and their visibility makes them great subjects for extended viewing.

To start gull-watching, focus on adult birds (white bodies with gray wings) and pass on the more challenging juveniles (brownish). Once you're familiar with the more common species, the rarer ones will stand out.

- Three common gulls are large (raven-sized) birds, about 24 inches long, with pink legs and yellow bills with red dots. Glaucous-winged gulls have gray wing tips. Herring gulls and Thayer's gulls both have jet-black wingtips and are difficult to tell apart. Look into their eyes, if you can. Usually, herring gulls have pale irises and Thayer's have dark irises. Some gulls are hybrids of two species. On the Kenai Peninsula this is common; virtually all of the gulls nesting at Skilak Lake are hybrids.
- Mew gulls are crow-sized (about 17 inches long). They have greenish-yellow legs, yellow bills, and black and white wing tips. They may be confused with black-legged kittiwakes, which are about the same size but have black legs and black-tipped wings without white spots.
- Bonaparte's gulls are pigeon-sized (about 13 inches long), with thin black bills and orange-red legs and feet. From April to August, they wear black hoods; the rest of the year they have obvious dark "ear" spots on their white heads. Bonaparte's gulls can be confused with slightly larger Arctic and Aleutian terns (which also have black caps and gray backs), but both tern species have forked tails, and Arctic terns have red bills.

OWLS The Kenai Peninsula's boreal forests and coastal rainforests, tundra areas and marshes are home to several species of owls. Secretive, harder to spot, and less common than eagles, owls offer particularly special wildlife viewing opportunities.

Winter and spring are good seasons to be particularly owl-aware, as that's the time of year that these birds are setting up territories and preparing to nest. During this season, owls call frequently during the dark hours.



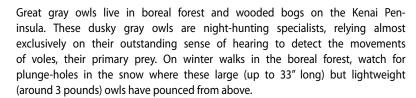
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At 18-25" long and weighing up to 4 pounds, great horned owls are the Kenai Peninsula's most powerful owls. They are the only large Alaskan owls with prominent ear tufts. Great horned owls hunt primarily by sight. Their populations fluctuate with the populations of their primary prey animals (snowshoe hares).

Short-eared owls are open-country birds, haunting marshes and tundra in search of voles and other small mammals, and small birds. They hunt primarily in evening and morning, but are active during the day as well. Watch for their distinctive fluttering flight.

Is that a hawk? Or is in an owl? The northern hawk owl lives up to its name, with its hawk-like silhouette, prominent perches and day-hunting habits. Hawk owls hunt a wide variety of small animals including rodents, hares and small birds. Watch for them in evergreen forests and along the edges of open areas such as meadows and bogs.

The smallest of the Kenai Peninsula's common owls, the boreal owl is about the size of a robin. Like great gray owls, these white-spotted woodland owls hunt primarily by listening for the subtle sounds of their prey. Smaller yet, the northern saw-whet owl is increasing in numbers on the peninsula.



What to look for: Watch and listen for owls at dawn and dusk, in particular. Be alert for their distinctive upright, stubby silhouettes in bare branches. Watch for their silhouettes gliding or fluttering mothlike overhead.



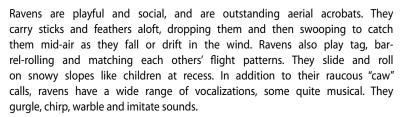
What to listen for: You're not likely to hear an owl fly overhead; their wings are designed for silent flight. But owls do make sounds. Listen for their voices on quiet evenings and nights in winter and spring. The larger owls (great gray owls and great horned owls) have distinctive, fairly deep hooting calls, while the hoots of the smaller owls such as boreal owls are much higher-pitched and rapid. Owls also make screeching and hissing noises when alarmed or agitated.

CORVIDS Ravens and their kin—crows, magpies and jays—are birds with curiosity and the capacity to solve problems. This serves them well in the wild—and also around people. Crows and ravens tear mussels from intertidal rocks, carry them aloft, and drop them on rocks, sidewalks and parking lots to break them open. They figure out how to open food containers, garbage cans, and backpacks.

Members of this bird family are known as corvids. They are monogamous and generally mate for life. Flocks forage cooperatively, working together to capture prey that is too much for a single bird.







The crow species of coastal Alaska, known as the Northwestern crow, is a different species than the American crow found across the rest of the continent. Northwestern crows are slightly smaller than American crows, and have deeper voices.

Black-billed magpies are striking iridescent black birds with long tails and bold white patches on their wings and bellies. Like their larger cousins, they're gregarious, scrappy and talkative.

Both Steller's jays and gray jays are found on the Kenai Peninsula. Steller's jays are rich cobalt blue shading to black on their jaunty, crested heads. Gray jays have downy-soft gray and white plumage and no crests.



Ptarmigan are close relatives of grouse, but where spruce grouse are forest specialists, ptarmigan prefer the open country of alpine tundra.

GROUSE AND PTARMIGAN Iconic birds of the boreal forest, spruce grouse are common on the Kenai Peninsula. They feed on a variety of berries, leaves, flowers and insects in summer, but their winter diet consists almost entirely of spruce needles. To collect the small gravel pieces that help them grind and digest this tough forage, they begin frequenting roadsides, streambanks, and lakeshores in August—so watch for them at dawn and dusk. They're well-camouflaged, so you'll have to look and listen carefully to spot them. Scan for broods of chicks following the female. Sometimes the male tags along as well.

A winter treat is the discovery of a grouse's bed: look for a hole in the snow where the bird plunged down to sleep, then scan for the tracks and wingmarks the bird made when it emerged.

Ptarmigan are close relatives of grouse, but where spruce grouse are forest specialists, ptarmigan prefer the open country of alpine tundra. There are three species of ptarmigan on the Kenai Peninsula: willow ptarmigan (Alaska's state bird), rock ptarmigan, and white-tailed ptarmigan. In areas where all three species overlap, the birds segregate themselves by elevation, with the willows the lowest, followed by the rocks, and finally the white-tails.

As favored meals of many predators, including eagles, owls, coyotes and falcons, ptarmigan must blend with their surroundings as best they can. In summer, that means delicately dappled and speckled feathers that match the heathers, rocks and lichens of their mountain homes. In winter, that means the white of snow. All ptarmigans molt their body feathers at least twice each year, and male willow ptarmigans molt three times: in spring to breeding colors that include a chestnut cape and white belly, in summer to mottled browns and grays, and in fall to winter white.

Like grouse, ptarmigan have a varied diet that gets more restricted in winter. Summer brings berries, leaves, and insects. In winter they eat the buds of willow, alder and birch.



WARBLERS AND THRUSHES Spend time birdwatching on the Kenai Peninsula in summer and you'll notice warblers. Only a little bigger than hummingbirds, these tiny birds dart like insects among the leaves, or perch to shout their surprisingly loud songs to the world. Many seem designed specifically to blend with the willow, birch and alder leaves, sporting olive-green or bright yellow feathers.

Warblers are bug specialists. Their beaks are tiny and tweezer-like, perfect for picking caterpillars, spiders, and other small prey from among the leaves. Some warblers have perfected the art of snatching insects in mid-air.

Birdwatchers on the Kenai will also find thrushes: the familiar, ubiquitous American robin; the similarly-sized (but more gaudily-colored) varied thrush of the coastal rainforests; Swainson's thrush; gray-cheeked thrush; and the small, shy hermit thrush with its lovely eerie song around Seward.



CHICKADEES Instantly recognizable by their natty dark caps and black bibs, chickadees are common on the Kenai Peninsula. Because of their bold dispositions and acrobatic natures, they're a great species to observe. Watch and listen for chickadees year-round, in forested habitats of all types. All Kenai Peninsula chickadee species give some variation of the familiar "tsikadee, dee, dee" call.

There are three species of chickadee known to breed on the peninsula. Black-capped chickadees, the familiar chickadees of the "lower 48" can be seen in deciduous forests throughout the region. Boreal chickadees, with their brown caps and rusty flanks, are more common in dry forests of white spruce. Chest-nut-backed chickadees are common in the coastal rainforest.

Chickadees nest in tree cavities excavated by woodpeckers and sapsuckers. They eat a wide variety of foods, including seeds, insects, and berries. They're common visitors to birdfeeders. Like many seed-eating birds, they cache food, especially during the winter. A single chickadee can remember the locations of dozens of food caches.

WATERFOWL Few places offer as much to nesting and migrating water-fowl as the Kenai Peninsula does. The western flatlands are pockmarked with thousands of lakes, ponds and wetlands, wild and inaccessible, that offer solitude and outstanding nesting habitat. Mountain lakes in the central and eastern part of the peninsula provide additional breeding territory. Huge estuaries provide crucial calories for migration. During summer, a visit to any lake or pond is a chance to watch nesting waterfowl, and in spring and fall you can watch the migration spectacle at marshes and estuaries. In winter, many waterfowl species can be seen along the saltwater shores and open waters of the Kenai River.







Three species of loons nest on the peninsula's many lakes: common loons, Pacific loons, and red-throated loons. These large birds build mounded nests of shoreline debris just adjacent to the water (loons are master divers, but can not walk on land). Loon chicks can sometimes be seen riding on their parents' backs.

On ponds and small lakes, you'll find many species of ducks, including mallards, teal, pintails, shovelers, and wigeons. These dabbling ducks feed by tipping downward from the water's surface with their tails pointing to the sky. When startled, they spring directly from the water into the air. Winter birders will find some dabbling ducks in saltwater.

Goldeneyes, mergansers, and buffleheads nest in hollow trees near ponds and lakes. These diving ducks submerge completely as they seek out the fish and aquatic insects that make up their diets. When disturbed, they usually must make short runs along the surface of the water to get airborne. Kachemak and Resurrection bays are important winter habitat for a variety of sea ducks, including the endangered Steller's eider.

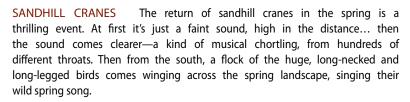
Swans—Alaska's largest flying birds—are often seen here. Tundra swans and trumpeter swans are the two species that migrate through; watch for them at Potter's Marsh, Tern Lake, and the Kenai River estuary. Some trumpeter swans remain on the peninsula to nest on larger lakes. A few swans winter in the region, and can be seen on the Kenai River where water remains unfrozen.

SHOREBIRDS Southcentral Alaska is a critical point in the migration routes of many species of shorebirds, whose annual journeys from southern wintering grounds to northern nesting areas can span thousands of miles. Sandpipers, dunlin, godwits, whimbrels, curlews, plovers... the list of species can't convey the enormity of the spectacle at the height of spring migration, when the mudflats and beaches of the Kenai River estuary, Turnagain Arm, Kachemak Bay, and other coastal hotspots are blanketed with thousands upon thousands of fluttering wings, darting legs, and bobbing heads.

During migration at these sites, every view can be filled with birds. Flocks of western sandpipers sweep across the landscape, shaping and reshaping, flashing dark and light as hundreds of birds turn as one. Dunlin quick-step through estuaries, their beaks stitching in and out of the mud like sewing machines at high speed, while turnstones skitter along rockier shores.

For the birds, the region's estuaries and wetlands mean plenty of food: energy to carry them across hundreds or thousands of miles of inhospitable territory. For humans, this means outstanding birdwatching, including the chance to see not just lots of birds but unusual birds—stray migrants from Asia, for example. If you're planning a visit to the Kenai Peninsula during shorebird migration, check ahead for birding tours and other events designed to help people learn about and appreciate this phenomenon. For example, Homer hosts an annual Kachemak Bay Shorebird Festival, featuring tours, presentations, and artwork.





The sandhill crane migration is a treasure of Kenai wildlife viewing. Thousands of these birds descend on the region's wetlands each May. Some remain to nest, while others continue further north. In September, they gather into flocks to head back to their wintering sites in California's Central Valley. To watch crane flocks rise in graceful spirals to migration altitude, calling all the way, is to witness a truly unique and thrilling wildlife event.

Sandhill cranes average around 3 feet tall and have wingspans of up to 6 feet. Although they resemble fish-eating herons, they're much more catholic in their tastes, feeding on berries, amphibians, fish, small mammals, seeds, and roots.

Another crane display well worth seeking out is their "dancing." When greeting each other (particularly in spring), sandhill cranes perform elaborate bowing, leaping and skipping dances that are a joy to watch.



SALMON are famous for their epic migrations—jumping waterfalls and braving hungry bears and hopeful anglers as they fight their way up rivers to spawn. Hatched in fresh water, they migrate downriver as juveniles and spend their adult lives feeding in the open ocean for two or more years. They then return to their home waters to lay eggs.

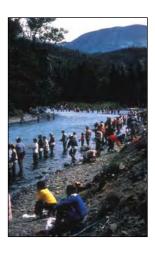
The rivers and streams of the Kenai Peninsula collectively produce millions of salmon. Salmon are not confined to large waterways; streams small enough to step across are visited by spawning adults, and some even lay their eggs in the intertidal zones of tiny creeks. These prodigal children of the rivers bring more than eggs to the rivers of the Kenai. After spawning, they die, and their decaying bodies enrich the streams and forests with important marine-derived nutrients.

By caring for watersheds and critical spawning habitat and carefully managing the harvest of adults, Alaska has maintained healthy salmon populations and sustainable fisheries. No populations of Alaska salmon are listed as threatened or endangered.

Five species of Pacific salmon spawn on the Kenai Peninsula. All are routinely referred to by at least two common names.

Chinook, or king salmon are the largest salmon. Kings average between 20 and 40 pounds, but larger fish are not at all uncommon. The state record sport-caught Chinook was caught in the Kenai River. It weighed 97 pounds. A Chinook caught commercially in Southeast Alaska weighed 126 pounds.

Coho, or silver salmon average eight to 12 pounds. Coho turn from dimebright to dark maroon when they migrate from sea to freshwater.



#### FISHING CROWDS

Fish don't draw just bears. When salmon are running, some of the Kenai Peninsula Wildlife Viewing Trail Sites are occupied by hundreds of anglers. Wildlife viewers may find those sites busier than preferred during the short fishing season (dates vary by run and location), but tranquil and great for viewing most of the year.

Chum, or dog salmon average from seven to 18 pounds. Some chums spawn in intertidal waters and small coastal streams, while others travel tens of miles upriver. Spawning chums develop tiger-like red and green vertical stripes on their sides. Males develop strongly hooked jaws with prominent teeth.

Pink salmon, or "humpies," are the smallest salmon. They're named for the prominent humped backs of the males. They are the most abundant salmon in Alaska.

Sockeye, or red salmon are named for their blood-red spawning coloration and red flesh. Averaging six to eight pounds, they are associated with lake systems. The Russian River supports perhaps the most famous of the Kenai Peninsula's sockeye runs—where bright red fish leap waterfalls and dodge milling anglers, who can sometimes seem as abundant as the salmon.

AQUATIC INVERTEBRATES The rivers, streams, lakes and ponds of the Kenai Peninsula are full of bugs...and that's a good thing. Aquatic insects form the basis for countless wildlife food chains. They're the primary food of juvenile salmon and other small fish, which are in turn eaten by larger fish, birds, and mammals. No bugs... no bears!

Many insects that you'll find in streams and ponds are juvenile forms of bugs that spend their adult time zooming through the air. Others spend their whole lives underwater. Some are extremely tolerant of pollution and other poor conditions, while others are so sensitive that their presence is used as an indicator of good water quality.



Aquatic insects are wonderfully adapted to their watery environment. Mayflies and stoneflies are tiny crawling insects that can often be found clinging tightly to stones in fast currents. Some even have suction-cup-like structures on their undersides to help keep them in place. Some caddisflies build themselves tube-like cases out of sand grains, bark, needles or other debris, while others spin silken nets to trap drifting prey. Juvenile dragonflies and damselflies are fierce predators, ambushing other aquatic insects and even fish in ponds and slow-moving streams. Diving beetles are also predators, chasing their prey down like wolves. Perhaps the most infamous of aquatic insects are mosquito larvae, which can be seen backflipping their way through the stillest waters.

When you visit a stream, pond, or lake keep your eye out for these very tiny—but very important—wildlife. Sit quietly at the water's edge and watch for beetles zipping among the aquatic plants, or caddisflies trundling along the bottom. Gently turn over a rock or two and look for clinging mayflies, stoneflies, caddisflies or others.



### Kenai Peninsula Bird Checklist

Avid birders may wish to consult the ABA Birdfinding Guide: A Birder's Guide to Alaska, by George C. West for more indepth information on birding the Kenai Peninsula.

Check recent reports and report rarities at http://ebird.org/ak/ and at these birding hotlines: Central Peninsula 907-262-2300; Kachemak Bay 907-235-7337 (PEEP); and Anchorage Audubon Society for Upper Cook Inlet 907-338-2473.

SWANS and GEESE  U Greater White-fronted Goose Emperor Goose U Snow Goose A Ross' Goose Er Brant U Cackling Goose C Canada Goose Trumpeter Swan T Tundra Swan	Surf Scoter  White-winged Scoter Black Scoter Long-tailed Duck U Bufflehead C Common Goldeneye Barrow's Goldeneye Hooded Merganser C Common Merganser Red-breasted Merganser Ruddy Duck	Short-tailed Shearwater Fork-tailed Storm-Petrel Leach's Storm-Petrel CORMORANTS Brandt's Cormorant Ct Double-Crested Cormorant Red-faced Cormorant Pelagic Cormorant
DUCKS  Gadwall Eurasian Wigeon American Wigeon Mallard Blue-winged Teal Cinnamon Teal Northern Shoveler Northern Pintail Green-winged Teal Canvasback Redhead Common Pochard Ring-necked Duck Tifted Duck Greater Scaup Lesser Scaup Steller's Eider Spectacled Eider	GROUSE, PTARMIGAN  er Ruffed Grouse Spruce Grouse	HERONS Great Blue Heron
	Willow Ptarmigan Rock Ptarmigan White-tailed Ptarmigan Sharp-tailed Grouse	EAGLES, HAWKS, FALCONS  Osprey Bald Eagle Northern Harrier
	LOONS  Wed-throated Loon Pacific Loon Common Loon Yellow-billed Loon  GREBES Pied-billed Grebe Horned Grebe Red-necked Grebe	Sharp-shinned Hawk  Northern Goshawk  Swainson's Hawk  Red-tailed Hawk  Rough-legged Hawk  Golden Eagle  American Kestrel  Merlin  Gyrfalcon  Peregrine Falcon
r King Eider er Common Eider u Harlequin Duck	Eared Grebe  PETRELS, SHEARWATERS Northern Fulmar Sooty Shearwater	RAILS, COOTS, CRANES  Sora American Coot Sandhill Crane

PLOVERS	Black-headed Gull	NIGHTHAWKS
Black-bellied Plover	Bonaparte's Gull	<u>er</u> Common Nighthawk
American Golden-Plover	Black-tailed Gull	
u Pacific Golden-Plover	Mew Gull	HUMMINGBIRDS
Semipalmated Plover	er Ring-billed Gull	a_ Anna's Hummingbird
<u>er</u> Killdeer	California Gull	Rufous Hummingbird
	Herring Gull	
OYSTERCATCHER	<u>er</u> Thayer's Gull	KINGFISHERS
Black Oystercatcher	Iceland Gull	Belted Kingfisher
	er Slaty-backed Gull	
SANDPIPERS	Western Gull	WOODPECKERS
Greater Yellowlegs	Glacuous-winged Gull	Red-breasted Sapsucker
Lesser Yellowlegs	Glaucous Gull	Downy Woodpecker
r Solitary Sandpiper	Sabine's Gull	Hairy Woodpecker
Wandering Tattler	Black-legged Kittiwake	Am. Three-toed Woodpecker
Gray-tailed Tattler	Red-legged Kittiwake	Black-backed Woodpecker
Spotted Sandpiper	Ross' Gull	Northern Flicker
Whimbrel	lvory Gull	
Bristle-thighed Curlew	Caspian Tern	TYRANT FLYCATCHERS
Hudsonian Godwit	Arctic Tern	U Olive-sided Flycatcher
er Bar-tailed Godwit	r Aleutian Tern	Western Wood-Pewee
er Marbled Godwit	White-winged Tern	Alder Flycatcher
Ruddy Turnstone		Hammond's Flycatcher
<u>u</u> Black Turnstone	AUKS, PUFFINS, MURRES	Say's Phoebe
r Surfbird	Common Murre	Say 31 Hococ
er Red Knot	Common Murre	SHRIKES
r Sanderling	Pigeon Guillemot	Northern Shrike
Semipalmated Sandpiper	Marbled Murrelet	Northern Shrike
<u>U</u> Western Sandpiper	Kittlitz's Murrelet	JAYS, CROWS
Red-necked Stint	Ancient Murrelet	Gray Jay
Least Sandpiper	Cassin's Auklet	Glay Jay Steller's Jay
White-rumped Sandpiper	Parakeet Auklet	Steller \$3ay Black-billed Magpie
<u>er</u> Baird's Sandpiper	Crested Auklet	Northwestern Crow
<u> </u>	Rhinoceros Auklet	Northwestern Crow
<u>er</u> Sharp-tailed Sandpiper	Horned Puffin	Common Naven
<u>r</u> Rock Sandpiper	U Tufted Puffin	LARKS
<u>u</u> Dunlin		u Horned Lark
<u>a</u> Stilt Sandpiper	DOVEC	Homed Lark
<u>er</u> Ruff	DOVES	SWALLOWS
Short-billed Dowitcher	a Mourning Dove	a Purple Martin
<u>er</u> Long-billed Dowitcher		Tree Swallow
Wilson's Snipe	OWLS	Violet-green Swallow
Red-necked Phalarope	er Western Screech-Owl	Bank Swallow
Red Phalarope	Great Horned Owl	Dank Swallow
	Snowy Owl	Barn Swallow
JAEGERS, GULLS, TERNS	Northern Hawk Owl	barn swanow
Pomarine Jaeger	Great Gray Owl	CHICKADEES
Parasitic Jaeger	Short-eared Owl	Black-capped Chickadee
<u>er</u> Long-tailed Jaeger	Boreal Owl	Chestnut-backed Chickadee
Franklin's Gull	Northern Saw-whet Owl	Boreal Chickadee
		Doreal efficialee

NUTHATCHES, WRENS, CREEPERS, DIPPERS  Red-breasted Nuthatch Brown Creeper Winter Wren American Dipper  KINGLETS	WOOD-WARBLERS  C Orange-crowned Warbler Yellow Warbler C Yellow-rumped Warbler Townsend's Warbler Palm Warbler Blackpoll Warbler	Snow Bunting McKay's Bunting  BLACKBIRDS Red-winged Blackbird Yellow-headed Blackbird Rusty Blackbird
Golden-crowned Kinglet Ruby-crowned Kinglet	Northern Waterthrush Common Yellowthroat Wilson's Warbler	Brown-headed Cowbird  FINCHES  Brambling
THRUSHES  er Northern Wheatear Townsend's Solitaire	TANAGERS  Western Tanager	u Gray-crowned Rosy Finch u Pine Grosbeak er Purple Finch
Townsend's Solitaire Gray-cheeked Thrush Swainson's Thrush Hermit Thrush American Robin Varied Thrush WAGTAILS, PIPITS Eastern Yellow Wagtail	SPARROWS and ALLIES  American Tree Sparrow Chipping Sparrow Savannah Sparrow Fox Sparrow Song Sparrow Lincoln's Sparrow White-throated Sparrow	a Cassin's Finch er Red Crossbill C White-winged Crossbill C Common Redpoll er Hoary Redpoll U Pine Siskin American Goldfinch
White Wagtail American Pipit	<ul><li>Harris' Sparrow</li><li>White-crowned Sparrow</li><li>Golden-crowned Sparrow</li></ul>	Abundance on the Kenai Peninsula (in appropriate
WAXWINGS  Bohemian Waxwing Cedar Waxwing	C Dark-eyed Junco Lapland Longspur Rustic Bunting	habitats at the right time of the year)  c—common u—uncommon r—rare er—extremely rare

Audubon Alaska WatchList National Audubon WatchList

The Audubon national and state WatchLists identify bird species that need special attention and stewardship. Learn more about Alaska's WatchListed species at http://www.audubon.org/chapter/ak/ak/BirdSci\_WatchList.html.

a — accidental

Todd Eskelin of the Kenai National Wildlife Refuge updated the Kenai Watershed Forum's Flying Wild over the Kenai Peninsula: A checklist to the birds of the Kenai Peninsula (compiled by: Eskelin, T., K. Marlow, and K. Tarbox in 2005) in February 2007. The order follows the AOU 47th supplement.

# Credits



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US Fish and Wildlife Service

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Wildlife photography is fun and challenging. Check out the U.S. Fish and Wildlife Service (Alaska Region) Alaska Digital Wildlife Photography Handbook at http://alaska.fws.gov/external/education/pdf/ak\_digital\_photography\_handbook.pdf to help you capture picture perfect memories, while respecting your wildlife subjects.

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pages 12 – sheep, 17 – wolf, 24 – coyote and hare, 69 – scraping, 98 – coyote and wolf, 101 – moose, 102 – whale, 104 – porpoise; Boyd Porter: page 69 – goat; Jack Whitman: pages 20 – owl, 44 – frog, 65 – porcupine; Jamie Karnik: pages 21 – dipper, 42 – Savannah sparrow, 53 – jay, 66 – rhinoceros auklet, 89 – marmot, 107 – gulls; Jeff Mondragon: page 100 – sheep; John Hyde: pages 15 – swan, 106 – sea otter; Larry Aumiller: pages 92 – bear and bear viewer, 93 – bears, 97 – brown bear; Riley Woodford: page 93 – tracks

Alyson McNight: page 73 - Kittlitz's murrelet; Art Sowls: page 61 - cormorant; Berg: page 62 - crab; C. Schlawe: pages 60 - storm-petrel, 75 - kingfisher; Chuck Young: page 47 - salmon; Dave Ericksen: page 100 - goat; Dave Kenagy: pages 84 - beaver lodge, 85 - stump, 107 - great horned owl, 108 - great gray owl, 112 - salmon; Dave Menke: pages 12 - sparrow, 13 - thrush, 26 - blackbird, 27 - loon, 41 - geese, 42 - whitecrowned sparrow, 55 - goose, 68 - thrush, 111 - dowitchers; Donna Dewhurst: pages 11 - blackbird and canvasback, 13 - warbler, 14 - yellowlegs, 15 - swallow, 17 - warbler, 18 - moose, 19 - gull, 20 - chickadee and woodpecker, 21 - merganser, 22 - warbler and woodpecker, 23 - tern, 26 - creeper, 32 - bufflehead and goldeneye, 33 - warbler, 34 - wigeon, 43 - junco, 46 - gull, 48 - warbler and cormorant, 53 - warbler, 55 - shoveler, 56 - grebe, 58 - scaup, 63 - king eider, 71 - both kinglets, 72 - bunting, 108 - northern hawk owl, 110 - chickadee, 112 - crane; Doug Alcorn: page 30 - grayling; Gary Kramer: pages 69 - sandpiper, 75 - heron; Gary Stolz: pages 33 - owl, 72 - owl; Glen Smart: page 23 - harleguin; Gus Van Vleit: page 73 - marbled murrelet; James Leopold: page 52 - swallow; John and Karen Hollingsworth: page 36 - merganser; Lee Karney: page 29 - siskin; M. Fenner: page 21 - goldeneye; Michael Halminski: page 38 - whimbrel; Mike Boylan: pages 61 - puffin, 64 - quillemot; Richey: page 89 - mountain; Ron Singer: page 99 - otter; Tim Bowman: pages 28 - long-billed dowitcher and rock sandpiper, 30 - ptarmigan, 38 - jaeger, 39 - sandpiper, 40 - dunlin and teal, 51 - plover, 57 - snipe, 59 - turnstone, 60 - turnstone, 66 - horned lark, 67 - sandpiper, 70 - ptarmigan and pipit;

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Minerals Management Service	page 103 – beluga
National Marine Mammal Laboratory	Dave Withrow: page 79 – gray whale

Todd Eskelin: page 25 - nutchatch; Vernon Byrd: page 78 - black-legged

## Feedback Not



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#### Feedback

As you explore the Kenai Peninsula and this guide, we welcome your feedback, stories, ideas and even corrections so that we may continue to build the Kenai Peninsula Wildlife Viewing Trail. Send your notes to:

Kenai Peninsula Wildlife Viewing Trail Committee, c/o KPTMC 35477 Kenai Spur Highway, Suite 205, Soldotna, AK 99669

or e-mail them to:

info@KenaiPeninsula.org (be sure to put Kenai Peninsula Wildlife Viewing Trail in the subject line so your message is routed properly).

And, as you travel the Kenai Peninsula, let the businesses and residents you encounter know that you are a wildlife watcher. Tell them what you've been seeing and ask them for wildlife pointers. We couldn't include all of the wildlife viewing opportunities in one guide.

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Notes		

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