What the Indians ate

Before Europeans arrived on the shores of what would become Maine, how exactly did aboriginal Native Americans — the Wabanakis — feed themselves? Author and illustrator Kerry Hardy set out to crack the mystery.

The most primal connection between a people and their habitat revolves around food. The intricate dovetailing of the Wabanaki lifestyle with the landscape and its four seasons represented an energy-efficient, fully sustainable, and highly evolved way in the world that puts our modern petroleum-subsidized society to shame.

It was also a cycle of sustenance that, at certain times of the year, benefited from an abundance nearly incomprehensible to us today. For most of Maine's history, until we decided that rivers made better sewers and power generators than they did fish hatcheries, thirty- and forty-pound Atlantic salmon were a common sight on the rivers of New England and were taken by the thousands with nets, weirs, and antler-pronged salmon leisters. The waterfall at Skowhegan, on the Kennebec, was one of the best places to fish, and the very name skua-higan, which I would translate as "spearing station," suggests that there was a funnel, platform, or some other sort of fixture constructed there to make the spearing easier.

In 1955 an agricultural economist named Merrill K. Bennett, in an attempt to reconstruct the diet of the Eastern Indians before the arrival of Europeans, drew a chart that matched different foods to the time of year when they were utilized. I decided to adapt Bennett's approach into a more thorough visual portrayal of the Wabanaki food year. I wanted something that would show, at a glance, all of the different foods, when they were eaten, whether they were fresh or preserved, and where the people were in the landscape when they ate them.

The result (at right), I admit, looks like a piece of birch bark that some hyperactive sapsucker has been drilling on, but the pattern will eventually make sense. Start on the left-hand side, the vertical axis, where you'll see a list of all the different foods. In general, the higher an item is on the list, the more important I think it was (based on anecdotal evidence, rather than quantitative data). The months of the year are arranged on the horizontal axis, beginning with March.

Note the four wavy lines running from top to bottom. They separate the year into four time-places: a winter hunting camp, a main village in the spring, the seashore, and main village again in the fall. The lines are wavy because the move from one location to another didn't happen on a fixed date; it happened when conditions — based on weather, fish runs, surpluses, whatever — were right. For instance, you can see that "Main Village" was occupied from roughly mid-April to mid-June, and then again from early September to late January.

Finally, look at the ink blots. Ink equals food; lots of ink equals lots of food. For example, in the first line you can see that

Cultures throughout the northern hemisphere developed their own versions of the salmon leister, but the functional concept is always the same: grasping jaws surround a killing point mounted on the end of a long wooden shaft. The Penobshts call this tool enikakw, which looks a lot like their word for "ant," enikws. Look closely at an ant's mandibles, and you'll appreciate how keenly the Indian eye for analogy saw the world.
the Indians started catching eels in September — a lot of them. By late October the run ended, and they switched to eating dried eels. The supply of dried eels would run out in January. The total area of ink in any given horizontal row gives you an idea of how important a particular food was. In the vertical columns, the total amount of ink shows whether it was a lean month (March) or a fat one (October).

As the legend shows, the characteristics of the ink blots allow you to answer four basic questions about any given food: When was it eaten? How much of it was available? Could surpluses be preserved? Finally, how dependable was that given food source? In general, the foods the Wabanaki could count on are shown with squarish shapes, whereas a round dot means that the hunter's luck/skill was a big factor. The asterisks are the wildcards; they represent an opportunistic, or unexpected, food choice for that time of year or a food of last resort. If your luck was good you ate passenger pigeon (opportunistic); if it was sad you ate tree bark (obligatory); but you could not predict for certain that you would be eating either. Clams on the beach were given; a whale on the beach was a godsend.

As a specific example, try "reading" the ink blots for moose and woodland caribou, then compare it to the following description. Beginning in late July and August, the two asterisks indicate opportunistic harvesting of moose, which could be done by driving them into the water. Come September, the mating season began for moose, and the hunters could call the rutting bulls to the edge of a pond or stream by imitating the call of a cow moose. Notice the circles getting smaller as fall progressed — the men still hunted moose, but their luck diminished as the weather (and the animals) cooled off. Finally, by the time January snow was deep enough to give the Wabanaki hunters on snowshoes a lethal advantage, they would head north to the winter hunting camps and follow the animals for a month or even two. Surplus meat could be smoke-dried and served as food for the maple sugar camp in March and early April. If the snow stayed deep, the hunters prospered; if not, they might be forced into a quick trip to the coast, where smelts, clams, or perhaps seals could supply the needed protein and calories.

No two years were ever the same — late frosts, army worms, floods, and bad weather were part of life then just as they are now. The following line-by-line summaries will provide more detail.

**Freshwater eels:** Note the sheer quantity of food that eels provided. In addition to being harvested during their spawning run
downstream in September and October, ethnographer Frank G. Speck tells us in Penobscot Man that eels (and other fish) were also taken during the low water of August by applying herbal poison (crushed poleberries and jack-in-the-pulpit roots) to the stream, then collecting the dying fish as they floated up. The asterisks refer to hunting dormant eels in the mud beds where they hibernated — cold, wet work, but it beat starving. Of this last method Speck says, “During times of scarcity of other game in the past, whole communities have had to subsist for months upon eels obtained in this manner.”

**Smelts, shad, lampreys, alewives, and salmon:** Listed in the order of their runs, smelts could be taken with hook and line in brackish tidal streams and rivers even before their April spawning run — a tradition still followed enthusiastically along the Maine coast and especially at Merrymeeting Bay. Notice also a fall opportunity to take salmon — when they spawn in the smallest tributaries of the rivers they ascend. The first Europeans were quick to learn this trick, and there are still stories told in Lincolnville of men taking Ducktrap salmon by pitchfork.

**Corn, beans, squash, etc.:** Some produce could be enjoyed in late summer, when the corn was “in the milk,” but the majority was saved for winter use. The burst of preserves in late April indicates consumption of stored corn. Among Jesuit Father Sebastian Rasle’s collected Abenaki phrases we find “one puts the corn in the ground, in caches — dass-er redin p-poo-thkadasin.” In fall, the corn was stored in woven sacks and buried in birchbark-lined pits, then covered over with bark and earth. Most of the corn thus stored for use the following spring was already shelled from the cob, but a few full ears of the very best corn were included to provide seed for the following year.

**Moose, woodland caribou:** As noted, late September and February were the best times to hunt moose. Meat was preserved by smoke drying. Clams, oysters, lobsters were primary foods in summer, but many were dried for winter use. The fall drying was actually a partial cooking in the shell, to facilitate shucking, followed by additional sun or smoke drying.

**Nuts:** Several species of oak acorns, as well as hickory, butternut, beech, chestnut, and hazel were available to most of Maine’s Wabanaki, and were even more abundant in the rest of New England. Although fall was obviously the peak of the harvest, considerable quantities could sometimes be gleaned the following spring.

**Roots, Jerusalem artichokes:** Bulbs and fleshy roots have their highest nutritional value in the fall, winter, and spring, when the green portion of the plant is dormant. Of the many species used by the Wabanaki, probably groundnut, Jerusalem artichoke, and wild lilies were the most important.

**Ocean fish, porpoises, seals:** These were easily taken during the summer trip to the seacoast. Occasionally seals would follow the anadromous fish upriver and be taken there as well. Seals were also killed in midwinter, according to the Jesuit Father Pierre Biard, on islands where they gave birth to their young. The preserves indicate seal oil, which was highly esteemed for its food and utilitarian value.

**Whitetailed deer, black bear:** Both species were valued for their meat and fur. Bear fat was rendered into oil and used year-round. The hunter’s luck with both species improved in the fall, when deer were in the rut and bears were seeking dens, and again in late winter when deep snow limited the deer’s mobility.

**Lake fish, brook trout:** These were easily taken with hook and
An authentic eel recipe comes from John Bartram, who observed his Delaware guides fastening eels in a split sapling to roast before the fire in the manner shown here—a recipe I'm tempted to call “eel pops.”

From Father Rasie's abenek-wangan, we can reconstruct what the Abenaki’s fish- and oyster-drying rack looked like. The abem prefix indicates something triangular in appearance. Such a shape would allow sun, wind, and smoke to work simultaneously to dry large quantities of eels, alewives, salmon, etc.

Deep snow meant moose and caribou meat; cold nights and sunny days meant maple syrup; but in a bad year both of these food sources could be scanty.

B: In June, sea bird eggs were available in great quantity and were nutritious. At night, roosting birds could be taken in great quantities as well.

C: Passenger pigeons were common as food because of their abundance, but if a nesting roost was established nearby then the food was almost unlimited.

D: Trade and plunder were two ways of augmenting the diet. Although either activity could occur at any time of year, late fall was a likely season to visit neighboring tribes.

E: The occasional beaching of a whale represented a protein and fat bonanza.

F: The very last anadromous fish to run each year was the tomcod, which could be speared or netted until the water froze, then taken by hook and line through the ice.

Other: Maple syrup was a seasonal bonus, but most foods in this category were less appetizing. Tree bark, old pieces of leather, soup made from old bones, family dogs, dried out shelf fungi from trees, and the ever-present clams and mussels were the last hedges against starvation. The spring and winter bobs on the chart indicate the likeliest times to run out of food and thus be forced to subsist on these “other” sources.

War and disease, along with social choices, such as family territorial divisions, may have suppressed the native population, but a shortage of food in the landscape rarely did. Maine’s Indians had raw survival completely figured out; it was a piece of cake given the richness of their ecosystems.