

# Treeways

2023 - 2

## Sunfish Lake Woodland Evolution

Our Sunfish Lake woodlands have changed much over the last 200 years and quite dramatically. Two hundred years ago Sunfish Lake was likely an Oak Savanna woodland with more ponds and marshland than we currently have. An Oak Savanna is an ecosystem that has less than 50% tree cover so the area of Sunfish Lake was likely an open, park-like woodland. Sunfish Lake's current woodlands are not original, pristine forests, they are the second growth forest that grew up to replace the woodland that had previously been cut down.

The old growth woodland was probably cut down to feed steamboats that navigated the Mississippi river during the second half of the 19<sup>th</sup> century. Evidence that this is true is suggested by the fact that the oldest oak trees in the City are uniformly in the 125-150 year old age range. Our old friend, Dick Bancroft, helped me understand this tidbit of history as we walked his property looking at his old oaks with me years ago.

The largest mature green ash trees growing in our landscapes and currently dying due to the introduced pest, emerald ash borer, were likely planted by early residents of the area around Sunfish Lake. The biggest ash trees were planted and then their seedling progeny established themselves along roadsides, wetlands, woodland edges, and in parks. This migration of seedling ash trees from yard landscapes to woodland and wetland is evidenced by relative locations of larger, older ash trees nearer the original planted mother trees. Ash trees of decreasing size and age occur as distance increases from the original mother trees in our maintained yardscapes.

Buckthorn, that evil genius of a tree in our midwestern woodlands was introduced from Europe. Buckthorn was introduced as a "hedge" plant about 50+ years ago and it is in fact a terrific hedge shrub that handles aggressive pruning and shaping without complaint. You just can't stop it with pruning. When it was introduced by multiple major nurseries, it was found to grow well here and was well received and widely planted. The downside is that it grows really well here, was widely planted, is a prolific seed producer, is spread widely by birds, exudes chemicals that help it take over native woodlands, and is hardly ever eaten by our native wildlife. When buckthorn escaped our maintained landscapes, it proceeded to take over and push out much of the native understory species in our woodlands while forming a thick thorny jungle.

Forty years ago the Sunfish Lake woodlands were relatively open and see-through compared to the current dense buckthorn jungle. Twenty years ago our Sunfish Lake woodlands were a solid buckthorn jungle from woodland edge to woodland edge. Buckthorn grows into thick brushy thickets with dark green foliage that last late into the fall and so provided great screening between adjacent properties. From 20 years ago to the present we learned and adopted the term invasive species. Invasive species are essentially an introduced organism that causes economic or other harm and buckthorn is one of many invasive species. Over the last 20 years we have done buckthorn busts, chemical herbicide spraying, controlled burns, and prescribed grazing all in the name of controlling or managing buckthorn and other invasive species. Buckthorn can be managed and controlled but many of us have internalized the aphorism "buckthorn is forever".

In 2022 it was apparent that buckthorn and other woody invasive species management was in full swing in Sunfish Lake. There is much more relatively open woodland in the City than ten years ago due to resident buckthorn removal and management activity. Homeowners that a few years ago could not see neighboring homes due to the impenetrable buckthorn jungle can now see each other again as they could 40 years ago now that buckthorn is being managed. In most cases this more open woodland is a positive. In general, the City endorses buckthorn and other woody invasives species removal or control and there is no permit required unless the area involved is greater than 1 acre during one calendar year. Areas larger than 1 acre require a plan and a state permit.

Buckthorn jungles are evolving into open woodlands before our eyes and due to the diligent efforts by our neighbors. Some of their projects approach achieving the oak savanna ecosystem that we started with 200+ years ago.

Your City Forester is available for a free consultation by phone, text, email or an in-person discussion of all things trees, environment or landscape within the City of Sunfish Lake (612-803-9033 or [Jim@LStrees.com](mailto:Jim@LStrees.com)).