

Alaria marginata

Winged Kelp, Wakame

Alaria, in the brown seaweed group, is known as winged kelp due to the bunch of small “blades” at the base of the frond. It is called wakame in Japan. This large seaweed grows in the lower intertidal zone.

Description

Alaria, an olive-brown colored seaweed, can grow up to more than 2 feet long and 2-8 inches wide in Alaska. It is anchored to the ocean floor with a visible holdfast. A short but noticeable

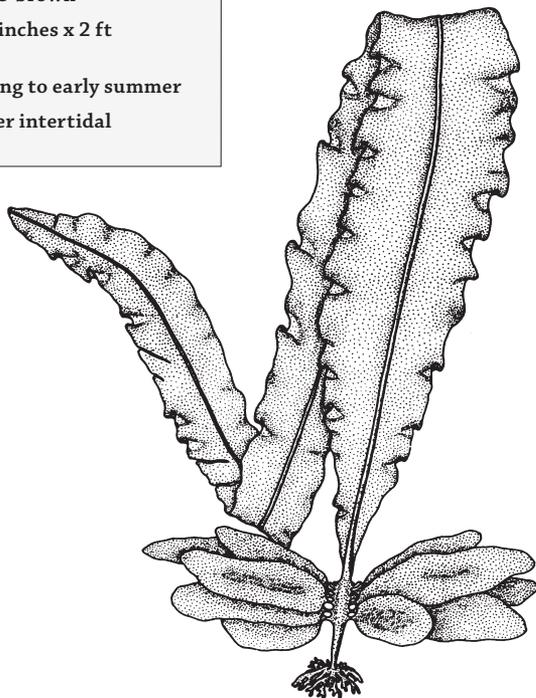
Alaria marginata (*Winged kelp*)

Color: olive-brown

Size: 2-8 inches x 2 ft

Collecting season: spring to early summer

Zone: lower intertidal



stipe runs from the holdfast to the frond. Oval shaped “blades” are attached to the stipe; these are sporophylls. The frond is long and narrow. The edges of the frond are ruffled and tend to fray near the tip, likely due to wave action. A thick midrib runs the length of the frond. Small *Alaria* fronds look similar to older ones.

Habitat

Alaria, like many larger brown seaweeds, tends to grow in the lower intertidal zone. It grows in areas with active surging water. *Alaria* often grows in large patches and is found attached to rock walls.

Harvesting

Alaria is a favorite for some people—the frond and midrib are delicious. Care should be taken not to overharvest an area. Generally this seaweed is harvested in late spring and into the early summer. Summer storms may batter the fronds until there is nothing left but a holdfast and a stub of a midrib.

Look for good-sized fronds and cut off only the top portion, leaving the lower portion of the frond and the stipe with the oval-shaped blades. You should be leaving a portion of every frond you harvest to maintain the habitat. Rinse in seawater or salted freshwater.

Harvested fronds can be kept in plastic or mesh bags until you get home.

Processing

Alaria will spoil fast if left in plastic for too long so begin processing right away when you get home. Fronds can be used fresh or dried. To dry fronds, hang them from a clothesline in the sun, if possible. As the frond dries it will shrivel up a bit.

Rather than drying the entire frond, many people slice the frond lengthwise into three strips—the midrib and two flat side pieces. The pieces can be hung to dry or used fresh.

Uses

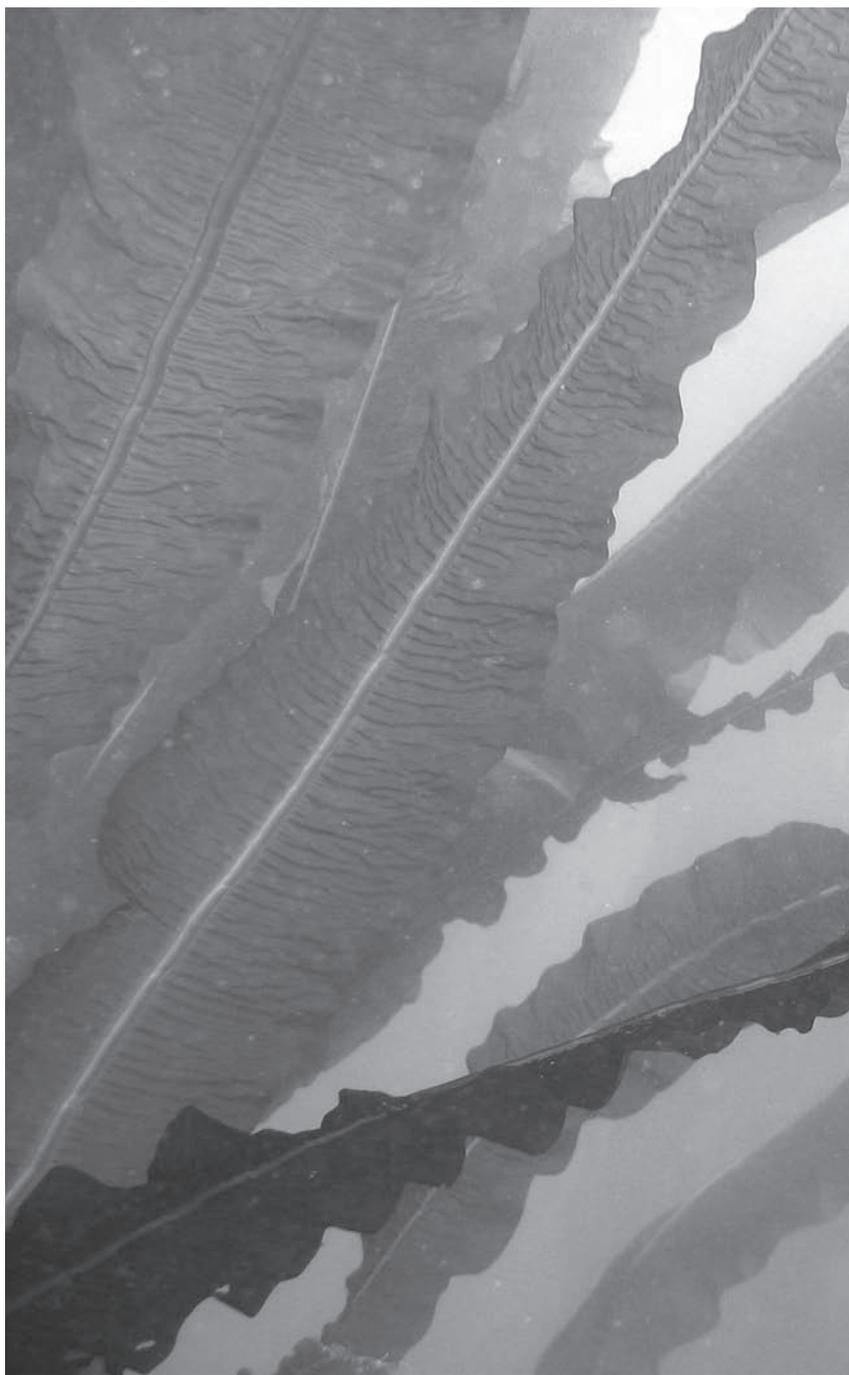
When fresh the midrib of *Alaria* is often cut out, creating two sheets and a thick celery-like stalk. The midrib can be chopped fresh and quickly stir-fried. The two side sheets can be used like a tortilla. Rice and fish are piled in the center and the seaweed sheet is rolled.

Dried fronds or strips may be broken into pieces. Store the pieces in airtight containers, in a cool, dry place.



Dolly Garza

Alaria marginata (winged kelp) grows in the lower intertidal zone.



Alaria marginata

Fucus gardneri

Popweed, Rockweed

Fucus gardneri is in the brown seaweed group. It is often overlooked but is a good edible seaweed.

Description

Fucus, or popweed, is brown or yellow-brown in color, and is attached to rocks with a visible holdfast. There is no visible stipe. A thick stock branches into numerous bladelets.

Popweed has a visible midline that runs down the center of the frond as well as down the center of the branching bladelets. Mature popweed generally has bulbs or small sacs at branch tips. The surface of these small bulbs is textured or bumpy.

Popweed may grow up to 12 inches long in Alaska. The young specimens are shorter, 2-4 inches, and appear more yellowish and often don't have bulbs on branch tips. These younger ones are preferred for picking.

Habitat

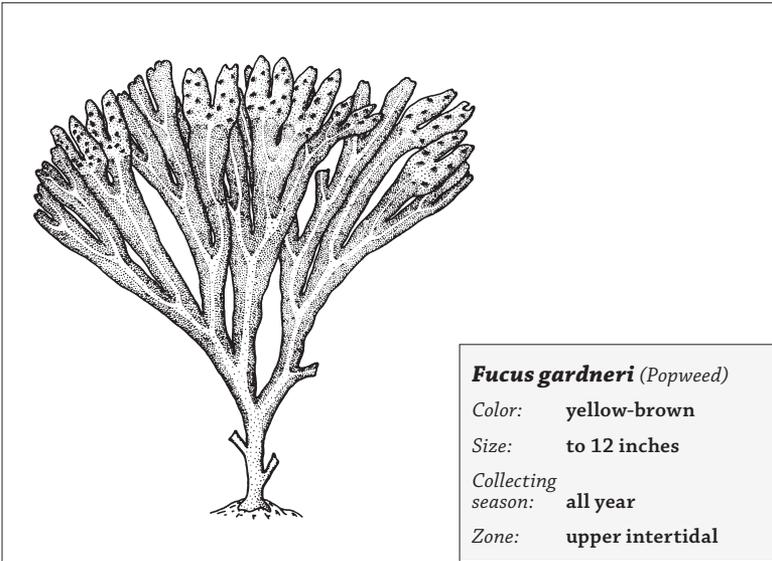
Popweed is most abundantly found in the upper intertidal zone; you will find it on almost any low tide. It grows along rocky shorelines, attached to solid substrates such as large and smaller rocks.

Harvesting

Popweed can be picked any time of the year, although younger yellowish specimens are more abundant in the late spring or early summer. You will find popweed on many rocky shores along the Gulf of Alaska and into Bristol Bay.

Because popweed is not as tasty after it has been dried, it is best to pick only as much as you will eat in the next few days.

While the younger yellow-brown popweed is preferred, the larger, darker brown forms are also tasty.



For the younger popweed, take the frond but be careful not to tear away the holdfast. With larger popweed, you do not want to pick the entire frond. Instead, you should harvest only the branched bladelets that do not have bulbs on them. The branched bladelets can be cut or torn away from the main frond.

Processing

As mentioned earlier, popweed tastes best fresh. Rinse it in ocean or freshwater. While it can be eaten raw, it has a “nuttier” flavor if blanched by dipping into boiling water.

Uses

There are several recipes for this versatile and abundant seaweed.

It is fun to introduce kids to seaweeds by blanching popweed for them on a beach outing. Take along a thermos of hot water, a small pot or coffee can, and a small paring knife or scissors. Be prepared to make a small beach fire.

Look for the fronds that do not have bulbs on the tips. The water inside these bulbs is a bit slimy and grosses kids out.

Pull off some fronds near the base. Pour the thermos water into your can over the fire. Have kids watch you while you dip the seaweed into the hot water for a few seconds, holding it by the base. The normally olive-brown color will turn a bright, near-neon green. For some reason kids think this makes it okay to eat. The water needs to be hot—if the water is not hot enough, the neon green color change may not occur.



Dolly Garza

The younger specimens of *Fucus gardneri* (popweed) are preferred for picking.



Kurt Byers

Mature popweed, with bulbs at the branch tips, is tasty but not as desirable as the young ones.

Laminaria

Kelp, Kombu, Sugar Wrack

Laminaria is in the brown seaweed group. Often called kelp or kombu, it is abundant in Alaska's gulf waters. Several species of *Laminaria* are large, ranging in size from 1 to 4 feet when mature. Common *Laminaria* in the Gulf of Alaska include *Laminaria saccharina* (commonly called sugar wrack), *Laminaria bongardiana* (formerly *Laminaria groenlandica*), and *Laminaria setchellii*. There are other species of *Laminaria* in Alaska's waters too.

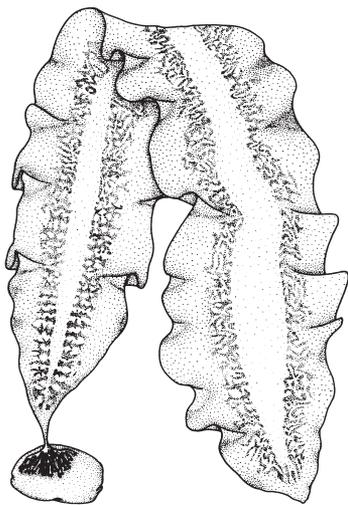
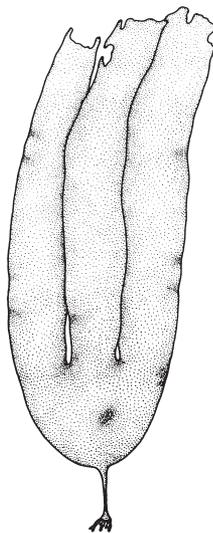
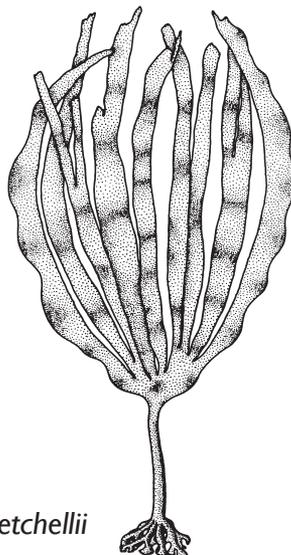
Description

All species of *Laminaria* have large visible holdfasts. Beyond that, their shape varies considerably. Some have short stipes and long blades such as *Laminaria saccharina*, or longer stipes and large blades as in *Laminaria bongardiana* and *Laminaria setchellii*. In all cases the frond or blade is thick and dark brown. Another similarity among *Laminaria* species is the lack of a midrib.

The shape of the blade itself varies considerably. The blades of *Laminaria saccharina* have large bumps or indentations. *Laminaria bongardiana* has a thick smooth surface and the blade is split into several larger strips. *Laminaria setchellii* has numerous long, relatively thin blades all running from the same base.

Habitat

Kelps are found in lower intertidal waters. You may find a rock covered with one type of *Laminaria* or you may find several different species in one bay or inlet. The thicker bladed *Laminaria bongardiana* and *Laminaria setchellii* are found in more exposed areas and the thinner bladed *Laminaria saccharina* is seen in areas with less wave action. All three of these seaweeds have been found in one area, such as around Craig or Sitka.

Laminaria (Kelp)Color: **browns**Size: **about 1-4 ft**Collecting
season: **spring to fall**Zone: **lower intertidal***Laminaria saccharina**Laminaria bongardiana**Laminaria setchellii*

Harvesting

Kelps can be harvested from late spring into autumn. As the season progresses they may get beat up from wave action or may be settled on by small invertebrates or sponges. Begin looking for these large seaweeds in April and May. They generally require a “minus” tide to harvest.

These large seaweeds are easy to pick. Prepare for harvesting by bringing a couple of plastic or mesh sacks, old pillowcases, and a small paring knife. As with other seaweeds, do not pick the entire kelp patch. Their blades provide a canopy for small fish and invertebrates and are important to the health of the local ecosystem.

Check the seaweed to see that it looks healthy with no sponge encrustations. Look for fronds that don't have ragged edges or patches of lighter coloration which signify damaged or diseased parts.

Taking only a few plants from one area, use a paring knife to slice off the blade leaving the holdfast, stipe, and lower portion



Dolly Garza

The thinner bladed *Laminaria saccharina* (kelp) is found in areas with less wave action.

of the blade. Rinse the blades in ocean water to remove small crustaceans or sand. If possible, put different species in different bags for transport back home.



Dolly Garza

The thicker bladed *Laminaria bongardiana* is more common in exposed areas.

Processing

Once you get home, there is little work to processing. To dry, string up twine in an area where there will be some sun and wind. The blades can be hung from the twine, and can be attached with clothespins or simply draped over the twine.

As blades dry they will turn a very dark brown, then blackish. A dusting of white may appear on the surface. This is salt, or with *Laminaria saccharina*, it is the sweet-tasting mannitol, and is edible.

Kelp, like most other seaweeds, is stored in an airtight container in a cool dry area. Large pieces can be broken into smaller pieces for storing.

Uses

As you begin to experiment with these seaweeds you will find that each of the kelps has a different flavor and texture. *Laminaria setchellii* and *Laminaria saccharina* are both sweet when dried. *Laminaria bongardiana* dries thicker, and when dried pieces are soaked in freshwater for 30 minutes they will appear fresh, as if never dried. See the recipe section for kelp chips, kelp seasoning, and other dishes.

Nereocystis luetkeana

Bull Kelp, Bullwhip Kelp

Nereocystis luetkeana is a common seaweed found along the Pacific west coast. Many people are familiar with bull kelp, but do not know it is edible.

Description

Nereocystis (bull kelp) is one of the largest seaweeds in the North Pacific, growing up to 100 feet in length. Bull kelp, in the brown algae group, is golden to dark brown in color.

Bull kelp is attached to the ocean bottom with a stout root-like holdfast, off of which grows a long hollow cylindrical stipe or stalk. The stipe is narrow at the base and increases in diameter farther from the base. The stipe is topped with a hollow bulb, a pneumatocyst, to which are attached numerous long leaf-like blades.

Habitat

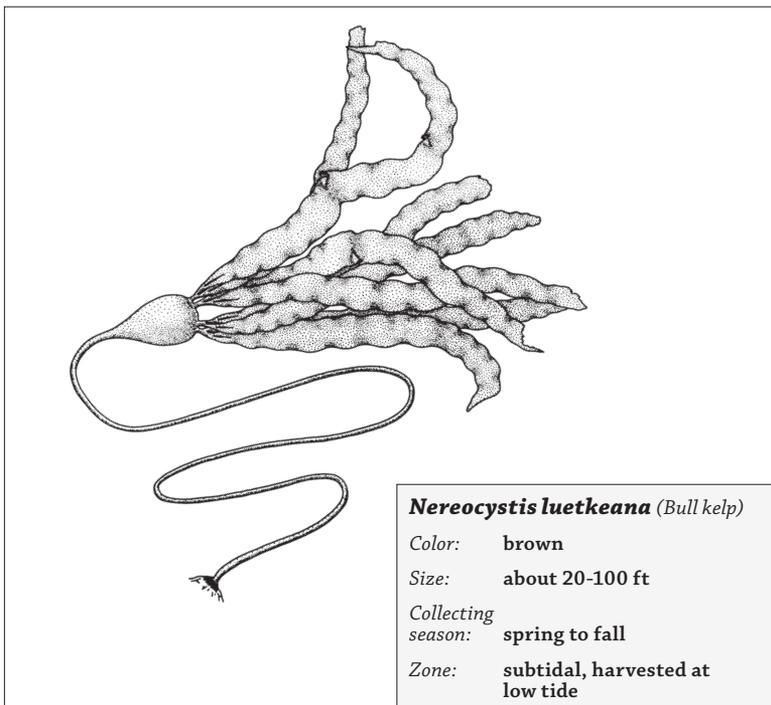
Bull kelp grows in subtidal areas and usually we see only the top portion—the bulb and blades. Rarely would an attached holdfast be exposed at a low tide, although you may find holdfasts and portions of the stipe, bulb, or blades washed up after a good storm. Bull kelp grows along many coastlines, more abundantly in areas having high wave action. Bull kelp is disliked by small boaters who consider it a nuisance when trying to motor into a small cove or through a narrow pass.

Harvesting

Most of the harvesting occurs in the summer and early fall, although specimens can be harvested year-round if they are healthy. You will likely not be able to reach bull kelp at a low tide on foot, as its holdfast is attached to rocks in the subtidal area. If you find some fresh bull kelp washed up along the shore

after a storm, it could be okay to collect and use if it is still olive brown and appears moist.

Bull kelp is usually harvested from a skiff. A long knife and a bag are necessary for harvest. Idle your skiff up to the bull kelp and grasp the long stipe or stem. Use your knife and cut down as far into the water as you can—and don't fall in! Or you can harvest the long blades from the top of the bulb. Both the stipe and blades are good to eat.



Processing

The stipe is used differently from the blades. The stipe should be rinsed in freshwater to remove excess salt. The hollow stipe is most often used in pickling and not dried before being pickled.

The blades can be dried or used fresh. To dry, rinse quickly in freshwater. Hang to dry on a clothesline, in a slight breeze or

sunshine. The blades can be dried inside if it is raining. As blades dry, your house will smell like the sea and the blades will turn a darker brown and shrivel up a bit. Once dried, the blades can be kept in airtight containers in a cool dry place.

Uses

A variety of pickles or relishes can be made from the thicker portion of the stipe/stem. You can experiment by using pickle or relish recipes in a standard cookbook and replacing the cucumber with bull kelp.



Dolly Garza

The long-stiped *Nereocystis luetkeana* (bull kelp) is usually harvested from a skiff.



Brenda Konar

Nereocystis luetkeana (bull kelp)