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Palmetto





Above: *Smilax smallii*. Photos by Francis E. Putz

Would You Prefer Red Coontie or White? Outstanding Mysteries About a Traditional Food

by Francis E. Putz, Gainesville, FL

While I admit to having only vague ideas about the restaurant fare of yesteryear, if I were dining out in Florida a few centuries back and the server offered me red coontie or white, I'd opt for the red. There's admittedly some exoticism associated with white coontie, derived as it is from the stem tubers of a very primitive plant, but I worry about the long-term health impacts of ingesting it in quantities. Then again, based on my admittedly unresolved experimental archaeology research, red coontie is apparently one of those "starvation" foods – the more you eat, the more malnourished you become. But what exactly was the "coontie" that was the staple food in Florida before colonization from across the Atlantic and how was it prepared?

Dangers of Eating Cycad-Derived White Coontie

I'm hesitant about eating white coontie made from our native cycad, *Zamia floridana*, mostly because it contains cycasin alkaloids, which cause liver damage, and beta Methylamino-L-alanine, the cumulative effects of which are senile dementia-like neurological symptoms. Until the life expectancies of cycad-consuming Australian aborigines and Pacific islanders increased, this form of psychosis was mistaken for alcoholism. I'm aware that by grinding up and then leaching the stem tubers, at least some of the toxins can be removed, but I worry about consuming even trace amounts. For me, white coontie starch is fine for stiffening collars, for which it was once commercially used, but it is not high on my list of favorite foods. From the plant's perspective, while these toxins provide protection against herbivores, there are specialists that eat little else including our glorious atala hairstreak butterfly.

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Would You Prefer Red Coontie or White?

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Some people don't know that when it comes to coontie, there are choices. The word "coontie" itself isn't very revealing insofar as it just means "flour root" in Creek. This confusion is also understandable given that *Zamia*, the cycad, is generally referred to as "Florida coontie." Less well known is red coontie, which is made from the swollen below-ground stems (i.e., rhizomes) of one or several of the dozen species of catbrier (*Smilax* spp.) native to Florida.

Food from Catbrier Rhizomes?

Due to the thorny stems of these pesky vines, *Smilax* species are generally referred to as "catbrier" or "greenbrier," but some stout-stemmed species are called "bullbrier" or "bamboo vine." Several South American and Caribbean species of *Smilax* were exported to Europe in astounding quantities in the 17th to 19th centuries, mostly as an herbal treatment for syphilis. The catbrier of former pharmaceutical importance is known by its Spanish moniker, *sarsaparilla*, derived from the words *sarsa* for prickles and *parilla* for climber. *Sarsaparilla* was, and perhaps still is, also used as a foaming agent in soft drinks. So far I haven't been able to find out much about how *sarsaparilla* was or is commercially grown and processed, but I am interested.

Whereas the writings of scientists often reveal profound knowledge, on the subject of coontie I have more outstanding questions than brilliant insights. Although laboratory analysis revealed that catbrier tubers contain as much starch as "Irish" potatoes (which originated in the Andes), I have still not perfected the technique for rendering the rhizomes into food. I shouldn't shirk responsibility for my failures to date, but progress in this project has been impeded by the poor attitudes of two of my would-be collaborators. Although my son is an always willing helper and subject, his



Above: Tubers of *Smilax smallii*.

Photo by Francis E. Putz

older sister and mother are not at all cooperative. For example, I expected them to be thrilled with the live oak mortar and pestle that I so painstakingly and lovingly made for them, but my vision of the two ladies happily pounding red coontie and perhaps singing while I reclined in my hammock was merely an illusion – they would neither pound nor even sample the bright red coontie pancakes we offered. I admit to not having yet perfected a method for removing the tannins and other astringent compounds that make red coontie red, but they could at least have taken a taste. After all, I followed the explicit instructions of the famed naturalist, William Bartram, about whom I now harbor some suspicions.

In his magnificent *Travels*, Bartram, known among the Timucuan as *Puc Puggy* (the "Gentle Flower") described in substantial detail how to make bread from catbrier rhizomes. Having tried his recipe and failed, I wonder whether the braves who gave him his information really knew of what they spoke. Mightn't they have left out a step, such

as a lye treatment to soften the fibers and render the bright red tannins more readily leached? Lye made from wood ashes would have been readily available, and use of that strong base is familiar to food processors from the olive groves of the Mediterranean to the tortilla shops of Mexico; our own hominy grits are made from corn kernels slaked in lye.

Having heard that coontie preparation sometimes involved fermentation, I also experimented with red coontie beer. In this case even I have to admit that the brew was awful, even worse than my muscadine wine, which does work well as a carburetor cleaner. One problem with the catbrier brew might have been that it fermented very slowly, which allowed plenty of opportunities for colonization by microbes other than beer yeast. The process could have been accelerated by adding honey or sugar, but since honeybees, sugar cane, and sugar beets are all recent introductions in the Americas, I opted for historical purity in exchange for biochemical diversity.

But Which Catbrier Species?

Despite having failed in my culinary experiments, I think I know which of the common species of catbrier in our area was the principal source of red coontie for local Timucuan and the Seminoles who followed. The scientific name for this thick-stemmed and nearly thornless species is *Smilax smallii*, named after John Kunkel Small, the author of the first comprehensive flora of the Southeast. In the vernacular this species is known as "Jackson vine" and "lanceleaf" in addition to the more generic name "greenbrier." The foliage of Jackson vine is evergreen and sufficiently attractive that it was commercially marketed for use in Christmas decorations through the 1960s. Large quantities were shipped northwards every year during the Yuletide season, a trade that has now

apparently stopped. What impresses me about Jackson vine are its massive rhizomes. I excavated a single plant that had six thumb-thick stems and a rhizome that weighed in at 65 pounds, which is a lot of potatoes.

I can't yet distinguish the taste of red coontie derived from different species of *Smilax*, but I do know that pound-for-pound *S. smallii* is the easiest to excavate. Using just a stout stick with a fire-hardened point I excavated nearly 100 pounds of tubers in a sweat-drenched half-hour. In contrast, harvesting a similar amount of the next most likely candidate, *Smilax laurifolia*, takes about four times longer even with a long-handled metal-bladed spade. The least likely candidate is perhaps our most common; the starch-containing rhizomatic swellings of *S. bona-nox* are small, widely dispersed, and seemingly impossible to harvest in meal-sized quantities.

I wonder whether the prodigious size of Jackson vine rhizomes is partially the result of thousands of years of selection by native Floridians. They may have delayed hoe-wielding and row crop planting until only 1,000 years ago, but almost certainly promoted the growth of their principal food plants by sparing some portions of harvested rhizomes and transplanting them to convenient places. The dozen catbrier rhizome fragments that I have transplanted over the years have all flourished, sometimes to my dismay. Jackson vine is common near sinkholes, just the sorts of places Amerindians once frequented. I expect that early Floridians selected for genotypes with favorable characteristics, such as low tannin contents. Or perhaps they cultivated lots of different species and when you dined out in Timucuan times, the coontie steward might have offered a range of vintages, each with its own unique taste and bouquet.

References and Further Reading

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About the Author

Francis E. "Jack" Putz is a professor of conservation biology at the University of Florida, Gainesville, where he teaches courses on the ecology and management of local and tropical ecosystems. His research spans topics from fire ecology and silviculture to experimental archaeology and ethnobotany.



The Florida Native Plant Society
PO Box 278
Melbourne FL 32902-0278

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Editor: Marjorie Shropshire, Visual Key Creative, Inc. palmetto@fnps.org • (772) 285-4286 • 1876 NW Fork Road, Stuart, FL 34994

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For most purposes, the phrase Florida native plant refers to those species occurring within the state boundaries prior to European contact, according to the best available scientific and historical documentation. More specifically, it includes those species understood as indigenous, occurring in natural associations in habitats that existed prior to significant human impacts and alterations of the landscape.

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