

MJC Vineyard

A Virginia Farm Winery & Nursery

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October 14, 1981

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Regulations Jan
10-20-81

Chief: Regulation and Procedures Division

Bureau of Alcohol, Tobacco & Firearms

P.O. Box 385

Washington, D.C. 20044

REF. Viticultural District

Dear Sir:

We are submitting a proposed viticultural area for your consideration, in accordance with Title 27 CFR, Part 4 as revised by Treasury Decision AFT-53. The area is known as the NORTH FORK OF THE ROANOKE. The area includes the headwaters of the Roanoke River and lies in portions of Roanoke and Montgomery counties, Virginia (1).

The viticultural area is well defined geographically. The North Fork of the Roanoke flows southwesterly for one-half its length, then reverses direction around Pearis Mountain and flows northeasterly an additional ten miles to form the main body of the Roanoke River. It is bounded on the west by the Alleghany mountain ridges of the Eastern Continental Divide, on the south by the Pedlar Hills, and on the north and east by the Pearis and Fort Lewis mountains (2).

The name NORTH FORK OF ROANOKE has been in continuous use since mid-1700. As a frontier community, the settlements along the forks of the Roanoke were of intense Colonial interest. Two forts were erected on the North Fork, one in 1754 and another in 1755. Both figured in the defense of western Virginia in the French and Indian War (3).

The name specifically applies to the 22 mile valley of the North Fork of the Roanoke River, including the surrounding hills, ridges, and mountains of the watershed, as shown in MAP 1, a depiction of the area circa 1750 (4).

4.25(e)2(i)

The name NORTH FORK OF ROANOKE is well established today as a recreation area on the Eastern Continental Divide. Portions of the Appalachian Trail and the Jefferson National Forest border the district (5); and what some consider to be the most pastoral and beautiful part of the Bicentennial Bike Trail traverses the length of the proposed district between the historic villages of Troutville and Christiansburg, Virginia (6).

The NORTH FORK OF ROANOKE appears on state, regional, and U.S. Geological Survey maps (7). The North Fork also is known widely for its unique geologic formations. Pedlar Hills, in the southern part of the district, are revered by conservationists for their active formation of limestone, travertine, and mineral deposits (8). Up the valley of the North Fork, and extending northeast along the Pearis and Catawba mountains, is a line of unique "haystack" shaped geologic benches that creates a lasting impression on all who visit the valley (9).

More importantly, the NORTH FORK OF ROANOKE has been a major center for grape hybridization and propagation. No fewer than five nationally significant varieties of grapes have been developed in this area by Virginia Tech fruit breeders in the past thirty years (10).

4.25(e)2(i)

The NORTH FORK was inhabited for years by one or another tribe of early American Indians. Both Catawba and Shawnee regularly plied the old bison trail along the North Fork over the Continental Divide to the New River and south to the Cumberland Gap. The Catawbans were known to have resided in the vicinity as

early as 1597 (11). Evidence of Indian agriculture remains in the valley, as well as numerous burial grounds (12). The first European settlers on the North Fork already were established by 1720 (13).

The NORTH FORK TRACT, a kind of 18th century sub-division, was cut out of the original Roanoke Grant of 100,000 acres in 1745. By 1746, the NORTH FORK was settled by about 25 major homesteaders (14). In that year, the Court of Orange County provided for the regular maintenance of the road along the "North Fork of Roan Oak" on behalf of the "North Fork People" (15). For 100 years, this road continued to be a major connecting link between the New River Valley settlements over the Continental Divide and the Great Road to Philadelphia that linked the Carolinas with Pennsylvania in a major colonial trade route (16). Continued references were made to this area in official documents throughout the century (17).

The NORTH FORK OF ROANOKE has a certain continuity in grape and wine production as well. First, the Indians and then the early European settlers harvested the local fox grape that was indigenous to the frontier. (18). According to Kegley, the official historian of the frontier, people on the Roanoke frontier were interested in commercial agriculture and profitable industry, although they were "as near economically independent as people can be." (19). In New Life on the Roanoke, he wrote further:

"In 1760, proposals were made to the General Assembly for the encouragement of useful undertakings. An Act was passed to stimulate the cultivation of the vineyard so as to employ the young and old and to use the fine climate of the colony. It was proposed that L500 be given as a premium to the person who in any one year within eight years would make the best wine in quantity not less than 10 hogsheads. . ." (20)

Wine production in this area was nationally acknowledged as early as the 1840 national census (21). By 1889, the principal wine grapes of the area included Concord, Virginia Norton, and Martha. Every plantation produced

grapes, and about one-half of all grapes were pressed into wine. (22). Grape production increased in this area until 1925, after which time there was a major reduction in vine and wine production throughout Virginia (23).

However, grape hybridization and experimentation continued at Virginia Tech's horticultural farm on the North Fork throughout the 1920's right up to the present time. Numerous crosses were made. Five new varieties were released. These are prominently grown in all major grape producing areas of the East today. They are: VPI 5-2 (Alwood) and VPI 26 (Moored), developed in 1949 by Prof. R. C. Moore; VPI 30 (Price) and VPI 31 (Monticello) developed in 1950 by Dr. Moore; VPI 32 (Century I), developed by Dr. Moore in 1951. George D. Oberle, one of the co-inventors of Cayuga White at Geneva, N.Y., extended Dr. Moore's work from 1949 until his own retirement in 1969. (24).

Today, Virginia Tech continues to operate its experimental vineyard in the Valley of the North Fork, including varietal trials of advanced breeding lines from other states. Tech, with MJC Vineyard and Nursery as an instructional station, also has become a center for wine and viticultural education, offering regular academic and extension courses and consultation in enology and viticulture (25). Other farm vineyards are reappearing on the North Fork, with wine producing cultivars of vitis vinifera and European hybrids now replacing the old American varieties (26).

44.25(e)2(iii)

The geographical features of the NORTH FORK OF ROANOKE are well suited to viticulture.

Elevation

The valley floor of the North Fork begins in Roanoke County at an elevation of 1800 feet. As it flows through Montgomery County it falls 600 feet before re-entering Roanoke County to form the main body of the Roanoke River (27).

Both the Pearis and Fort Lewis mountains overlook the North Fork. These rise to elevations of 3100 feet (28).

The viticulturally significant part of the NORTH FORK OF ROANOKE, however, lies neither on its peaks nor in its valley floor. Rather it lies in an uneven but frost-free band between 1700 and 2100 feet of elevation on the southeast-facing slopes of the Continental Divide, and on the lower fringe of the north-facing slopes of Pearis Mountain (29).

Soils

The viticulturally productive slopes are made up principally of FREDERICK and POPLIMENTO soils, with limestone ridges characteristic of the southeast-facing slopes, and limestone/sandstone layers characteristic of the north-facing slopes (30).

The USDA Soil Conservation Service Survey of 1979 describes the area soils as follows:

"Shallow to very deep (60") gently sloping soils formed in residuum from limestone or interbedded limestone, sandstone, and shale; on uplands in limestone valleys." (31)

The USDA further recognized the area as "good for general agriculture and timber" as well as viticulture (32). These characteristics are underscored on MAP II General Soil Map of Virginia.

Moreover, the soil in the district is significantly different than that found on the surrounding hills and ridges. On the north and west are the Alleghany ridges and the Jefferson National Forest, largely unsuited to agriculture. On the east is Pearis Mountain, and on the south the Pedlar Hills, areas of evident geologic but modest viticultural interest (33).

Climate

The microclimate for grape production in the NORTH FORK OF ROANOKE is excellent, due largely to the protection the valley derives from its location between two high-ranging, parallel and northwest-facing mountain ridges (34).

The mountains protect the valley and its southeast-facing slopes from destructive storms, and limit excessive rainfall in the growing season. The average rainfall in the NORTH FORK is 39.5 inches, as contrasted with 44 inches or more annually in the western mountains (35).

Air and soil drainage on the slopes are good (36). Prevailing westerlies wash out potentially troubling pollutants and keep vine diseases to a minimum (37). An early morning fog from the North Fork characteristically cools the vines in summer, as well (38).

The growing season in the NORTH FORK is relatively constant despite variations in elevation. It averages 170 days, with heat summation of about 2800 degree days between 28°F Spring and Fall frosts, roughly the equivalent of a California viticultural District II (39). Winters are mild. Temperatures below -5°F occur only every 12-15 years, with a 150 year record low of -16°F in 1977. Summer highs rarely exceed 90°F (40). The pattern of warm days and cool nights is conducive to wine grape quality.

In summary, NORTH FORK OF ROANOKE is a well defined microclimate as well as geologic area for grape production. Moreover, it has a long history of successful grape and wine production, and a 30 year recent history of creative grape hybridization and propagation. In all these respects, the area differs significantly from adjacent areas in the Appalachian Ridges and Valleys.

4.25(e)2(vi)

The boundaries of the proposed district are defined principally by state and federal roadways. Each of these is clearly shown on the U.S. Geological

Survey MAP III. The district line begins in the north in Roanoke County at the intersection of State routes 785 and 697. It follows route 697 over the Crawford Ridge to intersect State route 624. The district turns west on route 624, runs along the boundary of the Jefferson National Forest and continues across the Montgomery County line to intersect U.S. 460 (Business) where it turns south then southeast along the Eastern Continental Divide through the town of Blacksburg. The line continues on U.S. 460 (By-Pass) to the intersection of U.S. 460-East where it turns east for approximately one mile to intersect U.S. Interstate Highway 81 at Interchange 38. The district continues northeast on route 81 along the ridge of the Pedlar Hills to Interchange 37 where it intersects State route 603 as it leaves route 81. At this point, the line goes due west approximately one mile to the intersection of state route 622 then turns north up Bradshaw Creek across the Roanoke County line where it intersects the Chesapeake and Potomac Telephone Company right-of-way. The district line then turns northwest about 6500 feet along the C & P right-of-way over Pearis mountain to the point where the right-of-way crosses State route 785, just one-quarter mile northeast of the district's starting point at the intersection of State routes 785 and 697.

4.25(e)2(v)

Three maps are provided in support of the information herein contained.

These are:

- MAP I North Fork and South Branch, a map of the forks of the Roanoke River circa 1750 by Elizabeth Wallier Wilkins, reproduced in Kegley's Frontier Virginia, p. 602. The lines of the proposed viticultural district are superimposed on the map by the petitioners.
- MAP II General Soil Map of Virginia, U.S. Department of Agriculture Soil Conservation Service, July, 1979. The lines of the proposed viti-

cultural district are superimposed by the petitioners.

MAP III U.S. Geological Survey map sections assembled for Montgomery County, Virginia, by the Montgomery County Planning Department, July, 1976. Scale: 1:50000. Contour intervals 20 feet. Included are the following 7.5 minute series V834 maps, 1965:

Looney Quadrangle
McDonalds Mill Quadrangle
Glenvar Quadrangle
Elliston Quadrangle
Ironto Quadrangle
Blacksburg Quadrangle
Newport Quadrangle
Craig Springs Quadrangle

The lines of the proposed viticultural district are superimposed in red by the petitioners.

This petition has been reviewed for technical accuracy by Dr. Leslie McCombs, Professor and Viticulture Extension Specialist, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 24061.

We have tried to be responsive to the regulations governing the designation of specific viticultural areas. We have not sought to be exhaustive, however. Accordingly, if you or your staff need any further information in considering this petition, please let us know.

Thanking you for your consideration, we are

Very truly yours,



Karl T. and Myra C. Hereford,

Proprietors, MJC Vineyard

Attachments

NOTES

- (1) The Roanoke River Valley is one of six great watersheds that drain the Appalachian Ridges and Valleys, a 400 mile area that lies west of the Blue Ridge Mountains. The Roanoke River originates in the proposed viticultural district, flows north along the Eastern Continental Divide to the valley floor at Roanoke, Virginia, then cuts its way through a gap in the Blue Ridge to flow another 350 miles east and south through Virginia and North Carolina to the Atlantic Ocean.

The watersheds are: The Shenandoah Valley, which flows north from Staunton, Virginia, to the Potomac River; James River Valley, which originates in western Virginia between the Shenandoah and Roanoke watersheds, and cuts through the Blue Ridge to flow to the Atlantic Ocean. South of the Roanoke Valley are the New River Valley, the world's second oldest river gorge, which flows westerly from North Carolina and Virginia to the Great Kanawha River at Charleston, West Virginia, and the Clinch and Powell River valleys that drain deep southwest Virginia into Tennessee. See MAP II.

- (2) MAP III
- (3) Kegley's Virginia Frontier, F. B. Kegley (Roanoke: The Southwest Virginia Historical Society, 1938), p. 602.
- (4) Kegley, p. 213.
- (5) MAP III
- (6) BIKECENTENNIAL, The Biker's Yellow Pages, Missoula, MT, July, 1976.
- (7) EXXON ROAD MAP of Delaware, Maryland, Virginia, West Virginia, 1978, RAND McNALLY Map of Eastern States, 1978.
U.S. Geological Survey, AMS IV SE - Series V834, 7.5 minute series, Blacksburg, Ironto, McDonald's Mill, Glenvar Quadrangle, 1965.

- (8) USDA-Soil Conservation Service, "Urban Soils Programs", Virginia Polytechnic Institute and State University, 1981.
- (9) Ibid.
- (10) Department of Horticulture, VPI & SU, 1981.
- (11) Kegley, p. 166.
- (12) Samuel Lee Hancock, Local Resident and Roanoke County Agricultural Extension Agent, 1978.
- (13) Kegley, p. 162.
- (14) "Early adventurers on the Roanoke were homeseekers rather than explorers or land grabbers. They sometimes took up a number of small disconnected tracts to avoid unnecessary acreage in creek bluffs and untillable hillsides." Kegley, p. 90. See MAP I.
- (15) Kegley, p. 179.
- (16) Kegley, p. 177.
- (17) Kegley, p. 591-593.
- (18) Kegley, p. 177.
- (19) Kegley, p. 324.
- (20) Ibid.
- (21) "Enumeration of the Inhabitants and Statistics of the United States as obtained at the Department of State, from the Returns of the Sixth Census, by Counties and Principal Towns Exhibiting the Population, Wealth, and Resources of the Country. Prepared by the Department of State. Washington, 1841."
- (22) Virginia State Board of Agriculture REPORT 1889, Montgomery and Roanoke Counties. "What is the best wine grape?" "About what proportion of grape crop made into wine?", Richmond, Virginia.

(23) U.S. Census of Agriculture, Final Report - Vol. 1 - Part 24 - Counties for VIRGINIA: 1920 - 1959.

Reported 592,961 vines of all ages in Virginia in 1920 with 64,184 farms reporting, declining to 3,199 farms in 1959 and only 84,153 vines. The decline was reversed at the end of World War II but the recovery failed to develop after 1945.

(24) Moore and Alwood are crosses of Athens and Fredonia. Century I is a cross of S.V. 20-347 and Dunston 3 (Chasselas and Golden Muscat), Monticello is a cross of USDA 4606-5 and VPI 5-32. Price is a cross of VPI 4 (Hector x Seibel 13035) and VPI5-7 (Fredonia x Athena).

(25) Dr. Leslie McCombs, Extension Horticulturist, VPI & SU, 1981.

(26) At MJC Vineyard, for example, plantings dating to 1971 include: L. 4511, J.S. 26-205, Burdin 5201, V. 256, Chardonnay, Cabernet Franc, Cabernet Sauvignon, Merlot, Muller-Thurgau, and Sauvignon Blanc, as well as Delaware and Dutchess.

(27) U.S. Geological Survey MAP III.

(28) Ibid.

(29) Montgomery County Agricultural Extension Service.

(30) USDA-Soil Conservation Service: General Soil Map for Virginia, Legend A-3-11.

(31) Estimated soil properties for Frederick and Poplimento soils: MAP II.

(32) Ibid.

(33) Surrounding mountain soils are predominantly DEKALB-BERKS-WEIRT.

According to USDA-SCS, these are relatively shallow and impervious soils not highly suitable to agriculture. Pedlar Hills soil is principally CALVIN-BERKS, and the Roanoke Valley below the NORTH FORK is principally

RAMSEY-BERKS. One must go over the Eastern Continental Divide to the New River Valley to find soil comparable to that of the NORTH FORK. See MAP II.

(34) See MAP III.

(35) Climate at Selected Weather Stations in Virginia: 1941 - 1970: Temperature and Rainfall. E. L. Phillips, Department of Horticulture, VPI & SU, November, 1979.

(36) Montgomery County Agricultural Extension Service.

(37) Ibid.

(38) Thermal and rainfall observations, MJC Vineyard: 1971 - 1980.

(39) "Freeze Probabilities in Virginia", Research Report 119, J. H. Tinga, Department of Horticulture, M. H. Bailey, State Climatologist, U.S. Weather Bureau, July, 1967.

(40) Climate (Reference 35).

(41) MAP III.