



Alaska's

Wild Wonders

Wild foods: learn, harvest, share

In this Issue:

Alaska has an amazing abundance of wild foods. For many people in this state, living is centered around the traditions and practice of wild food harvest. Explore wild foods by ecoregion - or an area defined by the plants and animals that live there. Learn how wild foods are good for our health, and about some ways that Alaskans harvest and share wild foods within families and communities.



For Educators:

Find the ADF&G wildlife-inspired curricula and lots of other learning resources online: alaska.gov/go/n4ug

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Also, visit adfg.alaska.gov and search for "Wild Wonders" to find vocabulary, activities, and other supporting materials for this issue.



What is a wild food, anyway?

Wild foods are animals, plants and fungi that are not farmed by people and survive in the wild on their own.

Why choose wild foods?

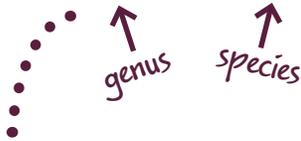
- 1) **They are good for your health!** Wild foods do not have chemicals or any other ingredients added by people. Many wild foods have important nutrients like proteins, carbohydrates, healthy fats, vitamins and minerals.
- 2) **Foraging is an outdoor activity.** Finding wild food means time spent outside with friends and family, building connections with nature, learning new skills, and time away from screens.
- 3) **Get moving!** Whether hiking to hunt small game, fly fishing in a river or traversing the tundra picking berries, foraging often means physical activity and the yummiest rewards for hard work!
- 4) **Become a naturalist:** finding and harvesting wild foods requires serious skills like identifying plants, animals, and fungi, and an understanding of the places we live in, rely on, and are a part of.



What are wild foods called?

Foods may have many common names, especially across different languages spoken around the world and across Alaska. Sometimes the same common name is used for different foods, which can be confusing. Luckily, all known wild foods have a specific scientific name.

Scientific names have two parts: **genus** then **species**. Cloudberries (below) have multiple common names - like salmonberries or yellowberries - but only one scientific name: ***Rubus chamaemorus***.



Tips for wild harvests:

1. Do your research, and be familiar with any wild food you want to harvest. **If you don't know what it is, do not harvest or eat it!**
2. Only take what you need, and leave enough for others, including for animals that also forage on the wild foods humans harvest.
3. Seek out and forage with someone who knows about wild foods, such as a family member, Elder in your community, or expert.
4. If you hunt or fish - know the regulations and make sure to get a license!

How to find wild foods?

To Forage means to search for food.

Foraging in the wild involves learning, searching, finding, harvesting...and then sharing with others.

Some of the ways we **forage** include: hunting, fishing, and picking!

Coastal Wetlands

Coastal wetlands are where salt water from the ocean mixes with fresh water from rivers and creeks. Here, the mix of land, freshwater and ocean provide a diverse and nutrient-rich environment.



Black bear (*Ursus americanus*)

Black bears are omnivores - they eat a variety of plants and animals including sedges, berries, mussels, fish and mammals. Bear meat is high in protein, iron, zinc, and low in sodium.



Bog cranberries (*Vaccinium oxycoccos*)

Bog cranberries are found in bogs and muskegs and grow on trailing vines, making them a little more challenging to harvest. They have a good amount of Vitamins A, C, and fiber. Pick them in late summer or early fall for the best taste.



Muskrat (*Ondontra zibethicus*)

Musk rats are large rodents that spend time in the water but live on land. Muskrat meat is high in vitamins, minerals, and protein.



Mallard (*Anas platyrhynchos*)

Mallards are called dabbling ducks because of the way they move their bill around in shallow water to feed. Duck meat has healthy fat, protein, thiamin and riboflavin (B vitamins).



Sea lettuce (*Ulva lactuca*)

Sea lettuce can be found in the mid to low intertidal zone. It grows on boulders, rock seafloor, and pebbles in areas that are protected from waves. Green algae is full of fiber when eaten, and has medicinal uses, too.



Eucalon/Hooligan (*Thaleichthys pacificus*)

This small fish is commonly known as candlefish because it has so much fat that it can be dried and used as a candle. In the coastal wetlands it is typically caught in nets and put in buckets. It is food for seals, sea lions, eagles, gulls, bears and humans. It is an easy to clean fish and is delicious whether fried, canned, or smoked.

Nutrition Facts

Serving Size 1 hooligan fish

Calories 110		% daily value	
Fat	23%	Sodium	2%
Protein	77%	Vitamin B12	89%
Carbohydrate	0%	Calcium	45%
Cholesterol	23%	Selenium	78%
Fiber	0%	Phosphorus	39%

The % daily value tells you how much a nutrient in a serving of food contributes to a daily diet of 2,000 calories

Can fat be healthy?

Fats store energy, protect organs, and keep human bodies warm. Unsaturated fats are found in fish, and can lower blood pressure, help your immune system, and keep your heart healthy.

Coastal Rainforest

Temperate rainforests have mostly spruce and hemlock trees - some that are over 200 ft. tall and 1,000 years old - that house and protect a variety of plants and animals. These forests have the greatest amount of plant life per area in the world.



Photo: Luce Cyd Fiera



Sooty grouse (*Dendragapus fuliginosus*)

Often found calling from the top of the tallest tree in the forest, listen for the "whomp, whomp, whoooooomp" of male hoots in the spring when hunting. Great for grilling, stews, or even sausage.

Boreal Yarrow (*Achillea millefolium borealis*)

Yarrow is a medicinal plant. It can be chewed up and placed on a wound to stop bleeding and prevent infection, or used in teas to lower a fever or help with digestion.

Proteins build your muscles!

Proteins are important for your cells, organs and tissues. Proteins build muscle, fight disease (antibodies), and carry messages (hormones).

Sitka black-tailed deer (*Odocoileus hemionus sitkensis*)

In Southeast Alaska, a favorite game species is the Sitka black-tailed deer. This small deer can be hunted from August into winter months and, like most wild game, is high in protein, low in fat and a great source of iron.

Nutrition Facts

Serving Size 1 lb. deer meat

Calories 526		% daily value	
Fat	15%	Iron	73%
Protein	196%	Vitamin B1	76%
Carbohydrate	0%	Vitamin B2	126%
Cholesterol	27%	Vitamin B3	187%
Fiber	0%	Calcium	2%

The % daily value tells you how much a nutrient in a serving of food contributes to a daily diet of 2,000 calories

Salmonberry (*Rubus spectabilis*)

These fruits come in colors of yellow, red, and...salmon. Salmonberries have lots of Vitamins A and C, and can be enjoyed raw off the bush, or used in jams. Salmonberry shoots can be eaten raw, or cooked like asparagus.

Sockeye Salmon (*Oncorhynchus nerka*)

Sockeye salmon are high in healthy fats like omega-3s, and good for bears fattening up for the winter, and also healthy for humans. Enjoy grilled, smoked, dried, or roasted! Salmon is also often canned and saved for winter.

Bull Kelp (*Nereocystis luetkeana*)

This kelp grows in shallow bays or channels, and is high in protein, potassium, sodium, iodine and magnesium. Kelp stalks can grow up to 100 feet in length. The best time to harvest is June -August during a very low tide. The blades are often dried in order to save them for later, and the bulb and stipes are used to make pickles or in other canned foods.



Boreal Forest

Alaska's boreal forest (sometimes called "taiga") is a complex mosaic of forest types from sunny aspen groves to spruce bogs, meadows, marshes, lakes, and rivers. Boreal forests are mostly found in the interior, or middle, of Alaska.

Alaskan moose (*Alces alces gigas*)

A large bull moose will provide approximately 500 lbs. of meat. Moose meat is low in fat and high in protein. Can you calculate how much 500 lbs. of organic beef from the store would cost?

Spruce grouse (*Falcipennis canadensis*)

These birds are popularly known as spruce hens or spruce chickens because they are chicken-like birds and a lot of people love to eat them. They are found throughout the boreal forest, and eat many wild foods people do - blueberries, crowberries, cranberries, and fungi.

Lingonberry (*Vaccinium vitis-idaea*)

Lingonberries are best after the first frost of the year when they are less tart. The berries remain on the plant all winter, and therefore are an important food for wildlife in the winter, and people too. Lingonberries have protein, fat, carbohydrates, and lots of

Snowshoe hare (*Lepus americanus*)

When snowshoe hares are abundant, they are relatively easy to hunt and snare. They weigh about 3 to 4 lbs. and have lean meat with very little fat.



Nutrition Facts

Serving Size 1 cup mushrooms

Calories	20	% daily value	
Fat	1%	Iron	45%
Protein	4%	Vitamin D	17%
Carbohydrate	1%	Vitamin B2	10%
Cholesterol	0%	Vitamin B3	9%
Fiber	6%	Potassium	6%

The % daily value tells you how much a nutrient in a serving of food contributes to a daily diet of 2,000 calories

Morel mushrooms (*Morchella spp.*)

In the right conditions after wildfires burn a forest, morel mushrooms can grow from the exposed soil by the thousands. Many people seek out morels in burns after early summer rains. Morels have a lot of iron, and a variety of other vitamins and minerals.

Alaska whitefish (*Coregonus nelsonii*)

Whitefish have always been an important wild food to people living in boreal forest. People often use nets when fishing to catch large numbers of whitefish at once. In some areas spearing is also a good way to catch fish. Whitefish can be salted, dried, and smoked or cooked.



Iron is for oxygen...

Iron is a mineral, and a critical component of hemoglobin, a protein. Hemoglobin with iron in it is responsible for carrying oxygen throughout your entire body!

Alpine Tundra

Alpine tundra is found on mountains, above the trees - such as in the Alaska, Brooks, and Chugach, and Wrangell ranges. Chilly temperatures, steep slopes and thin soils mean that alpine plants grow close to the ground and alpine animals are adapted to survive in cold, windy weather.

Barren ground caribou

(Rangifer tarandus granti)

Caribou have the longest land migrations on earth. They can travel over 3,000 miles a year. Caribou meat is a great source of protein and iron, and people harvest an average of 20,000 caribou in Alaska every year.



Burbot *(Lota lota)*

Burbot are a treat for Alaskans living far from the ocean. They are a long-lived, slow-growing fish. Burbot are high in protein, and contain lots of minerals, like manganese. They are especially tasty breaded and fried.



Rock ptarmigan *(Lagopus muta)*

Ptarmigan species are one of the best choices for people who are just learning to hunt. The dark meat is a good source of protein and iron - and good grilled, fried, baked, or slow cooked in a crock pot.



Dall sheep *(Ovis dalli)*

Hunters carry heavy packs up steep slopes over many miles to find Dall sheep. Many say Dall sheep meat is the best of game meats in flavor. Good grilled or in a dish — but don't overcook it!

Crowberry *(Empetrum nigrum)*

Crowberry is another alpine berry that grows close to the ground, and what they lack in taste they make up for in antioxidants. They ripen in autumn and taste better after a heavy frost, and can be used in mixed berry jams. The twigs can be used in tea.



Alpine blueberry

(Vaccinium uliginosum)

Wild blueberries are tiny yet potent! Blueberries are loaded with antioxidants that fight disease like Vitamin C. They also have almost no fat, sugar, sodium, or processed starches. Pick berries in mid-late summer.

Nutrition Facts

Serving Size 1 cup blueberries

Calories 138 % daily value

Fat 2% Vitamin C 46%

Protein 6% Vitamin E 17%

Carbohydrate 10% Vitamin K 32%

Cholesterol 0% Vitamin B2 72%

Fiber 21% Manganese 197%

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Awesome antioxidants

Antioxidants include Vitamins A, C, and E, along with many others. Antioxidants help fight infection and disease by protecting cells from damage.



Northwest Coastal Plain

The Northwest coastal plains are a vast landscape, where life is shaped by far north extremes: long winters and short summers. Species that people hunt and gather shift with the seasons - many species migrate at certain times of year, and plants have a brief window of warmth to grow.

B-complex, it's good for you.

Each of the 8 B vitamins has a name, number and helpful function. B1 = thiamine, which helps turn nutrients into energy. B12 = cobalamin, which supports your brain and nervous system. Learn about all the health benefits of B vitamins by researching on your own.

Greater white-fronted goose (*Anser albifrons*)

Greater white-fronted geese migrate north to Canada and Alaska from the lower 48 and Mexico to nest in the summer. Geese adults and eggs are a great source of protein, iron and B vitamins. Eggs can be collected in certain rural communities for nutritional and other essential needs.

Nutrition Facts

Serving Size 1 goose egg

Calories 266		% daily value	
Fat	24%	Iron	29%
Protein	40%	Vitamin B2	42%
Carbohydrate	1%	Vitamin B6	26%
Cholesterol	409%	Vitamin B12	306%
Fiber	0%	Selenium	97%

The % daily value tells you how much a nutrient in a serving of food contributes to a daily diet of 2,000 calories

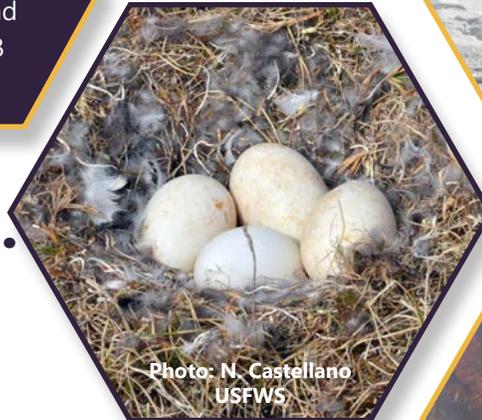


Photo: N. Castellano
USFWS



Cloudberry (*Rubus chamaemorus*) **card on pg. 2

Cloudberry plants are low to the ground, and produce fruit that contains the most Vitamin C of any Alaska berry - in fact, twice as much Vitamin C per serving as a whole glass of orange juice!

Bowhead whale (*Balaena mysticetus*)

Alaska Natives have harvested bowhead whales for thousands of years. This hunt is protected under the Marine Mammal Protection Act. Bowheads are favored for their oil, baleen, meat, and muktuk (skin with blubber).

King eider (*Somateria spectabilis*)

King Eiders are one of the largest sea ducks in North America. Nearly half a million migrate through the Beaufort sea with up to 10,000 breeding in Alaska. Migratory birds are important to people in the Arctic as a traditional and seasonal food source.

Tomcod (*Microgadus tomcod*)

When water nearshore freezes, tomcod escape predatory seals by entering shallow lagoons under the ice, where seals can't follow. However, tomcod are caught through chipped holes in the ice by jigging with colorful hooks. Tomcod can be frozen, dried, used in baking or as bait.

Bearded seal (*Erignathus barbatus*)

Bearded seals have blubber, which seals use for both insulation and to convert into energy. Blubber can be harvested and rendered into oil. Dried seal meat is a reliable food resource for many coastal areas. Harvest of marine mammals is only allowed by Alaska Natives.

Alaska's Wild Wonders

Wild foods: Learn, harvest, share



Let's make some connections! Try these activities:

1. Cut out all the game pieces (hexagons) throughout the magazine. Ask questions and do some research to learn more about your favorite examples of wild foods. Find an adult who can share stories about how they foraged as a kid. What did they forage, where, and what did they learn?
2. Did we miss a wild food that is important to you? You can make your own or use the empty hexagons (template online) to draw and label a wild food that we have not mentioned. What ecoregion(s) does it live in?
3. Let's make a meal! Connect different hexagon sides to make a healthy meal – in a straight line or in a circular chain, or however makes sense to you. It can be a meal you once had, or one you might like to try.
4. Did all the foods on your plate come from the same ecoregion within the magazine? If not, how many ecoregions did you pick foods from?
5. Think of foods or meals you eat that come from the grocery store. Can you find nutrition information for these foods? Compare nutrition facts to wild foods in this issue. What do you notice?

6. Challenge time! How many ways can you sort your hexagons?

Examples: Plants, birds, predators, omnivores

What kinds of connections can you make between pieces? How many hexagons can you connect using them? What shapes can you make?

Go to: adfg.alaska.gov
and search "Wild Wonders"
for hexagon patterns,
other species, vocabulary,
activity ideas and
extensions, and more!



Back cover images: King crab, nagoonberry, chocolate lily, willow parmitigan, king salmon, spotted shrimp, woodland strawberries

