

Kombu

History and Culture

The use of kombu (kelp; edible seaweed of the genus *Laminaria*) in cooking has a long history in Japan. Kombu is mentioned in historical documents some 1,200 years ago, but is thought to have been used as far back as the Jomon period (from about 15,000 to 2,300 years ago). From ancient times, dried kombu was chopped finely and prized for its medicinal qualities, and it was a precious, sacred product that was used as an offering to the gods. Around the twelfth century, with the development of shojin vegetarian cooking introduced from China, kombu began to be used as a main ingredient for broth, or dashi, as it is today. Seaweed like kombu is most useful for shojin cooking; not only for stock and simmered dishes but in many other ways as well—kombu strips deep-fried in sesame oil made a highly nutritious treat, for instance.

From around the latter part of the seventeenth century, coastal shipping routes developed, making possible the long-distance transport of kombu from where it was harvested in what is now Hokkaido to the commercial center of Osaka in the western part of the country. The northern city of Tsuruga became a major port of call in the coastal distribution routes plied by the so-called *kitamaebune*—the ships that engaged in the coastal commodity trade. Among the goods they dealt in, kombu was of considerable importance; it was processed at Tsuruga and shipped to Kyoto and Osaka. As this “kombu road” was established, kombu came to be sold cheaply enough that its use spread to ordinary people as well.

Japanese cuisine calls for many dried, preserved ingredients (*kanbutsu*) that can be used in various ways, a leading example being kombu, most often as the base for making broth. Drying, curing, and then re-soaking kombu before using it in order to draw out its umami component is a method at the very core of Japanese cuisine.

There are various types of kombu—Rishiri, Rausu, Hidaka, and *makombu* (see photo, p. 47)—differing by region and recipe. *Makombu* is sold most widely in Osaka and other parts of the Kansai region and Hidaka kombu the most familiar in the Tokyo area. With the “flavor of the broth” said to determine the character of the cuisine, chefs devote great attention to the source of their dashi. This book, except in cases where another type is specified, introduces dashi made with Rishiri kombu.

Kombu is also used to make *oboro kombu* (shredded kombu; used for *onigiri* rice balls, etc.), *tororo kombu* (filaments made by shaving kombu after softening in a vinegar marinade), which is added to soups, and *tsukudani*, a condiment for rice made by simmering strips or squares of kombu in shoyu and other seasonings.



OPPOSITE: Detail from “Matsumae kombu” (Kombu production in Matsumae domain, in present-day Hokkaido) in the 1754 book titled *Nippon sankai meibutsu zue* (Illustrations of Famous Products of the Hills and Seas of Japan), compiled by Hirase Tessai, prints by Hasegawa Mitsunobu. Shows the strips of kombu being harvested into the boats and then spread out to dry on the beach and over rooftops.

Printed advertising handbill with auspicious motifs distributed to customers at year's end by a kombu merchant. It is based on a polychrome woodblock print showing a *kitamae-bune* coastal shipping vessel in full sail (late Meiji).





TOP: Boats harvesting kombu. For the harvesting of kombu, which takes place on limited days and within limited hours each day, the boats go out all at once.



BOTTOM: Kombu being pulled out of the water. The plants are cut at their roots on the rocks using a long pole.



Kombu drying on the shore. The blades are spread out over gravel on the beach, where they dry in one day under the hot sun.

■ Harvesting and Drying Kombu

The season and even the time of day are fixed for harvesting kombu. From the start of the season around July 10 for two months until the middle of September, the harvesters' boats go out during two to four hours in the morning on those days. These rules have been established partly to protect the natural environment and assure the safety of the harvesters, but also in order to allow time to lay out the seaweed to dry. Using a hydroscope to locate the kelp plants underwater and a long-handled hook, the harvesters pluck the long blades at the root or cut them off with a scythe-like tool. The harvested kombu is carefully washed in seawater one blade at a time and then stretched out for a day of sun-drying over rocks or gravel on the shore.

Sun drying kombu is exacting, as the position of the blades may need to be shifted and drying time adjusted according to the weather and direction the wind is blowing. Exposure to rain would destroy the product. In recent years, kombu is often machine dried, but since machine-dried kombu tends to make a cloudy stock, respected kombu makers remain attached to the time-tested sun-drying method. Kombu dried under the sun retains a certain level of moisture and a fine, white powder forms on its surface. That white powder, called manittol, is a faintly sweet sugar that is one of the elements that determines the flavor of kombu.

From Harvest to Shipping

Kombu grows in regions of cold-current flows, and areas where warm and cold currents mingle are rich in nutrients and thought to be the best for high-quality kombu. Some 40 species of 10 genera of kelp grow along the coasts of Hokkaido, and these account for about half of the varieties found around the world. More than 90 percent of the kombu produced in Japan is harvested in that region.

Indigenous kombu species vary from region to region along the island of Hokkaido (see map at right): Rishiri kombu is found along the Soya cape—the big cape at the northern tip, Rausu kombu comes from the Shiretoko peninsula on the east side, Hidaka kombu from Cape Erimo in the south, *makombu* from the southern Esan cape, and so forth. Historically, kombu varieties have been associated with and named after the region and the exact seacoast area (*bama*) where they are harvested, and kombu products are identified and marketed accordingly. The Kabuka coast of Rebun Island at the northernmost point of Hokkaido and the Kutsugata coast of Rishiri Island are known for the highest grades of Rishiri kombu. These coasts are blessed with the natural conditions that make for good-quality kombu—the ideal mix of currents and water temperature, sunlight, the presence of freshwater rivers or streams flowing into the sea, and good areas to dry harvested kombu. Even when the variety of kombu is the same, the product will differ depending on the conditions under which it grows, so sometimes the price and grade of the kombu of harvesters can differ even among the coasts in the neighborhood. Also, the quality of kombu differs from one year to the next, depending on climatic conditions.

Kombu Growth and Harvest

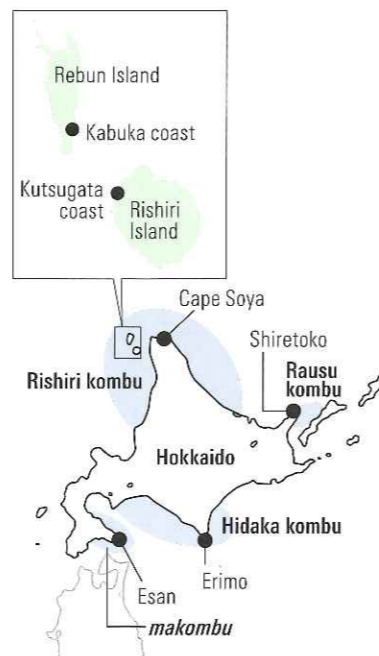
Kombu propagates from spores that attach to rocks around 5 to 10 meters (16 to 30 feet) underwater and takes about two years to grow. The first year, the blades start to wither in autumn and die off by winter, but this is the means by which the plant gets through the harsh winters of the northern ocean. In the spring of the second year, the plant regenerates from the root and sends out blades of even greater thickness than the first year. During the summer, the blades increase in width and length, and they grow thicker by the time the harvest season arrives. Kombu harvested from July to mid-August of the second year is known as *hashiri* (“early”) kombu, and all after that is called *godore* (“later picked”) kombu. *Godore* kombu, gathered after growth has ended, has thick blades that yield poor and slightly viscous stock; the kombu best suited to making broth is *hashiri*.

Once the season begins, kombu harvesters go out to gather kelp, and on the same day spread out the blades to dry in the sun (pp. 16–17).

Aging (*Kuragakoi*)

Kombu that is aged in a cellar after harvesting and drying is called *kuragakoi* kombu. The aging process was adopted after it was found that kombu kept in a cellar over the winter loses its unpleasant, briny smell and its flavor is enhanced. This method was once the traditional practice among the kombu dealers of Tsuruga, but today it is rare.

Kombu is stored away from light and air at a temperature of around 70°F (20°C) and a humidity level of about 60 percent for at least a year, and normally for



Cellar for aging (*kuragakoi*)
A cellar for aging kombu. Harvested kombu is aged at a temperature of around 70°F and 60 percent humidity for at least a year, normally for two to three years.

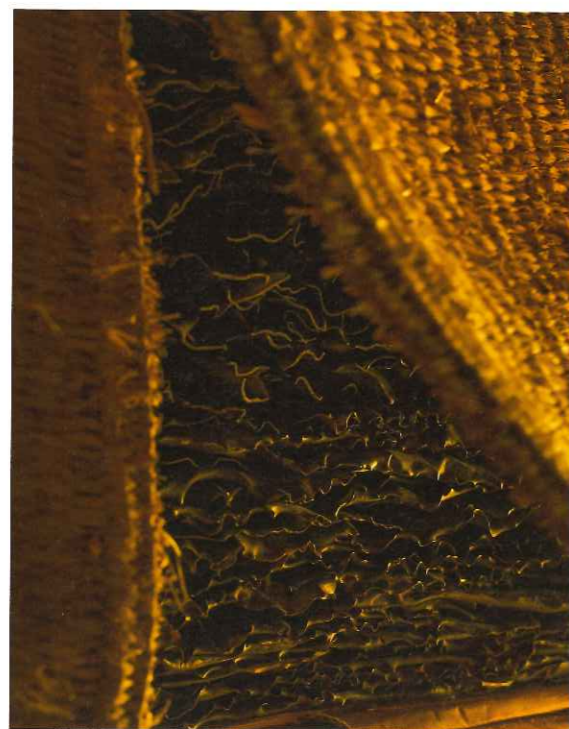


two to three years. The aging ripens the kombu, giving it a more complex, deeper flavor and aroma. Such kombu yields stock with strong umami without bitter or other unpleasant flavors, and is thus used in fine cuisine and shojin cooking.

■ From Dressing to Shipping

Kombu undergoes a number of other processes before it is shipped. These differ from one producing area to another, but for Rishiri kombu, the thin parts at both edges are trimmed, and the strips are folded into neat shapes. These “dressing” processes are all done by hand. The coastal areas where kombu is harvested have cooperatives that set various standards for the packaging and shipping of kombu that goes to market. Broad and thick kombu blades are marked as Grade 1 or Grade 2; slender or shorter ones are sold as Grade 3 or Grade 4 kombu. The sorting, dressing, and grading of kombu takes time and trouble. It is even more complicated for Rausu kombu or *makombu*, which is folded or wrapped, but in recent years the number of kombu producers who simply cut the blades into standard lengths has increased. In any case, there is no waste in the kombu-dressing process; all kombu is shipped as product.

The amount of natural kombu that can be harvested has been decreasing due to global warming and the deterioration of the ocean environment where it thrives. As a result, the bulk of kombu on sale today is less expensive farmed kombu. Natural or wild kombu has a strength resulting from its survival amid the severities of nature. It has a deeper flavor and produces a clearer stock, and has thus become highly prized by fine restaurants.



The flavor of kombu intensifies and its color becomes more saturated through aging in the *kuragakai* cellar.

Dressing kombu for sale. Each blade is folded in a prescribed way and made uniform in size.

