

Agriculture

During an 1898 trip through the mountains of eastern Kentucky, sociologist George Vincent observed that the families who resided there subsisted on a diet of “hog and hominy.” In this, he was more or less correct, for not only did mountaineers the region over (including those in the East Tennessee hamlet of Gatlinburg) raised enormous quantities of hominy (corn) they also derived the majority of their yearly protein intake from the hogs that clustered about their homes.

But let us begin our discussion with corn, for it was the very heart of Southern Appalachian agriculture. Throughout the nineteenth century--and well into the twentieth century, for that matter--corn and corn leaves served as the primary source of nutrition for Southern Appalachian farm families and their livestock. The crop required little cultivation, relatively speaking, and could be grown in rocky soils and on steep hillsides. Soon after settling on a piece of land, farmers would cut down trees to create new fields, remove the downed timber, and scatter seed corn among the stumps. If plowing was necessary, farmers used the bull-tongue plow, characterized by a long, narrow moldboard, to create shallow furrows amid the numerous rock outcroppings. As early as 1874, Tennessee State Agriculture Secretary J. B. Killebrew marveled at the ability of East Tennessee farmers to raise corn under the most difficult of circumstances. “We have seen fields of corn upon steep slopes,” he wrote, “where the limestone rocks almost sheeted the surface, that would yield from fifty to seventy bushels per acre.”

Although much of the annual harvest went to feed livestock, mountain families consumed enormous quantities of the grain. In fact, historian Donald Edward Davis estimates that an average farm family of seven consumed 162 bushels of corn per year. Fresh corn on the cob

added welcome variety to meals, while cornmeal, more so than rye or wheat flour, served as the family's primary bread-making ingredient. Corn also provided Southern Appalachian farm families with construction materials and a crude form of currency for use in local barter. According to Davis, corn "husks and leaves were woven into hats, dolls, mops, and chair bottoms." Farmers "purchased" plows and other agricultural implements with surplus grain, and hired hands could expect to receive several bushels in exchange for their labor.

If corn was the heart of Southern Appalachian agriculture, then hogs were its soul. Mountain farmers raised and slaughtered millions of swine each year, and rare was the family that did not rely heavily on pork as a source of protein. The reason for mountaineers' dependence on pork is actually quite simple: hog husbandry, like corn cultivation, required relatively little effort on behalf of the farmer to be successful. Hogs are, as a rule, hardy, independent animals, more than capable of finding their own food and defending themselves (and their offspring) against predators. And so it was standard practice among the region's farmers to simply turn their herd of squealing porkers out into the forests during the spring and summer months, there allowing them to fatten (at no cost) on chestnuts, roots, small animals, eggs, carrion, and other naturally-occurring foods. As an added bonus, hogs reproduce quickly, with the average sow giving birth to litters of between eight and ten piglets (and sometimes as many as twelve to sixteen). One might easily start a large herd--again at very minimal cost--merely by turning out a brood sow to mingle with his neighbors' boars.

In fact, the only real work involved in hog husbandry came during the late fall, for it was at this time that mountain farmers rounded up their porcine charges in preparation for "hog-killing." According to historian and former Cades Cove resident A. Randolph Shields, "hog-killing" was often a community event, one which saw multiple families gather to slaughter and

process hogs. To begin the process, the hogs were killed with a rifle or a sledgehammer, and then suspended by their back feet and drained of blood. The carcasses were then boiled to loosen the hair (children, Shields notes, were given the job of “fill[ing] the kettles with water from the spring or creek and . . . keep[ing] the fires under them well-stoked”), scraped clean with large knives, and then, after the organs were removed, left to hang overnight in the bitter cold. The following day, the carcasses were carved into hams, loins, and chops, and the “lean trimmings were processed into sausage.” The hams and other chops were then salted, smoked, and stored away, there to provide the family with nutritious meat during the long winter months. Of course, the hog had other uses as well, some of which had nothing to do with providing nutrition: fat trimmings were rendered into lard for cooking, or mixed with wood ashes and turned into lye soap.

Important as hog and hominy were to Southern Appalachian farmers, however, they were by no means the only source of nutrition available. Mountain families cultivated potatoes, squash, beans, tomatoes, greens, and other garden vegetables during the summer months; raised sheep both as a food source and as a source of wool (although sheep were never as important as hogs as a source of protein); raised cattle for meat and milk; raised chickens and ducks for food, eggs, and as a source of feathers and down for use in pillows, mattresses, and warm winter garments; gathered blueberries, blackberries, ginseng, dandelions, wild leeks or “ramps,” and a host of other edible plants from the fencerows and mountain forests; tended apple and peach trees; kept beehives and processed sugarcane as a means to sweeten their food; and supplemented their diets with a variety of game animals such as deer, bears, squirrels, and fish. A handful of farmers also cultivated winter wheat and rye for use in flour-making, although it

was difficult to do so in the more rugged corners of the region (such as Gatlinburg) and so was relatively rare.

All told, Southern Appalachian agriculture provided mountain families with nutritious, if not altogether healthy meals (the mountaineers' diet, laden as it was with fats and starches, would make a modern nutritionist shudder). And yet, the methods that they used were often terribly destructive to the land, serving to diminish farmers' prospects for raising an adequate supply of food.

Corn, like cotton and tobacco, is a hungry plant which leaches phosphoric acid, nitrogen, and potash from the soil. Farmers may, with careful crop rotation and the cultivation of cover crops, curb soil depletion and preserve fertility. But in the rugged Southern Appalachians, land scarcity led farmers to plant corn in the same fields year after year, thereby destroying the very basis of their livelihood. After several years of such abuse, even the most fertile soils lost their ability to sustain food crops. Devoid of ground cover, hillside soils gave way quickly to erosion, leaving behind a landscape of parched soil, deep gullies, and thick tangles of broomsedge, briars, and other hardy weed species. To make matters worse, the hogs and cattle on which Southern Appalachian mountaineers depended for protein and milk were destructive in their own right, devouring underbrush and root systems, trampling sapling trees, and otherwise intensifying the effects of erosion.

The only hope of correcting these problems would have been to institute vocational agricultural classes in the region. But the region's schools were too poorly funded, and the mountaineers too resistant, generally speaking, to the notion of "book farming," to support such programs. And so, Southern Appalachian farmers (at least those in the more isolated corners) continued on as they always had, scratching out a living on lands that grew ever more marginal

each and every year. If positive changes were to be made, they would have to come from the outside.