



TAPPING ON NATIONAL FOREST LANDS

*A Case Study of The Mt. Rogers Volunteer Fire Department
and Rescue Squad in Whitetop, Virginia*

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When looking to expand the maple industry people often look at the large acreages of forested lands in the public domain. In West Virginia, 16.5 percent of the land is in public ownership, and in Virginia, 17.1 percent. Of that, the largest acreage is managed by the federal National Forest System (NFS). Sugarbush owners adjoining NFS lands might look across the line to tapable maple stands in the national forest. Private citizens or community groups could also look at public lands as a way to get in the business. In this study, we investigated an example of a community group, the Mt. Rogers Volunteer Fire Department and Rescue Squad, that is running a successful maple sugaring operation by tapping trees in the adjoining George Washington-Jefferson National Forest. We examined the sugaring operation and the impacts that the sugaring operation is having on the Whitetop community.

OBTAINING PERMISSION TO TAP

Using national forest lands for any private activity that derives income requires obtaining authorization for that use. Special-use permits are granted for specific activities in a specified location, and for a set period of time. Information and the application form for these permits on US Forest Service Lands can be found at:

<https://www.fs.fed.us/specialuses/documents/broch.htm>

Special-use permits are granted to private individuals and non-profit organizations for production and economic development activities. A quick Google search and a review of Maple Trader posts found few examples of maple tapping on NFS lands. The consensus seems to be that special-use permits for tapping are not regularly granted, and that success in obtaining one is left, to a great degree, to the goals of the proposed users and the discretion of the specific national forest supervisor and district ranger.

BACKGROUND

The MRVFD is in the community of Whitetop in Grayson County, southwestern Virginia, near the North Carolina border. Mt. Rodgers, at 5,729 feet, is the highest point in Virginia with a climate and ecology similar to more northerly regions. The surrounding Washington-Jefferson National Forest supports extensive stands of a birch – beech – maple forest type, with mature stands of sugar maple ideal for tapping.

As told in the *Maple Syrup and Molasses* regional cookbook, the Whitetop Mountain molasses and maple syrup story began in 1973 with a lightning strike that started a house fire. This led to the realization that the community needed a fire department. For the department to be sustainable in such a small rural community with a limited tax base, it would need a reliable source of financial support. At the same time, Virginia Tech was demonstrating an evaporator

that was capable of making both molasses in the Fall and maple syrup in the Spring and the Mt. Rogers National Recreation Area, part of the George Washington-Jefferson National Forest, was attracting a growing number of tourists. This led to the suggestion to tap into the surrounding NFS maple resource and the local agricultural community. Those resources would go towards establishing a business selling maple and sorghum syrups to tourists in support of the new fire department. The community rallied around this idea, and with support from community groups, officials at the George Washington-Jefferson National Forest, and a grant from the Lilly Foundation, the Whitetop Mountain Maple Syrup and Molasses Company was formed. The new community company advertised itself as: “The sweetest business this side of Heaven.”

The Whitetop Mountain Maple Syrup and Molasses Company worked with the George Washington-Jefferson National Forest to obtain a special-use permit to tap NFS lands near the Elk Garden parking area, along the Appalachian Trail. The Company operated the maple syrup business for a few years with hired labor. Being on national forest land, maintaining good relations with the public was a primary concern. A large interpretative sign was installed by the company along the trail in the maple tapping. The sign, still present on-site, depicts the sap flow process and the use arrangement with the Jefferson National Forest. Unfortunately, in the late 1970s, maple syrup prices were very low (ranging from \$6 to \$15 per gallon) and by the early 1980s it became apparent that the business operation was not economically viable. The company dissolved, turning the sugaring operation over to the now well-established Mt. Rogers Volunteer Fire Department and Rescue Squad.

SUGARING AND THE MT. ROGERS VOLUNTEER FIRE DEPARTMENT RESCUE SQUAD

The MRVFD took over operation of the maple sugaring operation, using volunteers instead of paid labor, and started the Whitetop Mountain Maple Festival. Whitetop, like many villages in rural Appalachia, has a history built on logging. Photos displayed in the town’s public areas depict a prosperous era when lumbering supported the local economy. It was common for workers in the lumber industry to also be engaged in agriculture, making and growing what they could for their own family use. Sugaring from trees “borrowed” from the National Forest was a common springtime activity. We were told that locally crafted sap spouts were made from willow bark and sealed in the tree with cheesecloth.

With the shutdown of the local sawmill in the 1930s, the Whitetop area has increasingly relied more on tourism as an economic base than logging. The George Washington-Jefferson National Forest, the Virginia Creeper bike trail and the Crooked Road music trail all have helped build a tourism economy. And while tourism has grown, the population continues to shrink. Government support for the MRVFD has not kept pace with the department’s needs, despite how essential they remain to the community. When the MRVFD took over the maple sugar operation, it increasingly turned to tourism to supplement operational funds. The annual Whitetop Mountain Maple Festival is held in March, followed every year by the Whitetop Mountain Ramp Festival in May, and the Whitetop Mountain Molasses Festival in October.

Each festival draws numerous tourists to the area and are important fund raisers for the Mt. Rogers Fire Department and Rescue Squad.

The key to the success of these festivals is obviously volunteerism and community spirit. With the 2009 closure of the Mt Rogers High School in Whitetop, the MRVFD has become an ever more important institution in the community. In 2019, working with community volunteers, the Fire Department tapped approximately 3,400 trees. Volunteers operated the modern sugarhouse, complete with UV sap disinfection and Reverse Osmosis (RO) to concentrate the sap. Sap was collected off the NFS special-use permit area and trucked to the sugarhouse. The 2019 season brought a reported 200 gallons of maple syrup, which, if sold as quarts should raise \$16,000 for the MRVFD. The Whitetop Mountain Maple Festival, staffed by volunteers, also raises funds through a two-day pancake breakfast (charging \$8 per person), a craft show, and live music (with a \$5 door charge) that features local bluegrass bands each year. Over the weekend of the 2019 festival, the organizers expect to serve pancakes and sausage to 2,000 people, raising another \$16,000. Volunteers also conduct interpretative tours of the woods and tapping operation and the sugar house, where the syrup is sold.

LOOKING TO THE FUTURE AT MT. ROGERS

Making 200 gallons of syrup from 3,400 taps is a production of 0.06 gallons/tap. That is extremely low, especially in a good sap flow year such as 2019. The Mt. Rogers sugar house has the capacity to process many times that volume of sap, yielding more syrup, with more potential sales and more income to support the Fire Department. A technical evaluation of their sugarbush showed multiple ways that sap production could be increased. Some of those are; (1) droplines were too short, (2) droplines did not look like they were being replaced regularly, (3) tap holes need to be spread out over the tapping zone, and (4) there was no indication that sap collection spouts were being replaced every year. By maintaining proper vacuum, these improved practices should be able to raise production to at least 0.2 gallons of syrup per tap, providing a total yield of 680 gallons of syrup available for sale, versus 200 gallons.

A quick analysis of area syrup markets shows the potential for increased sales. In addition to syrup and maple candy sold at the sugar house during the maple festival, that used for the pancake breakfast, and that sold at the other two festivals, MRVFD syrup is sold at the Skyline National Bank in Whitetop. However, a discussion with the proprietor of a nearby general store found that he would love to have Mt. Rogers syrup for sale if available. With the added production, sales through other similar local outlets could increase revenues.

To move forward on these production issues the Virginia Tech maple program has proposed working with the Mt. Rogers Volunteer Fire Department to offer a sugarbush management workshop. This workshop would be open to volunteers working the Department's maple syrup operation and to other area residents thinking of getting into the maple sap collection and syrup processing business. The MRVFD sugar house has the equipment to easily evaporate the

increased sap production from their NFS special-use permit area and serve as a production hub for others in the area collecting sap on their own lands as part of a community sugaring program. The MRVFD would benefit from increased income through the use of its equipment to process sap into syrup for other sap collectors, as well as from the increased production from their tapping operation.

“TAKE HOME” MESSAGES REGARDING TAPPING ON NFS LANDS

- There is a role for tapping on NFS lands, but this opportunity might be best exploited by community sugaring operations that benefit the community as a whole rather than individual private entities. In the USFS mission statement, it is stated that one NFS objective is: *“Helping States and communities to wisely use the forests to promote rural economic development and a quality rural environment.”* The Mt. Rogers experience shows that sap and syrup production can help rural communities maintain a sense of community and provide income to support needed community services.
- Making maple syrup is fun. It is a way to bring the community together with a common purpose. Mt. Rogers shows the sustainability of volunteer activities in rural communities. For more than three decades, and through multiple leaders, the MRVFD has been working with volunteers to run their sugaring operation and their festivals.
- Sap collection using special use permits on NSF lands supplements the educational and interpretative programs of the national forest. The Whitetop Mountain Maple Festival brings visitors to the George Washington-Jefferson National Forest at a time of low tourism. A few hikers on the Appalachian Trail were the only other tourists met during our visit, and they did not know about the maple festival. People come to the festival not only for the pancakes, but also to learn how trees are tapped and maple syrup is made. It demonstrates both sustainable forest management and multiple use, which are key tenets of the management of our national forest lands.

Several people from the Whitetop community were interviewed for this case study including; Lisa Blevins, Burl Greer, Doug Hayes, Renel Gambrell, and Rodney (Ronnie) Richardson. This case study will be part of a larger look at the history of community sugaring in the Central Appalachian region.

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