

Lessons of the Seeds

By Robert Francis

April 2015

In late April, we have the Blessing of the Seeds Ceremony, to bless the land and the seeds before planting. As we look forward to the Blessing of the Seeds, we might also consider what we may learn from the seeds. What are the lessons of the seeds?

In Cherokee culture as well as in many other American Indian cultures, the Three Sisters: Corn, Beans and Squash are at the center of the farming aspect of our agriculture. As it is with all indigenous peoples, we Cherokee people and our Cherokee culture begin with agriculture. Our parents are Kanati (The Great Hunter) and Selu (The Corn Mother). Kanati by himself was unbalanced. Selu by herself would also be unbalanced. The two together exemplify balance: male and female, hunting or animal husbandry on the one hand and the raising or growing of crops on the other, the securing of meat and animal products and the gathering or raising of plants, vegetables and cereals. Here is where it begins. It is through agriculture that an indigenous people connects with Land and Creator. Indigenous culture begins with agriculture and stays rooted in agriculture or stops being indigenous.

The Three Sisters: Corn (Selu), Beans (Duya) and Squash (Squasi) began together; their wild progenitors continue to grow together in Oaxaca, Mexico, and these Three Sisters should always stay together. The corn stalks support the bean vines and provide shade for the squash vines. The beans draw nitrogen from the air and fix it into the ground, making this essential element available for both the corn and the squash. The large, prickly leaves of the squash vines minimize the growth of weeds and, at least in theory, discourage raccoons, with their sensitive little fingers, from raiding the fields. In reality, raccoons are pretty determined when seeking corn in the milk stage, and watchful dogs are the best defense. But you see, the diverse community of Corn, Beans and Squash work together to help one another. The Three Sisters also work together in helping their human partners. While indigenous heirloom corn varieties are high in protein, corn lacks three of the amino acids essential for human needs. Beans contain all three of the amino acids lacking in corn but are lacking in two essential amino acids that are present in corn. Together, corn and beans complete one another nutritionally and are further completed by squash which provides a



multitude of essential vitamins as well as much, very helpful dietary fiber. In short, the Three Sisters provide a balanced diet.

Diverse companion planting is normative in Cherokee and other American Indian agricultural practices. This has served, through the millennia, to instill profound respect for and valuation of cultural diversity within the hearts, minds and cultures of American Indian peoples. For tens of thousands of years prior to European invasion, varied and diverse tribes or ethnicities interacted and shared the land. Sure there were wars, but the norm was respectful and peaceful coexistence. Even within tribes, interactive, mutually helpful diversity was the norm, with each clan having its own distinctive customs, ways of dressing and wearing hair, taboos and talents.

By contrast, monocultural agricultural practices were and are normative for Mediterranean and European peoples. In other words, for those peoples, it is normative to plant a field with one crop only. There is even a verse in the Bible that prohibits companion planting (Leviticus 19:19). Europeans and European Americans even plant corn, beans and squash in separate fields. Modern hybrid and genetically modified corn varieties are engineered to be grown like wheat with protein content and flavor sacrificed for the sake of supposed convenience. In reality, it is a cultural thing, with monoculture being the norm. And, from this deep-set cultural tendency, arising from monocultural agricultural practice, comes the European and Mediterranean tendency to be fearful and intolerant of diversity within human society, as well, giving rise to interracial or intercultural exploitation, culture wars, religious wars, empire building and unspeakable holocausts.



One variety of corn we grow is Cherokee Long Popcorn. This is a genetically diverse, multi-colored variety of popcorn. Now, if you walk into a grocery store in the fall of the year, you will see multi-colored popcorn labeled "Indian Corn". I don't like that. Seemingly, there is this idea that before Europeans came here, the only corn we had was multi-colored popcorn. That could not be further from the truth. From thousands of years back, indigenous peoples in this land have had popcorn, flint corn, dent corn, sweet corn, every type of corn available today. Some indigenous heirloom varieties of corn are multi-colored, others are

bi-colored. There are also indigenous heirloom varieties of corn that are solid hues of white, yellow, red, pink, purple, blue, green and even black. When Europeans arrived in this continent, there were thousands of varieties of corn of every type. There are still, at least, hundreds of varieties of indigenous heirloom

corn. Even so, it's the multi-colored popcorn that is labeled "Indian Corn". It's not just Indian people who are falsely stereotyped; our corn is stereotyped too!

Corn is our Mother, the First Woman of the Cherokee people. Corn, in a very real sense, has giving birth to us and made us who we are as a people. The Corn-Mother stories are some of the most important stories in our oral tradition. However, we also have a story that says the Turkey taught us that corn was good for food. As the story goes, for a long time, the people raised corn but did not eat it; it was only grown as an ornamental. But then, the time came when the people saw the Turkey eating the kernels of corn, and we began eating corn ourselves.

The progenitor of corn is teosinte grass. Teosinte grass continues to grow wild in Oaxaca, Mexico, along with the wild progenitors of beans and squash. The seeds of teosinte grass are edible, but they are encased in hard, indigestible shells. To crack the shells and release the seeds, making them good for food, takes more energy than could be procured by eating the teosinte seeds. Therefore, for all practical purposes, the seeds of teosinte grass are inedible. At some point, teosinte grass made a genetic leap which not only made it edible to humans but also made it dependent on humans. Did humans domesticate corn or did corn domesticate humans? Corn is our Mother. She made us who we are.



Another variety of corn we raise is Cherokee Yellow Dent Corn. This variety is mostly always yellow, with an occasional red ear. It's a dent corn, with a tooth on the outer tip of each kernel. All the old indigenous heirloom varieties of corn are high in protein, but I have been told that the Cherokee Yellow Dent is even higher in protein than most others, something like 20% protein, if memory serves me



right. Jared Diamond, in his book *Guns, Germs, and Steel*, asserts that corn, as grown by indigenous peoples of the Americas before the European invasion, was inferior in protein content to wheat. However, only modern hybrid and genetically modified corn varieties are inferior in protein content when compared with wheat. No other cereal crops can compare nutritionally with indigenous heirloom varieties of corn.

We grow a Cherokee White Corn that is very good for making hominy. Some call this Cherokee White Flint Corn. Others call this Cherokee White Flour Corn. One thing for sure, it is not dent corn. It does make good flour, but mostly we use it for making hominy. And, by the way, the process of making hominy further increases the protein content of corn, making it even more nutritious or making the nutritional value more available to the body. The Cherokee White Corn we raise is an eight-row corn, which is to say, there are eight rows of kernels on most ears. A few ears will be fatter, with ten or twelve rows of kernels. When seed companies have gotten hold of varieties like this, they have quickly bred out the eight-row quality. Not understanding the spiritual significance of an eight-row corn, the thought has been, "More has got to be better."



Cherokee Eagle Corn is a very special variety, of particular significance. Some call this Cherokee Blue Eagle Corn, as the color of the corn is primarily blue or



sometimes purple, with an occasional white kernel. Others call this Cherokee White Eagle Corn, because the "Eagles" that appear on some of the blue kernels are white. Several years ago, while speaking at a conference, I held in my hand an ear of Cherokee Eagle Corn, shelling off a few kernels, explaining that the stories of our Oral Tradition are like seeds. When I identified this

special variety of corn we raise as Cherokee Eagle Corn and passed around the kernels to allow the people to see the "Eagles", I noticed one elder woman's eyes open wide. When I gave the opportunity for questions or comments, this woman said, "There is a prophecy attached to this corn. When I was a girl, I heard it said that, 'When the Eagle returns to the Corn, the Cherokees will come together again and return to their own.' I



never understood what this meant,” she said, “until now.” Does this mean we will get all our land back again? I don’t know, but I think one way to “come together again and return to our own” is to reclaim our agriculture and return to raising the excellent varieties of Corn, Beans, Squash and other plants our ancestors raised.

While we do raise all these varieties of corn and others as well, we do not plant them all in any one year. By planting one variety and then another variety a few weeks later and yet another variety a few weeks after that, we can work with as many as three varieties of corn in one year, minimizing cross-pollination. The fact that our non-Indian neighbors like to get their sweet corn planted very early and seldom make more than one planting helps, but there are commercial corn fields planted within two miles of us every year, and corn will readily pollinate within a two-mile radius and can pollinate from much further than that. How do we keep our traditional indigenous heirloom corn varieties from being raped by the hybrid and genetically modified varieties developed by agribusiness? Well, we can’t. What we can do is what indigenous farmers have done for thousands of years. We can do what farmers in Oaxaca, Mexico, where hundreds of indigenous heirloom varieties of corn are raised side by side in very small plots, have always done. We can learn what our own corn varieties are supposed to look like, and when saving seed, examine each and every seed, not planting seeds that are clearly not what they should be.

Varieties of beans need to be separated by a mere 150 feet to prevent cross pollination. Just as with corn varieties, indigenous heirloom varieties of beans also have far greater food value and higher protein content than varieties such as pinto beans, that have become heavily commercialized. Just as with corn, each tribe has their own bean varieties. Varieties of beans originating with and raised by Cherokees include Greasy White Beans and Trail of Tears Beans (a black seeded variety). Both these varieties are long-vining and primarily used as green or snap beans but may also be used as dry beans. October Beans are a Cherokee variety of semi-bush dry beans. Aunt Velna Beans, which have also been called Aunt Tenn Beans or Aunt Tyne Beans, are a variety of semi-bush snap beans passed down through our family. These beans, with brown-speckled



seeds, were the primary variety my grandmother and mother always raised. However, for some reason, Aunt Velna Beans have not adapted well to where we live now, in Bates County, Missouri. What *has* done well here is a variety of very adaptable long-vining snap or dry beans called Cherokee Cornfield Beans, a genetically diverse variety with seeds varying widely in color as well as somewhat in shape and size. Some people, upon encountering Cherokee Cornfield Beans, determined to separate

the diverse beans within this variety by color and type in an attempt to develop several homogeneous varieties. The result has been failure. These beans simply will not produce when segregated. I think we Chickamauga Cherokees can learn a good lesson from the Cherokee Cornfield Beans. Our people are also very diverse. Beginning with a nucleus of Cherokees intent on protecting our land and culture from invasion and genocide, we accepted refugees and allies from other Indian tribes as well those of African and European descent who wished to join in the cause. All became known as Ani-yvwiya (The Real People). Cherokee Cornfield Beans come in every color from Scottish Tea Biscuit to Wolof Ebony. Some even have freckles. We Chickamaugas should be proud of our origin and continuation as a diverse people, with genetics and complexions every bit as varied as what we see in the Cherokee Cornfield Beans.

There are four species of squash: *curcubita maxima*, *curcubita moschata*, *curcubita mixta* and *curcubita pepo*. These are their Latin names. In Cherokee, they are all just squash or squasi, unless they are round and orange or tan, in which case they are iya or, in English, pumpkins. Every pumpkin is a squash, but not every squash is a pumpkin. Although the seeds of the four species of squash look remarkably similar, they will not cross with each other and so may be planted all in the same Three Sisters field or garden.



The Hubbard squashes, along with several similar types and varieties, are of the *curcubita maxima* species. Most having



been in the hands of seed companies too long, few of these retain natural hardiness and resistance to vine borers or squash bugs. Although originating in Oaxaca, Mexico. For a long time this species has been grown primarily in the western and northern regions of what is now known as the United States, not so much in the southeast.

On the other hand, squashes and pumpkins of the *curcubita moschata* species, which also originated in Oaxaca, Mexico, have long been grown in the southeastern and east-central regions of North America, with varieties developed by Leni Lenape, Cherokees, Muskogees and others. Many of the varieties within this species still retain resistance to squash bugs, but as with all other crops, seeds passed down through indigenous sources will retain more hardiness than anything purchased from a seed company.



While *curcubita mixta* is another species



of squash with origins in Oaxaca, Mexico, the variety Cherokees have long grown and generally refer to as long-necked squash, came to us, I think, from the Caribbean Islands. Today this variety of squash is commonly called cushaw pumpkin. Since it is not round and not even orange or tan, the only reason for calling it a pumpkin, that I can think of, is that most canned pumpkin sold in supermarkets, is of this variety, even though the picture of the label will

invariably be of a round, orange, true pumpkin.

We grow tan cornfield pumpkins (*curcubita moschata*) and long-necked squash (*curcubita mixta*) in our Three Sister's patches with some success. It has been more of a challenge to find a variety of *curcubita maxima* that will grow organically here, in west-central Missouri, without succumbing to squash bugs. My wife Janet comes from northern Ohio, definitely Hubbard squash country, so I keep trying. We plant all of these long-vining species out in the middle of the Three Sister's patch, giving them ample room to grow.



The most diverse species of squash and pumpkins is curcurbita pepo, and this is the only species of squash and pumpkins to originate in eastern North America, not in Mexico. Most summer squashes are of this species: the American Indian varieties such as yellow crookneck and scallop or patty-pan, as well as varieties developed on other continents, such as the all-pervasive zucchini. We grow yellow crookneck squash, a Cherokee variety of summer squash, around the perimeter of our Three Sister's patches. There are also many, many varieties of

winter squash within the curcurbita pepo species, including acorn squash and spaghetti squash as well as all those round, orange jack-o-lantern pumpkins. All these varieties, all this diversity of form, began with the little, inedible hen's-egg gourd, the original curcurbita pepo which can still be found growing wild in eastern North America.

Tobacco is often called the Fourth Sister, even if it is not grown in companionship with the other three. Traditionally, tobacco is most usually grown by men



rather than women. Exceptions may be made for women past child-bearing age. The variety of tobacco we grow is a Cherokee variety of Old Tobacco or Jolagayvli. The Latin designation is Nicotiana Rustica. This is the kind of tobacco grown by our ancestors. It is a strong, even harsh tobacco, much stronger

than the tobacco John Rolfe brought to Virginia from the Caribbean Islands. Old Tobacco is not conducive to pleasure smoking, but that is not what it is/was for. Tobacco is for prayer and for medicine, and when used in this way,



in a sacred manner, it is very helpful for the people, a very strong spiritual helper. This great helper, this mighty prayer carrier comes of a very tiny seed. Anyone who ever said the mustard seed was the smallest of all seeds never saw or knew about tobacco seeds.

Of course there are many other crops of American Indian origin besides corn, beans, squash and tobacco. Three-fifths of all crops now in cultivation were developed by indigenous agriculture in the Americas, including potatoes, sweet potatoes, cotton, sunflowers, peanuts, peppers, tomatoes, vanilla, cacao (chocolate), avocados and pineapples, as well as many other vegetables, fruits, nuts and spices.

There are many lessons to be learned from the seeds, but most of the lessons cannot be learned by listening to someone tell stories nor by reading a paper or book. Really learning what the seeds have to teach involves getting your hands and knees dirty, raising a garden, raising a Three-Sister's patch, participating in the agriculture of your people. And please, don't neglect to save seeds. Saving seeds, rather than buying them year-to-year, has a two-fold benefit. First, saving seeds lessens dependency on what amounts to economic colonization. In other words, you don't have to spend money for seeds. Secondly, by saving seeds year-to-year, the varieties you raise are able to adapt themselves to the soil and climate conditions where you live and to develop more hardiness and insect resistance, assuming you don't baby them too much. Raise a variety for seven years, and it becomes a landrace of where you live. One more benefit, especially if you are raising indigenous, heirloom varieties, is that you will be doing your part in preserving and passing along these varieties for future generations. These seeds become your legacy even as you enter into the legacy and life of the seeds.