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## SHORTER CONTRIBUTIONS

### THE CIVIL WAR AND THE FLOWERING DOGWOOD TREE (*CORNUS FLORIDA* L.)

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#### ABSTRACT

The Flowering Dogwood tree, *Cornus florida* L., is renowned as the State Tree of Virginia. Its natural history in Virginia has included destruction during the American Civil War as an important medical resource for the treatment of fevers from wounds and malaria. Evidence supports that it was cut down for its bark and used mostly by the Confederate Army’s medical staff.

**Keywords:** Anti-malaria treatment, Civil War natural medicines, Confederate Army medical practice, quinine substitute.

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#### INTRODUCTION

Before the Commonwealth of Virginia selected the Flowering Dogwood (*Cornus florida* L.) as its state tree in 1956, this plant had a profound history. George Washington was noted to have enjoyed the tree, and Thomas Jefferson was known to encourage the spread of the tree across the landscape (Peattie, 1950). These mentions aside, the Dogwood had a more consequential role in American history, especially its use in the Civil War of the 1860s.

#### BOTANICAL FACTS

*Cornus florida* is well suited for the climate and soils of Virginia. The tree, at its tallest, may reach 12 meters and have an average lifespan of 80 years (Bernheim, 2021). Its distribution across Virginia today is statewide. It is described as “a scattered understory species in many eastern

deciduous or coniferous forests” (Tirmenstein, 1991). Its wood is hard, strong, heavy, and fine-grained.

### MEDICINAL AWARENESS AND USE

Some Native Americans made a scarlet dye from the roots of the Flowering Dogwood (Tirmenstein, 1991), and others may have been aware of its medicinal value for the treatment of fevers. During the American Civil War, fevers from wounds and the treatment for malaria were frequent issues for the military medical staff, and quinine was the preferred medical treatment.

Quinine made from the bark of trees not found in North America, became difficult to obtain for the Confederate forces, as the Union navy imposed their blockade for medicine coming from other countries. Considering the limited supply of medicine, the Confederate medical staff were aware that boiled bark of the Flowering Dogwood was known for treatment of fevers from wounds and treatment from malaria. Hasegawa (2007) noted the Confederate medical staff knew that it was a good substitute for the absent normal treatment of quinine, and notes that surgeon Joseph Jones mentioned in 1861 that it might be a quinine substitute. Such use was later noted in F.P. Porcher’s medicine resources book published in 1863. Thus, Confederate medical staff sought Dogwood bark to produce the needed medicine.

### EVIDENCE OF REMOVAL

The next step for medical staff was to obtain and process the Dogwood bark for its medical uses. Hasegawa and Hambrecht (2003) note that Confederate Medical Laboratories throughout the South were established for medicinal preparations. By 1862, the Confederate Surgeon General in Richmond, VA was publishing announcements about indigenous plants that could be turned into medicines and the Flowering Dogwood was prominent on the list.

Figure 1 presents a copy of an advertisement that was placed in Southern newspapers, with “A HIGH price” payment offered for “DOGWOOD” with certain words capitalized likely for emphasis and importance.

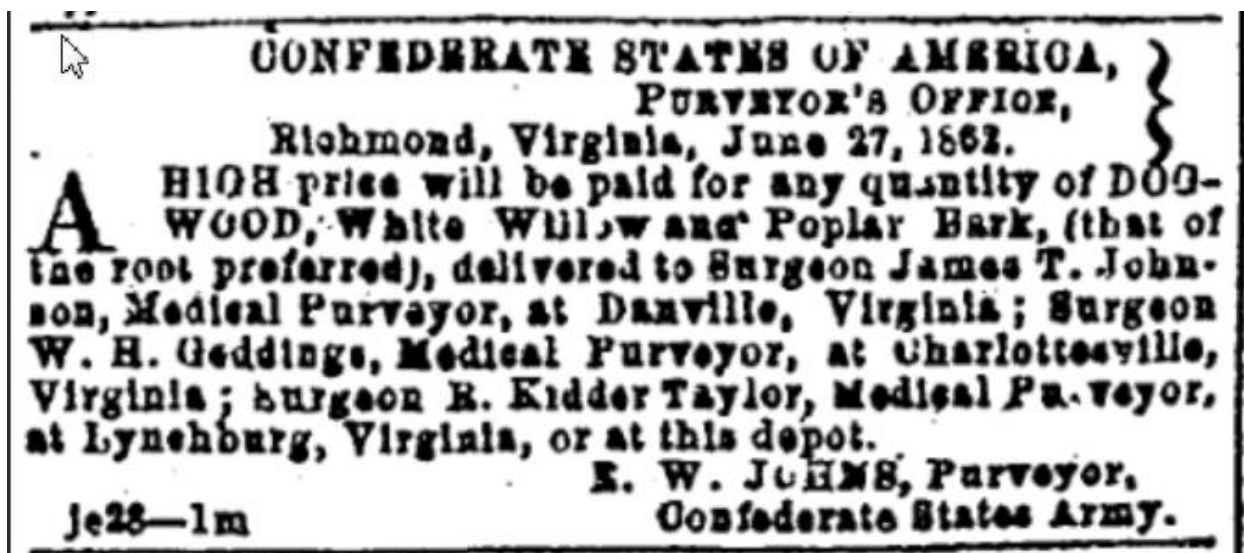


Figure 1. Confederate Army 1862 offer of purchase for Dogwood bark (credit Virginia Historical Society, 2016).

A Confederate Laboratory in Charlotte, North Carolina mentioned that Flowering Dogwood bark was purchased at a rate of 25 cents per pound (Hasegawa & Hambrecht, 2003). This indicates that civilians were involved in the procurement of Flowering Dogwood bark to be processed into medicine, presumably for the above noted uses.

By December 1863, S.P. Moore, the Surgeon-General of the Confederate States Army, provided a receipt for making Dogwood bark potion as a quinine substitute (Bollet, 2002).

No written record has been discovered that revealed that field surgeons, traveling with the Southern armies, were harvesting Dogwood bark and making their own medicines. One could assume that medical staff did cut down any Dogwood trees they might see along their travels from battlefield to battlefield.

Many trees were destroyed for various reasons during the Civil War. An estimated 2,000,000 were cut down for roads, bridges, fortifications, earthworks, fires, and living structures. Nelson (2012) reports that an estimated 20% of the tree cover in Confederate states was left after the War. As Figure 2 shows, battlefields were stripped of most arboreal vegetation.



**Figure 2.** Federal cavalry at Sudley Ford, Bull Run, Virginia, 1861 (photograph by George N. Barnard; Library of Congress, Washington, D.C., LC-B8171-0313 DLC).

In an examination of land survey records Flately & Copenheaver (2015) demonstrated continuous presence of, *Cornus florida* in southwest Virginia from the 1780 to 2000, but no density or abundance data are noted. Peattie (1950) claims that 90% of Flowering Dogwoods were cut (and removed) in the 19<sup>th</sup> century. He claims it was because the tree was used to make wooden shuttles in the textile industry, but additional evidence supports the tree's removal for another reason, specifically for the medicinal value when their bark was needed.

## EPILOGUE

No direct records exist shortly after the Civil War regarding the abundance or density of Dogwood across the Commonwealth of Virginia landscape. With a maximum of 80 years lifespan,

it might be impossible for a single Flowering Dogwood to last for centuries when more detailed surveys were undertaken. The evidence of the use of this tree during the Civil War and probable removal is recorded. Flowering Dogwood's role as a source for needed medicine is well documented.

Prior to and after the Civil War, Native Americans used Flowering Dogwood for various cures and treatments (Banks, 2004). In the early 1900s, this author's great grandfather procured herbal medicines from surviving members of the Eastern Band of the Cherokee Native Americans, and it is believed the Flowering Dogwood bark powder was sold at his pharmacy.

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