RECREATION EVALUATION OF THE POWELL RANCH

St. James, Missouri

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Introduction

This report is the result of a reconnaissance study made in order to answer an inquiry by Senator Edward V. Long on behalf of a constituent who wished to know if an agency of the Department of the Interior would be interested in acquiring for park purposes a tract of land in the vicinity of Maramec Spring near St. James, Missouri.

The land investigated is known as the Powell Ranch, an area of 6900 acres. It is owned by the W. H. Powell Lumber Company, Inc., St. James, Missouri. All stock except one share is owned by Mr. and Mrs. Carl Eysenberg, Rolla, Missouri. Mrs. Eysenberg is the daughter of the late W. H. Powell. The single share is owned by H. Jackson Daniel, the corporation's lawyer.

Location

The study area is located partly in Phelps County and partly in Crawford County. It joins the Maramec Iron Works, holdings of the James Foundation, on the north, south and east. It is 6 miles southeast of St. James on State Highway 6, which passes through the James Foundation land and the eastern part of the Powell Ranch. It has good location in respect to major north-south and east-west
highways. Interstate 44 (U.S. 66) passes through St. James which is approximately 100 miles west of St. Louis; and U.S. Highway 63 passes through Rolla, which is only 6 miles west of St. James.

**Physical Description**

The area is a part of the Salem Plateau section of the Ozark Plateau physiographic province. The Meramec River passes through the heart of the area for a distance of approximately 6 miles, and the Dry Fork flows for a distance of approximately two miles through the western part of the area where it joins the Meramec. The bottom lands of these rivers average slightly more than one-fourth mile across and in places exceed one-half mile. The relief and topography of the area is controlled largely by the underlying rocks and the Meramec River. The area back from the river bottoms has been naturally dissected into ravines, ridges, and knolls. Although the topography is fairly rugged, the relief is not great. The maximum relief from the Meramec River bottom to the highest point is approximately 390 feet. The greatest relief in any one place is along the Meramec River, where precipitous cliffs rise in places to heights of 170 feet. (See the attached Meramec Springs Quadrangle for a better understanding of the topography of the area.)

Most of the area is capped with sandstone and cherty dolomite of the Houbidoux Formation, but much of the bedrock consists of cherty dolomite of the Van Buren Formation, Ordovician Age.
Vegetation Cover, Animal Life, Land Use

The knolls, ridges and steeper slopes are wooded with a fairly dense stand of deciduous hardwood trees, predominately oak. Some of the more gentle slopes and ravines are clothed with a fine stand of blue grass. These slopes and the river bottoms which make up 20% of the total area, are devoted to cattle grazing and cultivation. The rest of the area is covered with timber, some of which is ready for cropping. In October and November the fall coloring of the tree-covered bluffs and slopes of the area add much to its scenic appeal.

White-tailed deer, wild turkey, quail, and squirrel are abundant. The Dry Fork and Maramec River have an abundant supply of fish including trout which have moved down from Spring Branch which is well stocked with trout of catchable size. Although game animals are abundant and fishing good, public access to the farm area is denied. The Maramec River is not very deep in this stretch, but has a current that is adaptable to canoeing.

The Maramec Spring and Maramec Iron Works

The Maramec Iron Works, established in 1826, was the first commercially important iron works in Missouri. It was also the nucleus of early settlement in this area. In the earlier years, a large amount of
kettles, plow mallees and bar iron was produced at the plant. During
the Civil War practically all of the production went into plate
for Union gunboats built at St. Louis by James Eden. The business
was terminated in 1876.

Naramea Spring, with a daily average discharge of 96,500,000 gallons
is the 7th largest of the several permanently flowing springs in
Missouri. Water from this Spring was impounded to supply power for
the Iron Works. The water surges up in a circular basin at the
foot of a dolomite bluff, spreads out below the basin, falls over
an old rock dam, and flows down Spring Branch for half a mile into
Naramea River.

Lucy Northea James, granddaughter of William James, former owner of
the Iron Works, stipulated at her death in 1938 that this area be
preserved for public use and enjoyment. The James Foundation was
formed in 1941 to administer these lands and to consummate the
"great hope" Lucy Northea James held that "in private, considerate
control" they might be "ever open to the enjoyment of the people,"
who could be relied upon "to keep the natural beauty unmarred."

Today the Foundation administers 1700 acres of land in this area
including a park consisting of Naramea Spring, Spring Branch, a
mile and a half stretch of Naramea River, and the remains of the old
Iron Works.
Visitors are welcome during the daytime, and facilities for cooking on hearths and for picnicking are provided for them without charge. Camping is not permitted.

The Missouri Conservation Commission administers fishing within the park, and this appears to be an important recreation activity here. The sale of daily fisherman tags for 1965 had reached 37,923 by November 1. Trout of catchable size are released into Spring Creek periodically from holding pens that have been constructed immediately below Maramec Spring.

Value of the Powell Ranch

Mr. Eysberg would not place a monetary value on the property but said the price would be high. The James Foundation made an offer of $60 per acre for the 2600 acres south of State Highway 6, but this offer was not accepted.

Conclusions and Recommendations

The acreage under study lacks national significance, and does not qualify for national park or recreation area status. It does have good recreation potential for state or local purposes as a state park, state forest, state recreation area, or as an addition to the holdings of the James Foundation. It has good location in
respect to the metropolitan area of St. Louis; and with the Marmee
Spring Park and Iron Works as a nucleus, it should draw heavy visitation
from that locality. The area could complement the Marmee Iron Works
in providing space and resources for camping, additional picnicking,
and fishing. If it were State owned, approximately 8 miles of stream
not now utilized by the public could be made accessible, and the
entire acreage now closed to public hunting could be opened. Also,
because of proposals for impoundment of portions of the Marmee River
drainage elsewhere, it appears that the stretch within this area
along with adjoining stretches above and below it should receive
consideration by the State for possible wild river status.

Certainly if the State or the James Foundation does not acquire this
acreage before long it is most likely to be lost forever to public
use, because it appears to be well adapted to private recreational
development or to subdivision for summer home sites.

It is recommended that copies of this report be transmitted to the
Missouri Conservation Commission and to the administrator of the
James Foundation, St. James, Missouri.
Dry Fork Valley

Meramec River Valley
Pastured slopes with the wooded bluffs of the Meramec River in the distance
Twenty percent of the farm is in pasture or cultivation
Metal plaque at the base of the old furnace stack
Furnace stack, Naramac Iron Works

Picnicking among the remains of the Naramac Iron Works
Spring Branch flowing from Naramea Spring

Spring Branch and remains of Iron Works
Fishing is permitted below this point
MARAMEC
An Operation of The James Foundation
NEAR ST. JAMES, MISSOURI
The Maramec Iron Works was established in 1826 by Thomas James, a banker and iron merchant, of Chillicothe, Ohio, and Samuel Massey. A possibly apocryphal account tells that in 1824 or 1825 some Shawnee Indians, on their way to Washington, D.C., camped on the premises of Mr. James. Attracted by their decorative body paint of hematite, Mr. James inquired about its source and was told of a mine beside a huge spring in the West. Mr. James sent Samuel Massey, his "Marble Furnace" Superintendent, with the Shawnees on their return trip to Missouri to inspect the mine and the big spring. The report was favorable and in 1826 Massey returned to Missouri and began construction of the iron works. It was completed in 1829 at a cost of $40,000.

In 1843 Thomas James sent his son William to Missouri and four years later William bought out Massey’s one-third interest and took over the management. After Thomas James died, in 1856, William James continued to manage the works under a lease until 1866, when he bought out the other heirs and became the plant’s sole owner. Under his administration the works were rebuilt and Maramec became a large-scale operation.

The Bloomery

From the furnace, pig iron went to the Bloomery to be converted into wrought iron. The refinery forge contained five forges, whose stacks still stand. These forges were charged eight times daily with 280 lbs. of pig which was heated until it became a pasty ball called a "loup." This was subjected, under a trip hammer, to repeated blows and shaped into a rough square ingot about two feet long called a "bloom." The bloom then went to the anchony forge where it was heated and hammered into an elongated bar with knobs on each end called an "anchony." The next stop was the chaffery forge where the anchony was heated and drawn out under a forge hammer into finished wrought iron bars. All forge hammers were driven by separate water wheels and the forges "blow’d" by an old-fashioned "tub-type" blower.

The Product

In the earlier years of the iron works, a large amount of kettles, plow molds and bar iron was sold at the plant or hauled to St. Louis, Springfield, Missouri, or points west. Blooms were hauled to the Gasconade River and floated down in flat boats to the Missouri River or to meet a steam boat coming up-stream. After the completion of the Iron Road to Hermann, about 75 miles north on the Missouri River, most of the iron moved over this road to be loaded on steam boats for shipment east. This road was the principal outlet until the Pacific Railroad reached St. James in 1860. During the Civil War practically all of the plant’s production went into plate for gunboats built at St. Louis by James Eads.

The Village

The Maramec Iron Works was organized on the same plan as an Eastern 18th century iron plantation. Lands, buildings and equipment belonged to Messey and James. After the arrival of William James the community lost part of its feudal characteristics and took on some aspects of an isolated company town. Apart from plant buildings, the settlement included a grist mill, store, post office, school, boarding house, wagon and blacksmith shop, saw mill, Marager’s house and nearby one hundred workers cabins. The population was probably above five hundred.
Approximate Section Thru Maramec Furnace

The Furnace

The present furnace, built in 1857 (to replace a smaller one constructed in 1828), was a “cold blast” charcoal fired furnace with an average daily production of 14 tons of iron. It was charged through the tunnel head, at the top of the stack, about one hundred times a day, each charge consisting of 640 lbs. of iron ore, 18 bushels of charcoal and one bushel of “brands” (half-charred pieces of wood). These ingredients were wheeled across the bridge to the tunnel head and dumped in alternating layers. An air blast, entering through tuyere nozzles near the bottom of the crucible, fired the charcoal to an intense heat, melting the iron which dripped into the hearth below. The slag, formed by the action of the limestone and the impurities in the ore, floated upon the molten iron and was drawn off through the “cinder-notch” from time to time. About four times a day the iron was drawn off through the lower “iron notch” and run into moulds made into the sand casting bed in front of the furnace, the products being either ingots (“pigs”) or castings of various types. This smelting operation was continuous and went on until the lining of the furnace became burned out. The furnace was “blow’d” by a cast iron compressor of 2 cylinders with a 4'-0” diameter and 4'-6” stroke turned 16 rpm by a 16’ diameter water wheel. Most of the iron ore was from the Maramec Bank 0.4 mile west of the furnace. Charcoal was made by the old method of piling cord wood in earth-covered bee-hive-shaped piles, lighting the pile at the top and regulating the burning until the entire pile was charred.

The Spring

Maramec Spring, with a daily average discharge of 96,300,000 gallons, rises almost vertically at the base of an overhanging bluff of Van Buren dolomite into a pool formed by damming the original channel at the time the Iron Works was constructed. This dam diverted the water to the seven water wheels which powered the works and grist mill.

The source of the water is thought to lie in the area roughly south and west of the spring. The rock formations underlying this vicinity are of a permeable nature facilitating the percolation of surface water into the underlying strata. Within this area are several large dry valleys and the Dry Fork River basin. No doubt these valleys and a broad surrounding region are sapped by the Spring’s underground collection system. This is evidenced by the response of the spring flow to heavy rains which often cloud or muddy the water.

The James Foundation

After William James died at Baltimore in 1912, his granddaughter, Lucy Wortham James, reacquired much of her ancestors’ holdings around the Iron Works and the Spring. At her death in 1938, she made her residuary estate a part of the New York Community Trust. The latter organized the James Foundation in 1941 to administer the Missouri lands.

“My reason for purchasing the tract,” Mrs. James explained, “was that it is a spot of great natural beauty, which has been in the possession of my family for generations, and, through our permission . . . has been . . . used by the public under such regulation and supervision as to insure that the public use shall be seemly and shall not mar the natural beauty. I wish to continue such permissive use and to keep the natural beauty unmarred.”

To her executors she wrote:

“As this is considered to be the most beautiful spot in Missouri, it is my great hope that you will arrange that it may ever be in private, considerate control and ever open to the enjoyment of the people.”

That is the purpose and function of the James Foundation: to consummate the “great hope” Lucy Wortham James held for these lands her forebears had cherished—that “in private, considerate control” they might be “ever open to the enjoyment of the people,” who could be relied upon “to keep the natural beauty unmarred.”

In the name and memory of Lucy Wortham James, the James Foundation welcomes to Maramec all those who can share something of the attachment and affection she had for these surroundings and who will help to give expression to the generous dedication she impressed upon these acres.
This is a topographic map of the Meramec Spring quadrangle in Missouri. The map is part of the State of Missouri Geological Survey and Water Resources. It is mapped, edited, and published by the Geological Survey. The scale is 1:24,000, and the contour interval is 10 feet. The datum is mean sea level, and the northings and eastings are based on the Missouri coordinate system. The map includes various topographic features such as contour lines, streams, and roads.