

How To Make Your New Year's Resolution Work for You or How After Six Years I Learned to Control My Expectations—Kudzu Style

by Rachael Watman, Extension Master Gardener Volunteer

For the past six years, I have had the same New Year's Resolution: To eradicate my Kudzu. I completed my Master Gardener training in 2018. My final project "Kudzu: A Love Story" was a bit of a divergence from the traditional presentations, but I wanted to learn about this maligned invasive which had overtaken nearly an acre of my farm. My kudzu patch had been around for some time; it was dense, with coverage on the ground and vines overtaking a number of mature trees. Through my research and Master Gardener training, I learned much about its history and how it grows. Why it was loved, why it is now hated, and how hard it is to eradicate. (Spoiler Alert: it takes years and is done better when you bring in the experts.) And then, in 2019, kudzu climbed to the top of my New Year's Resolution list. It had to be eradicated.

Kudzu is a perennial, climbing vine of the legume family. Kudzu is deciduous, losing leaves in the fall after a killing frost. It produces long, hairy vines which spread in all directions from a central root crown; vines produce nodes to form root crowns where they come in contact with the bare soil. Vines can grow up to 30 to 100 feet per year and in the early summer, kudzu can grow up to a foot per day.

Kudzu was introduced to North America in 1876 in the Japanese pavilion at the World's Fair in Philadelphia. During the Great Depression, thousands of acres of kudzu were planted by the Civilian Conservation Corps for hillside stabilization projects. Kudzu was also marketed as a drought-tolerant, nitrogen-fixing legume for livestock feed.

The roots contain starch, which has been used as an ingredient and a tea. In traditional Chinese medicine, kudzu has been used as a remedy for alcoholism, measles, menopause, diabetes, fever, and pain. Recent research has revealed kudzu's effectiveness in treating addiction and in promoting liver regeneration.

6 Years Ago



Controlling Kudzu



Current Status



Photos by Rachael Watman

So why is kudzu a problem? Kudzu's rapid growth as a perennial allows it to displace native vegetation. Kudzu changes soil chemistry, altering its environment. Kudzu also emits isoprene and nitrogen oxides which can increase dangerous levels of ozone pollution. Control costs have been estimated over \$1.5 million per year as vines must be removed from power lines, railroad tracks, and roads.

Kudzu's stock has plummeted since 1950: first it was removed from agricultural use, then slid into "weed" status, then "noxious weed", until it finally hit the list as an Invasive which threatens Virginia's forests, grasslands, wetlands, and waterways.

Given this, I needed help with my acre.

Armed with my research and Master Gardener training, I brought in the experts—The Virginia State Office of Natural Resources Conservation Service (NRCS) and the Virginia Department of Forestry. Together, we developed a conservation plan.

We started with the idea of burning the kudzu to clear the land to assess the terrain and number/size of the kudzu root crowns. Weather conditions made this impossible—it was always too dry or too breezy. We had cut fire lines, but we couldn't set it on fire. After a few years of this, I realized that the fire lines themselves control the kudzu, limiting its growth. Perhaps this was enough? Could we simply control the kudzu, rather than attempt to eradicate it?

We started to use heavy equipment and mow the kudzu to limit the production of new food reserves by reducing photosynthesis. This strategy is slow, must be repeated annually—hence, my new New Year's Resolution. It has proven effective in reducing the root crowns to limit the spread and the overall size of the infestation. It has also proven effective in limiting my disappointment. I need not mourn the unattainable. Control is all I needed.

The pictures posted here were taken over a span of six years showing the effectiveness of mechanical harvesting of kudzu. I am grateful for the contributions of the NRCS and Virginia Department of Forestry for being my long-term partners in realizing my resolution.