

## **Garlic Mustard**

*Prepared by Victor Illichmann*

Garlic mustard is a learning experience. I'd like to share what I've learned. I have been fighting garlic mustard for 12 years. Since 2007 it's been my primary responsibility to control it in Green-Rock Audubon's Androne Woods. This 16 acre woods was wooded prior to European settlement, it's not an overgrown savannah. The Cleophas family homesteaded this land. When their neighbors were fencing cattle in their wooded areas, they were fencing cattle out of these woods. Consequently, we have a unique and diverse ground cover with 60+ species.

Prior to 2007 about 3 acres had good control of garlic mustard. Thirteen acres were heavily overgrown with garlic mustard and black raspberry. Where the 3 acres ended, there was a chest high wall of vegetation that was virtually impassable. It was obvious that nothing could be done without access. We made trails dividing these woods into 8 two acre sections.

At the Midwest Conference at Ho Chunk near the dells, I met someone that insisted torching was the way to go, not pulling. He said he had 90% success. Our local garlic mustard guru disagreed, he said what wasn't killed would be harder to pull in the spring. I found a place at the wall heavily overgrown with garlic mustard. In 4 hours I pulled garlic mustard in about 100 square feet. A week later I went back and torched about a quarter acre in the same amount of time. I decided to torch garlic mustard in the fall and pull in the spring. That fall we started torching and did about 8 acres. In the fall of 2009 we managed to torch the whole 16 acres and have continued doing this. The best we could manage pulling in the spring was about 8 acres. The spring of 2011 there wasn't enough 2"d year garlic mustard to justify pulling, so we started torching. We torched half and pulled in the rest. That's the first year we did the whole woods in the spring. In 2010 we used 57 hours per acre controlling garlic mustard. In 2011 that was down to 41 hours.

It's very obvious that torching is much more labor-effective than pulling. Spring and fall control puts any garlic mustard plant in harm's way 3 times 'in its lifetime. On the down side, there is more collateral damage, especially in the spring where there is a dense growth of garlic mustard. You could be using \$60 worth of propane an acre. We use 100,000 btu torches. We prefer the 111b propane tanks from Ace. They are lighter and have a low center of gravity. One tank won't last a whole day, so we need 2. Between the tanks and torch, it costs about \$150 to equip 1 volunteer. In the future we plan on doing little or no pulling.

If you pull garlic mustard, take off the buds or flowers and put them in a bucket, not a bag, and leave the rest lying in the woods. If you get permission from a neighboring farmer to spread these in a corn field, disposal is easier. These three things make pulling more labor-effective.