

## BERRY SOUP, PEMMICAN AND OTHER NATIVE USES OF COMMON BERRIES

ANNA LEIGHTON, 328 Saskatchewan Crescent W., Saskatoon, SK S7M 0A4

For many of us, berries find their way into our diet primarily as jams, jellies and syrups or as cranberry sauce served with Thanksgiving turkey or in pies. We tend to like our berries sweetened and use them to flavour bread and other baked goods. People of other times and other cultures have used berries in a great variety of ways, reflecting differences in taste and cooking practices as well as technologies available for preserving ripe fruit. This article focuses on traditional food uses of common berries by Saskatchewan's native people. These uses date from a time when drying was an important method of food preservation and the diet was meat-based and largely free of flour and sugar. (Although sugar appears in the recipes given below, it is a recent addition and would have been replaced by sweet berries or simply left out in the past.)

Native peoples of the plains made extensive use of abundant summer-ripening berries, especially saskatoons and choke cherries. People searched for good berry crops and spent considerable time and trouble picking and drying them. Carefully dried berries kept indefinitely and were easy to transport. They were an ideal addition to pemmican, a mixture of dried meat and fat to which the dried berries added flavour without adding moisture that could cause

spoilage. They were also popular in soups and stews. They softened on cooking but didn't get mushy, and added a nice flavour, especially to meat-based soups. Berry soups were company food and a must at certain ceremonies, some of which occurred in spring before fresh berries became available, increasing the importance of preparing a large quantity of dried berries for later use.

Native people living in Saskatchewan's boreal forest relied heavily on berries that ripened in the fall, such as low-bush cranberries and blueberries. They also used the less abundant choke cherries and saskatoons in the same way as the plains tribes but to a lesser extent. Fall-ripening berries were picked late in the year, which often made it more practical to preserve them by freezing than by drying. The number of fish and berry combinations in the northern native diet is striking. Uses of some of our most common berries are presented below. (Throughout this article the term berry is used in its broadest sense to mean a fleshy fruit and is not limited to the fruit type defined botanically as a berry.)

**Choke Cherry** (*Prunus virginiana*). Choke cherries are mostly pit, as you probably know, and this pit contains cyanide-producing compounds, which you may not know. This is not a problem for the casual user or for

people who make syrup or jelly and throw out the pits, but it would have been serious for native peoples who ate large quantities of these berries, pits and all. The traditional plains Indian way to prepare choke cherries for eating was to pound the fresh berries on a flat rock with a hammer stone. This process is so characteristic of choke cherries that their Cree name is *takwahimian* which means "the berry that is pounded." Handfuls of these crushed fruits were formed into patties and, according to Buffalo Bird Woman, an Hidatsa Indian from North Dakota, "on warm days they dried in three days' time. But if it was damp and chilly, it might take five or six. They were ready when a lump broke dry clear through."<sup>9</sup> Exposing the crushed fruit to slow drying apparently removed the danger of cyanide poisoning. (**Editor's note:** Cyanide is decomposed to carbon dioxide and ammonia by bacteria (*Nitrosomonas*, *Nitrobacter* and others), in the presence of water and air. In summer this reaction takes a few days.)

Dried pounded choke cherries were added to pemmican, were eaten alone or put into soups for flavour. Lewis, of the Lewis and Clark expedition, describes the Indians he encountered on the upper Missouri River in 1805 as "boiling [crushed choke cherries] with roots or meat, or with the prairie beans [Hog-peanut, *Amphicarpa bracteata*] and white apple [Indian Breadroot, *Psoralea esculenta*]."<sup>6</sup>

**Saskatoon** (*Amelanchier alnifolia*). Saskatoons were added to pemmican and soups in the same way as choke cherries. Like choke cherries, they were dried first but drying them was a simpler process. Whole berries were placed on a hide

and dried in the sun for several sunny days. I have done this myself and found that the dried berries keep for years and have a very nice flavour, some would say even better than the fresh fruit.

Beverly Hungry Wolf from the Blood Indian Reserve in southern Alberta, describes saskatoon berry soup made by her Blackfoot grandmothers as follows: "It was a healthy dessert and special treat, as well as a sacred meal for such times as medicine pipe ceremonies... If the berries are dried, they must be soaked until they have become somewhat tender. ... Mix the soaked berries with 3 quarts of good broth [for 1½ cups of dried berries] from the ribs or meat that you boiled for the main meal. Let this mixture boil until the berries are quite tender, then add a mixture of water and ¼ cup of flour, which will thicken the soup. Add 1 cup of sugar to sweeten to taste, and serve it."<sup>4</sup> Other recipes call for thickening the soup with powdered Indian Breadroot instead of flour, and adding other ingredients, such as Bitter-root (*Lewisia rediviva*) or blood from a freshly killed animal. Plains tribes also dried currants (several species of *Ribes*) and gooseberries (*Ribes oxycanthoides*), which were used like saskatoons in this kind of soup.

**Rose** (*Rosa* species). Most of us are familiar with the fruit of the rose, called a rose hip (Figure 1). They are soft, red-orange and contain many little, hairy seeds which are reputed to be irritating to the digestive tract.

Rose hips are an excellent source of vitamin C, containing roughly five to ten times more than most of our other wild fruits, and the fact that they stay on the bushes throughout the winter, when other sources of



Figure 1. Rose hip of the Prairie Rose.

this vitamin may be scarce, makes them especially valuable.<sup>5</sup>

Native people of the plains ate rose hips cooked and mixed with fat. One Gros Ventre recipe, recommended for growing children, is a soup containing rose hips, marrow and internal organs of an animal (unspecified). Very small children were given rose hips as their first solid

food — mixed with grease and put on a stick to eat like a popsicle.<sup>1</sup>

One of the more whimsical uses for this unusual fruit is the rose hip pipe, called *okiniwispwakan* in Cree. This child's toy is made by removing the seeds from half of a large hip to make a bowl, then inserting a hollow grass straw as the pipe stem (Figure 2).



Figure 2. Cree boy smoking a rose hip pipe.

**Buffaloberry.** There are two species of Buffaloberry in Saskatchewan: Thorny or Silver Buffaloberry (*Shepherdia argentea*), a very common shrub in the south of the province which has short thorns on the branch tips and grey-green leaves, and Canada or Russet Buffaloberry (*Shepherdia canadensis*), more common in the north, which lacks thorns and has a rusty hue to the leaves. The berries of both plants can be used in the same way.

Buffaloberries are small, transparent, red-orange and juicy (Figure 3). They tend to be too bitter for most people to enjoy until after a hard frost which sweetens them. Their small



Figure 3. Thorny Buffaloberry.

size and position close to the branches make them difficult to pick, so they are gathered in large quantities by hitting the branches with a stick to knock the berries into a container or onto a cloth on the ground.

Native people on the plains ate the fresh berries, made juice by crushing them in a horn, and dried them like other berries for adding to soups. The most celebrated use of buffaloberries is "Indian ice-cream," a delicacy that comes to us from native people living west of the Rocky Mountains. It is a very special food among British Columbia tribes such as the "Ksan."<sup>5</sup>

To make Indian ice-cream, one cup of berries is crushed and mixed with  $\frac{1}{4}$  cup of water. Then the berries are beaten until foamy and  $\frac{1}{4}$  cup of sugar is added gradually while the mixture is beaten into a stiff foam. This foamy mixture is the "ice-cream" and is served immediately. The berries foam up because they contain soap-like compounds called saponins, small quantities of which are not harmful to people. Since the mixture

will not foam if it comes into contact with grease, it is best to avoid using plastic utensils during the collection of the berries and during preparation of the ice-cream.

**Bearberry** (*Arctostaphylos uva-ursi*). This plant is best known as a traditional Native tobacco, a use that has given it the name kinnickinnick, an Algonkian term for plants put into smoking mixtures. Uses of the berries are less well known. Bearberries are mealy, with several noticeable seeds and not much flavour. The berries resemble low-bush cranberry in size and colour and can easily be mistaken for them where the two plants grow together in a dense carpet on the ground.

The berries are used to remedy diarrhea and are not eaten in quantity without first cooking in fat. Both the woodland Cree and the Blackfoot on the plains prepared dishes of mashed bearberries and fat. The Cree recipe calls for cooking  $1\frac{1}{2}$  cups of berries in a tablespoon of fat until they are bright red, then crushing them to a coarse paste and



Figure 4. Bearberry and fish egg mixture.

adding several tablespoons of raw fish eggs to moisten the mashed berries and some sugar to sweeten them for children (Figure 4). This dish is called *asiskakwani-kahikan* in Cree. It can be made either in fall when the berries ripen, using fresh whitefish eggs or in spring, if the grouse and bears have left any berries on the plants, with the eggs of sucker.

**Low-bush Cranberry** (Dry-ground Cranberry, Lingonberry, Mountain Cranberry, Partridge-berry, *Vaccinium vitis-idaea*). Even more than the blueberry, this is the berry that is nature's gift to the people of the northern regions of the world. Although cranberries cannot compete with blueberries in taste, they produce an abundant crop every year, rather than one year in three for blueberries. In addition, fresh cranberries keep for a long time when simply stored in a cool place due to the presence of benzoic acid, which acts as a natural preservative.<sup>7</sup>

Saskatchewan's woodland Cree ate stewed cranberries with meat or

fish, a use that parallels the current North American practice of eating cranberry sauce with turkey at Thanksgiving dinner. In addition, the Cree cooked the berries with a variety of nutritious parts of fish, such as fat, eggs, livers and swim bladder, as did Alaskan Eskimos.<sup>5</sup>

Other common berries: **Wolf-willow** or Silverberry (*Elaeagnus comutata*) has a grey-green, mealy but edible fruit sought primarily for its large woody seed which is used to make necklaces. Berries of **Juniper** (*Juniperus* species) which, botanically speaking, are cones, were used as medicine since they contain substances that act as diuretics and can induce uterine contractions.<sup>5</sup> They were also strung with rose hips to make colourful necklaces. **Red-osier Dogwood** (*Cornus stolonifera*) has clusters of small bluish-white, bitter berries. Many people believe the berries to be poisonous but they were, in fact, a food item for the Blackfoot and certain tribes on the west side of the Rocky Mountains. They were treated like choke cherries, but not gathered in such large

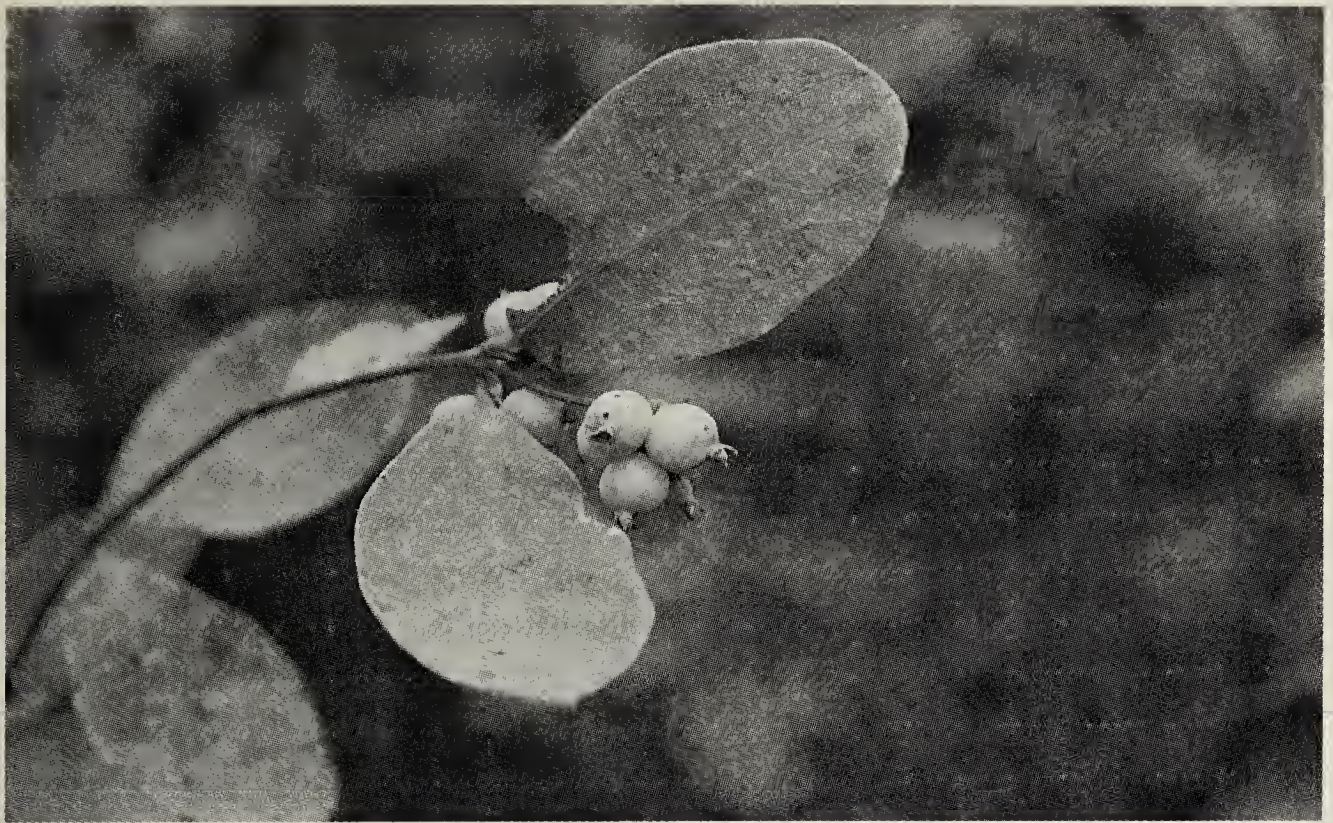


Figure 5. Western Snowberry.

quantities, and they were often mixed with other berries.<sup>5</sup> Perhaps their reputation for being poisonous comes from their resemblance to the truly poisonous Baneberry (*Actaea rubra* forma *neglecta*) which grows in the same habitat. **Buckbrush** or Western Snowberry (*Symphoricarpos occidentalis*) is one of the most common shrubs in the prairie region of the province. It has clusters of greenish-white berries that turn blue as they ripen and brown after being frozen (Figure 5). Its relative, Snowberry (*Symphoricarpos albus*), has larger, slightly puffy, strikingly-white berries. There are only two reports of native people eating these berries, which are generally regarded as poisonous by the native community and others.<sup>2,5</sup> The fruit of the **Hawthorn** (*Crataegus* species) is not very palatable, being dry and seedy, and contain substances that could be harmful to the functioning of the heart if eaten in quantity. In spite of this, hawthorns were eaten by native peoples in many of the areas where they occur. In Saskatchewan they

were eaten only by the Blackfoot and not in large quantities.<sup>3</sup>

There are over 50 kinds of wild berries in Saskatchewan: most edible, some poisonous; some extremely abundant, others hardly ever seen; some tasty, others bitter, dry or seedy. Our most immediate source of information about how to use them is the native community, which has taken an interest in local berries for many, many generations. This article presents a fragment of the information available from this rich source of traditional knowledge.

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## CALLING ALL PHOTOGRAPHERS

Dr. Ka-lu Fung, Geography Department, University of Saskatchewan, is editing a new *Atlas of Saskatchewan*. The first edition appeared in 1969. This version will be published as a book in 1999, then put out as a CD ROM and then go on the Internet.

Included are sections on birds and butterflies. Coloured photographs of selected species will be included. The reproductions will be small — in the order of 1 in. x 1 in. Credit will be given. All contributors to this project are volunteers and, so, there is no money to pay for photos. For the greatest detail with the technology being used, slides are necessary. If you wish to make one or more submissions, please send them to me. If you wish the slide returned, please enclose a stamped, self-addressed envelope. Otherwise, the slides will be given to the *Blue Jay* for future use, unless you specify otherwise. The deadline is 31 July 1997.

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- Bernie Gollop, 2202 York Ave., Saskatoon, SK S7J 1J1. (Phone (306) 343-1027)

**Editor's note:** *Blue Jay* would also like to extend its selection of Black & White prints of birds, mammals, flowers etc. If you have some photos that are crisp, full frame and have good contrast I would really appreciate a copy.