

Introduction: Falling for Corn

Ayers Creek establishes the western boundary of the farm where my wife, Carol, and I live in western Oregon. We are located in the Wapato Valley, between the city of Portland and the Coast Range, just a bit south of the town of Gaston. The creek provides the farm's name as well as the water for irrigating our crops. The land is a mixture of rolling oak savannah, marshy wetland, and about eighty acres of good-quality arable soil on a bench above the creek. We operate as a market farm, selling what we harvest to local stores, restaurants, and directly to the public. Our crops include many types of plums, tart cherries, walnuts, chestnuts, table grapes, legumes, grains, and a variety of vegetables. Among the crops we grow is corn.

Since childhood, I have enjoyed sweet corn from the garden. Eating fresh corn on the cob is a sensual pleasure that takes the sad edge off of the dwindling days of summer and, when I was a boy, the bittersweet start of school. I still grow sweet corn and love the rituals attending its harvest and consumption. As middle age approached, a deep appreciation for more mature corn crept up on me. While the tender kernels of sweet corn embody the fleeting days of late summer, the fully mature, tough, dry kernels of grain corn, or what I knew in my youth as "cow corn," are a gift of autumn. They sustain us through the lean months of winter, cooked up as cornbread, cornmeal mush, and hominy. Grain corn is a crop that requires more time and patience than sweet corn but rewards the effort generously. It came to our farm obliquely and unplanned.

Seeking a break from the farm after a busy season several years ago, Carol and I went on a holiday to the city of Cuneo in the Italian

Piedmont to attend a chestnut festival. Italian food festivals are a wonderful mixture of Renaissance pageantry and modern marketing. Amid the fragrance of roasting chestnuts, the gaily dressed acrobats and singers of madrigals, and the horns and drums announcing some event or another, were rows of stalls selling the signature cheeses, cured meats, and fruits and vegetables of the mountain valleys fringing the Po River plain.

Many of these stalls displayed ears of corn familiar to Carol and me as the richly colored Indian corn our families used to brighten up the house during autumn. At other stalls, we saw ears similar to another ornamental corn of our youth, strawberry popcorn, with its small red kernels. Other than the occasional house mouse, no one we knew had ever contemplated eating those decorative types of corn, though we had heard it was possible to pop strawberry popcorn. But in Cuneo, these corn varieties were stone-ground into cornmeal and sold as cherished regional specialties under the name of the farm or cooperative that produced them. We were there to learn about and enjoy chestnuts, and they were the primary ingredient on every menu. Corn has its own festival later in the autumn, so in my mind those brightly colored ears remained mere ornaments.

Later, home at Ayers Creek, we recalled those beautiful ears of corn treated as culinary treasures and started thinking about growing high-quality corn, something special and delicious beyond the yellow and white cornmeal of uncertain origin found in the supermarket. That trip to Cuneo dislodged the negative associations I carried regarding corn as an industrial grain, and weakened my inclination to dismiss beautiful forms of corn as quaint ornamentals. The trip carried me past the debates about corn's role as sweetener, animal fattener, and the first genetically modified grain. We asked a couple of seed importers about the possibility of getting some of those special varieties from the Piedmont. Forget it, we were told; the legal importation of seed corn is nearly impossible. Disappointed, we relegated our thoughts about corn to the back burner over the summer as we tended to other crops. Later, at seed ordering time, a catalog entry stirred memories of that week in

the Piedmont, and again we entertained the idea of growing a delicious grain corn on our farm.

The conventional wisdom in western Oregon is that our climate, with its short ripening season and wet autumn, is not good for grain corn, an observation underscored by the fact that none of the market farmers we knew were growing corn for grain. On the other hand, Italy's Piedmont and the Wapato Valley are at the same latitude and share a similar climate. Some of our neighbors have planted the famed nebbiolo wine grape of the Piedmont in their vineyards, recognizing the similarity between the climates. Our seed order that spring included five pounds of grain corn. Our hunch was confirmed, the right grain corn will grow well in northwest Oregon, and it is now a well-established crop at Ayers Creek Farm. A decade later, we are still testing new varieties.

When we started, I had many questions and could find few satisfactory answers. I wanted to know the plant better. I dusted off my old copy of Paul Mangelsdorf's *Corn, Its Origin, Evolution and Improvement* (1974) and refreshed my knowledge. Mangelsdorf was a professor of botany at Harvard University and a pioneer in the study of corn genetics. Although molecular analysis has since shown that Mangelsdorf's theory on the origin and evolution of corn is wrong, the book is otherwise a fine work of scholarship and provides a good entry into the extensive literature of corn. Ultimately, the information I wanted was scattered hither and yon, often buried in scientific texts or old journal articles. My bookshelf now has a six-foot-long section devoted to corn.

As a college student, I had passed a portrait of Professor Paul Mangelsdorf on the way to the classroom and laboratory. Academic portraits often include props underscoring the professor's area of study, and my eye always fell upon the glowing, yellow ear of corn, a focal point of the painting. Mangelsdorf recognized the indigenous Americans as expert plant breeders, but he could not accept the fact that these early cultivators possessed the same keen observational and analytical skills found in every good scientist and plant breeder. In an interesting digression, he speculated that their love for the plants overcame the challenge of managing their complex genetics. He was a man educated in the age of

genetics, statistics, and analytical biology contemplating the most magnificent achievement of plant breeding who recognized that anonymous individuals guided by custom, folklore, and affection accomplished this enduring achievement.

Mangelsdorf was right about the emotional pull of corn, and that pull is not limited to the early cultivators; I'm besotted. As my research progressed, I discovered that many of those corn ears we saw displayed in the stalls at Cuneo were varieties that had their origin in the north-eastern United States. Cultivated into the early years of the twentieth century, the varieties disappeared from the region almost overnight. Changing farm practices and the abandonment of the local gristmills led to the demise of New England's traditional corn varieties, even as the same varieties were being cultivated and milled widely around the world, from the northern provinces of Spain to Sapporo, Japan. By the time I was born, just a few old types of corn remained, in the protective custody of dogged traditionalists. In fact, this scenario occurred across the United States, with old regional varieties of corn slipping away from the landscape. Now, quietly and slowly, the trend has reversed, as more gardeners and farmers as well as home cooks and chefs seek out the rich flavors of these varieties.

As corn in its many forms found its way onto our farm, its presence engaged the farm's staff, many of whom were born and raised in the southern Mexican highlands of Oaxaca. American agriculture has its origins in those highlands roughly eight thousand years ago. Our staff's families continue to cultivate many types of corn, as well as vegetables and legumes. In Oaxaca, they grow corn to feed the family; it is not just a commodity for sale but the basis for the family's well-being. Moreover, the land where corn is cultivated provides a range of food for the family, not just corn. Cheap commodity corn subsidized by the Mexican government is available, but where possible, Oaxacans grow their own grain because they consider it superior in every respect. Although the climate and soils of the dry tropical highlands of Oaxaca are very different from Ayers Creek, the traditional varieties we grow have the fine flavor familiar to our staff. Many of the other plants associated with corn in Oaxaca, such as tomatillos, beans, and squash, also feed us here as well.

Like many market farms, we send out a newsletter before each market day describing what foods we are bringing to sell. To keep people looking forward to the weekly communication, the newsletter includes an essay. Wide-ranging in content and overtly educational, the essay may include a discussion of the history and natural history of a crop, the machines we use to raise and harvest the food, the natural history of an interesting local wasp or bird, or the arcane details of water law. The spirit of this book was drawn from those market essays about growing food and corn.

The aim of this book is to encourage the appreciation of traditionally grown grain corn in all of its rich diversity. If we take time to return the true beauty and flavor of these corn varieties to our fields, gardens, and tables, our lives will be enriched. This I know from experience.

At our farmers' market stall, following the example of those we saw in Cuneo, we display a few ears of our corn with their husks tied together with a bit of sisal. One young girl was so entranced by a long ear with eight rows of uniformly deep orange kernels, she returned several times to touch it and tell her mother how beautiful it was. We gave the ear to her and suggested she plant the kernels in the spring. Later, her mother told us she had planted them in the backyard and harvested some ears of her own. When I brought Esmé a box of ears to draw for the book's illustrations, she was immediately drawn to another type of corn, but with a similar response as she held it: "What a beautiful ear of corn." That ear was short with speckled kernels of various colors, all similar to small birds' eggs. It is a type of corn grown high in the Andes that was coaxed into producing a few ears in Oregon, well beyond its element. Esmé drew that ear first.

The book that follows is a "how-to" from planting to eating. I provide a practicum of corn growing from seed selection through seed production, based on my experience as a farmer and gardener. If a young person can take a beautiful ear of corn, pry off a few kernels, and grow some new ears in her family's backyard, the process is hardly beyond the ken of most people. But there is more to appreciating corn than just dropping a seed in the ground.

Corn is remarkable among the grains because it is used as food from the emergence of the flower buds to the time the kernels are mature. Even among the dry, mature kernels, there is a range of colors, textures, and flavors. No other grain provides such culinary elasticity.

More than just a kitchen ingredient, the corn plant is an elegant organism, especially when you know how it functions. When Mangelsdorf talks about the cultivator's love of corn, he is referring to whole plant and not just the grain. Corn is a grass shaped by the intimacy the cultivator feels for the plant. It is easy to slip into a mystical frame of mind when working among corn plants, especially when you start selecting characteristics for your own seed. Before ascending to that level of thinking, it is important to understand the nuts and bolts of how corn is constructed. I have distilled the botany to its essential details, those that are useful for our appreciation and understanding of the plant.

The cornfield itself provides more than just a crop of wholesome kernels. I am at heart a naturalist who farms and, as such, I prefer to keep the boundaries between the cultivated and natural areas of the farm as indistinct as possible. Consequently, we measure our farm's productivity not only in crops but also in terms of the birds, weasels, spiders, centipedes, snakes, and frogs that make their home among the cornstalks. In summer and winter, the cornfield offers up a separate bounty of nourishing greens from the many volunteer plants that appear in cultivated fields and gardens.

After describing the tasks of harvesting, cleaning, and preparing the corn, I include recipes to help readers explore the various ways corn can be enjoyed at the table. Some of these come to us from our customers, including local chefs. The most important ingredient in a dish made from corn is always high-quality grain. But you do not need to invest in a mill to make popcorn or fresh hominy, a traditional American food worth reintroducing to our table.

We begin in the lull of late winter and early spring, when there is time to think about the origins of corn and its subsequent spread through the Americas, and then throughout the world.