

By BARBARA CLERIHUE

Sea vegetables. What are they, exactly? We know them as marine algae - primitive photosynthesizing plants without true stems, leaves or roots. These plants do, however, possess a leaflike blade, a stipe which is stemlike and a rootlike holdfast. They are not seedbearing, but reproduce by means of spores, gametes and fragmentation.

The habitat of sea vegetables is the ocean and its brackish coastal waters, fastened to the sea floor by means of holdfasts. These holdfasts are not like roots in that they play no part in the nutrition of the plant, they are merely means of attachment.

The three main divisions of marine algae which are found in New Brunswick waters are the Chlorophytes, the Phaeophytes and the Rhodophytes.

The Chlorophytes are bright green in colour and not generally found in the sea, but some species are very common in areas where fresh water dilution occurs. One of the most common local species is *Ulva lactuca*, the sea lettuce. Phaeophytes (brown algae) range from red brown to green brown and are the dominant shallow water algae in the Maritimes. Many species are

of commercial importance and used for the extraction of alginates which stabilize chocolate milk and latex paints. *Ascophyllum nodosum* and species of *Laminaria* and *Alaria* are common in this division.

Rhodophytes or red algae are quite common locally - the best example being *Chondrus crispus* (Irish moss) which is used for the extraction of carageenin, a white powder used as an emulsion stabilizer in ice cream and cosmetics.

Here in the Maritimes dulse is munched on by many people, but few venture on to bigger and better things. In Asian countries, however, algae is part of the daily diet and is often regarded as something of a delicacy.

Not only does algae taste good, it is good for you. Sea vegetables contain large amounts of vitamins A and E, and on the whole are similar to oats in both carbohydrate and protein values (25 percent protein by dry weight). They also contain large amounts of iodine, which in proper amounts help to stimulate the thyroid gland. Tea made from *Fucus vesiculosus* is called "slimming tea" because of the iodine content. This is only good for obese people as the over stimulation of the thyroid

gland could prove to be disabling to a normal body.

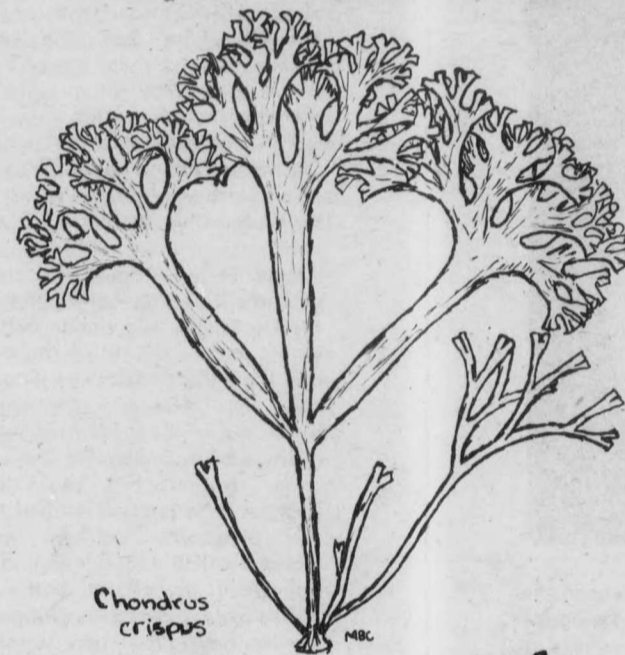
The best way to know what you are looking for once you find yourself floundering about the sea shore, is to use a key. A key to the algae of the northeastern coast of North America can be found in the science library. However a few of the algae are quite distinctive and can be tentatively identified by the drawings on this page.

Once you have collected the sea vegetables that you need, they can be kept fresh in a covered bowl or a plastic bag containing a bit of sea water. Wash quickly in running lukewarm water to loosen the sand. Soaking in fresh water is not recommended, as the cells in the plant will burst and the plant will become soggy.

Some kinds can be frozen and are very good as salad ingredient or added to soups. There are also a host of recipes that can be tried which use sea vegetables as a prime ingredient.

NOTE: more information & recipes can be found in the book *The Sea Vegetable Book* by J.C. Madlenser, Clarkson, Potter, Inc. Publisher, N.Y., N.Y. 1977.

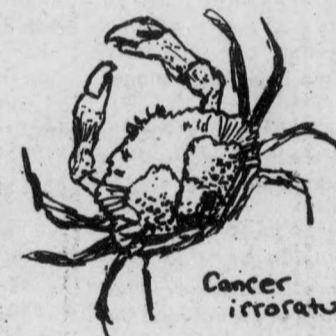
Sea



Chondrus crispus



Thais lapillus



Cancer irroratus

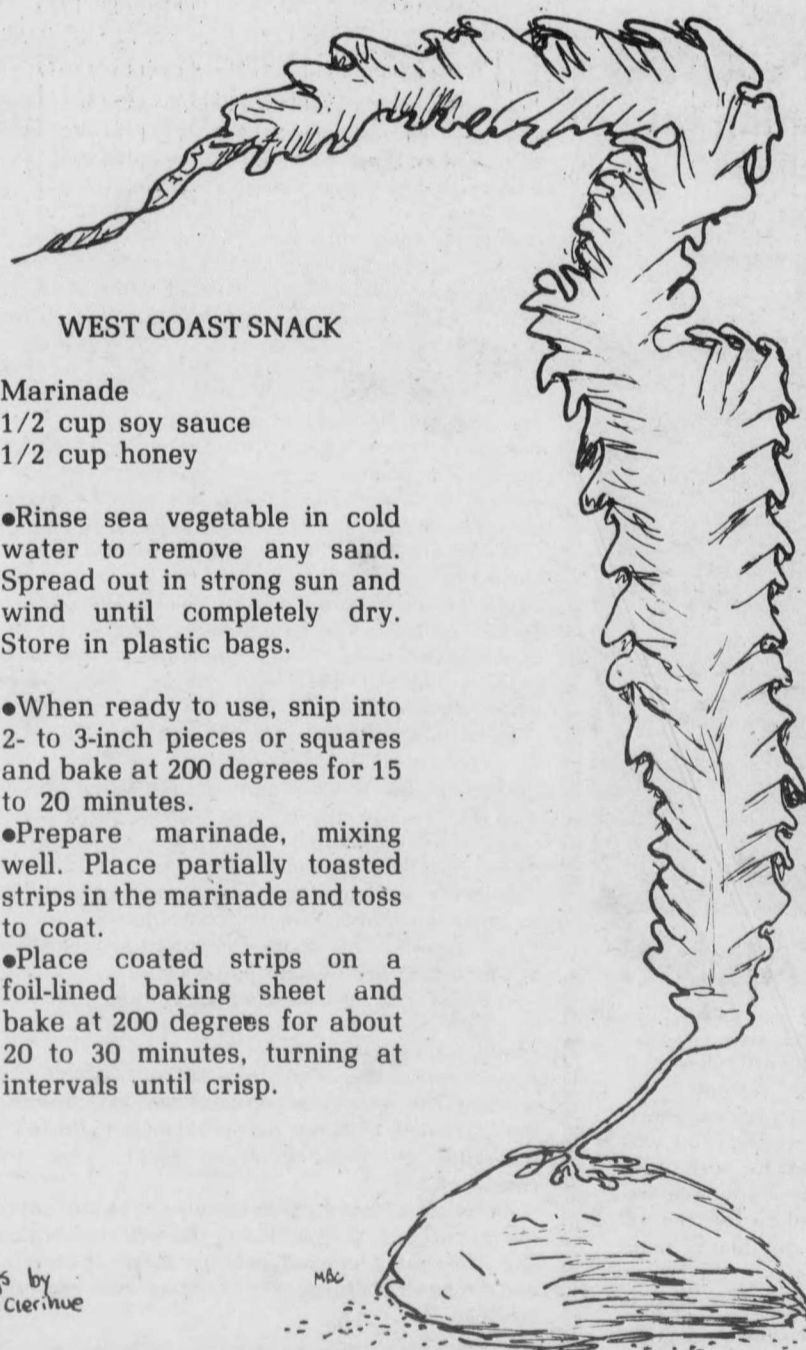


ALARIA VEGETABLE STEW

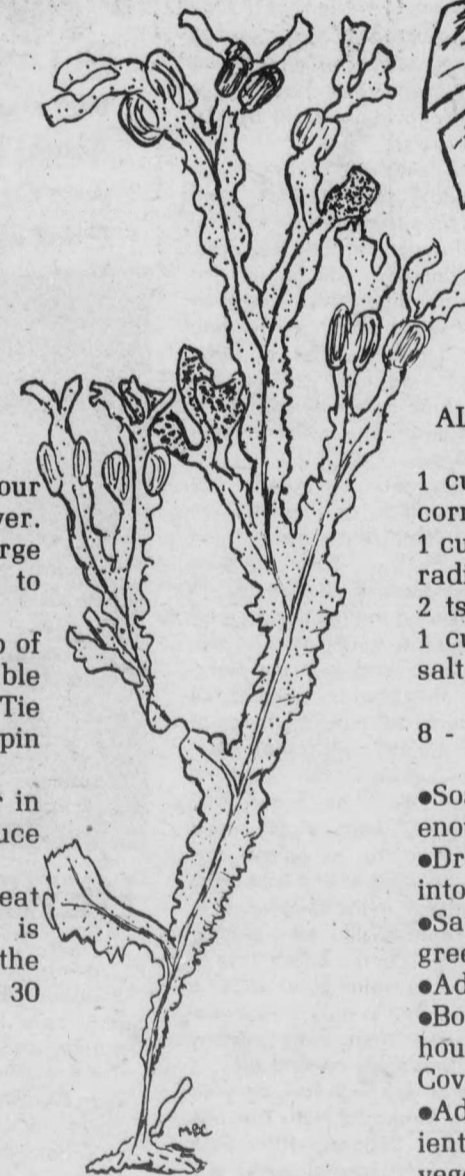
1 cup alaria
corn oil for sauteeing
1 cup each of carrots, turnips, radish, parsnips, rutabagas
2 tsp powdered ginger
1 cup dry white wine
salt, pepper

8 - 10 servings

- Soak the alaria overnight in enough cold water to cover.
- Drain. Cut fronds at midrib into 1/2 inch strips.
- Sautee in oil until bright green and sweetly aromatic.
- Add water to cover.
- Boil uncovered for a half hour. Add water if necessary. Cover pot and boil 2 hours.
- Add the remaining ingredients and simmer until vegetables are cooked.



Laminaria agardhii



Fucus vesiculosus

WEST COAST SNACK

Marinade
1/2 cup soy sauce
1/2 cup honey

- Rinse sea vegetable in cold water to remove any sand. Spread out in strong sun and wind until completely dry. Store in plastic bags.

- When ready to use, snip into 2- to 3-inch pieces or squares and bake at 200 degrees for 15 to 20 minutes.

- Prepare marinade, mixing well. Place partially toasted strips in the marinade and toss to coat.

- Place coated strips on a foil-lined baking sheet and bake at 200 degrees for about 20 to 30 minutes, turning at intervals until crisp.

HAM AND LAMINARIA ROLLS

10 pieces dried Laminaria
10 slices smoked ham
water
1/4 cup soy sauce
3 tablespoons honey
string or toothpicks

- Soak the Laminaria for 1 hour in enough cold water to cover. Drain. Cut it into large rectangles and cut ham to same size.

- Place a slice of ham on top of each piece of sea vegetable and roll up from one end. Tie with a piece of string or pin with toothpicks.

- Place in a saucepan. Pour in water to cover. Add soy sauce and honey.

- Cook over medium heat uncovered until the liquid is almost evaporated and the Laminaria is soft (about 30 minutes).

drawings by
M.B. Clerihue