

## Monarch

A Notable Feature of the Wild Botanic Garden:  
Eloise Butler wrote in 1915:

One of my white birches on a hillside has eight bolls, while opposite in the meadow a yellow birch rejoices with seven. Between them "Monarch," the largest white oak in Minneapolis, lifts his aged head and rules the landscape.



Monarch in 1926. Due to age and accumulated storm damage, the tree was taken down in 1940.

It is reported that Eloise measured the circumference at 10 feet and always stated that the tree was over 700 years old. The age is wildly overestimated but tree growth factor charts produced from field studies were not available in her day. (details in note 1) These studies have produced tree age calculation tables which for a white oak of that size would indicate an age of 290 years for trees growing in perfect environment but perhaps older for a typical forest tree of the White Oak species. [note 2]

Some new information came to light when on May 6 1946 the *Minneapolis Tribune* in Ruth Thompson's *Minnesota Memories* column published a look-back at Eloise Butler under the theme that the Garden was a memorial to the former teacher. The writer states Monarch was taken down in 1942, but in 1940 we have Martha Crone's report of the correct date. The size of the tree in the 1946 article is given as 4 feet in diameter and 14 feet in circumference and the age of 700 years is given which is a repeat of what is stated in many references of the time. The only previous reference to the actual size of the tree is Eloise Butler's measurement.

Since Martha Crone had the tree taken down and was there at the time, perhaps this new reported size came from what was seen in 1940, in which case if we use the circumference of 14 feet we have an average diameter of 53 inches and the tree growth tables tell us the tree could have been about 400 years old, still well short of Eloise Butler's proudly proclaimed age of 700 years. The 400 year age happens to agree with the Park Board Forester, Louis Boeglin, who estimated the tree to be 400 years back in 1923 when a fire in dry grass and leaves enveloped part of Glenwood Park and came close to Monarch. (*Minneapolis Tribune* December 13, 1923 "City's Oldest Tree Periled by Flames in Glenwood Park". Text on next page.) But there is no doubt that Monarch was old and decaying.

On April 4, 1912, tree surgeons were brought in. Eloise noted in her log "Monarch treated surgically today." Dead limbs were removed and concrete was used to reinforce the rotting trunk. The rotting trunk may be the reason that the base of tree usually produced a mushroom, *Polyporus frondosus* [Hen of the Woods], often of large size - 25 pounds in 1935.

In an essay she wrote in 1926 [*Trees in the Wild Garden*, note 3], Eloise gave some details about that surgical operations and subsequent events.

'Monarch,' as we call him, was slowly dying atop. So, in obedience to the scriptural injunction, his dead limbs were cut off and cast away, and decayed portions of his "heart" - not essential as with humans for circulation -- were taken out and replaced with concrete. Thus, lopped and reinforced, he bade fair for many more years to hold sway. Alack and alas! In the tornado of June [1925], large chunks of concrete were belched out and all the limbs torn off. How long will he yet stand without his crown?



Eloise Butler with Monarch, July 24, 1924  
*Minneapolis Star* photo.

Her question would be answered by her successor, Martha Crone, in 1940. On October 28th 1940 she went back to the Garden (the Garden closed October 15 in those days) to direct some workers on which trees to cut. She met Mr. Lucking there. One of the trees removed was the old giant White Oak. [Greg Lucking, Parks horticulturist from 1940 to 1966]. In her annual report to the Board of Park Commissioners (December. 11, 1940) Martha wrote:

It is with deep regret that I record the passing of the oldest inhabitant of the Reserve, the Giant White Oak, estimated age 700 years. It had become a hazard to passers-by, therefore it was removed in October.

NOTE 1: The 10 foot circumference is reported in a description of the Wild Botanic Garden that appeared in the May 3, 1913 issue of *The Bellman*. Field studies done by the Morton Arboretum in Chicago resulted in an age calculation for White Oaks. Referencing that data yields the age of 290 years.

NOTE 2: Other examples: An example of a White Oak that can attain an age of 240 years is an old White Oak recently taken down in the forest at St. John's Abbey in Stearns County Minnesota. Tree ring count indicated it started as an acorn around 1776.

The largest known White Oak today in Minnesota is in Scott County and is 5.8 feet in diameter and that still falls well short of 700 years. The only known White Oak in North America of that age is the National Champion located in Virginia, having a circumference of 331 inches (27.6 feet - 8.8 feet in diameter), which yields an age approaching 800 years. [The Morton Arboretum studies state the growth factor for white oaks is 7.6, which is multiplied times the diameter in inches to attain the average age.]

NOTE 3: This text is available on The Friends website in the Garden History Archive and in Martha Hellander's book The Wild Gardener.

