



Nature in Como Park

Invasive Garlic Mustard – loathe it or eat it.

Written and illustrated by Deb Robinson

May 21, 2009

After working so hard to get buckthorn under control, two years ago Como area volunteers had to start pulling up yet another invasive plant that was taking over the Como Woodland. This new upstart, Garlic Mustard, has since spread all over Como Park, and it looks like we've lost that battle. But we could win the war against Garlic Mustard by letting everyone know how good Garlic Mustard tastes and how nutritious it is. There are many tasty Garlic Mustard recipes available online, but I've included a few (at the end of this updated column) from Friends of Patapsco Valley and Heritage Greenway's "Garlic Mustard Challenge." So get out in the park and start pulling and eating Garlic Mustard – you'll be doing the woodland and yourself a favor. DR



With birds singing, trees flowering, and people smiling, spring melts into summer. By Memorial Day, the flotilla of sparkle-green paddleboats are out on Como Lake with the mallards and wood ducks. The Schiffman Fountain is spraying and Hamm Falls is splashing again with sky-blue waters. Bridal parties and recent graduates pose in front of the Gates Ajar for the photographers. Live music and tree swallows dance over the lake from the Como Lakeside Pavilion. The scent of lilacs floats in the air along with the smells of freshly mown grass.

All the wonderfully familiar sights, sounds, and smells of late spring unfold into summer's warmth and slower rhythms. But an unfamiliar sight (and smell) also unfolded across the forest floor of Como Park woodland: garlic mustard (*Alliaria petiolata*).

Many volunteer hours have gone into removing invasive buckthorn trees from Como Park woodlands over the years. Unfortunately, that was just the first assault. Garlic mustard, listed as a *prohibited noxious weed* by the Minnesota Department of Agriculture, is just one of the latest introduced plants that is threatening the native plants of our shady woodlands.

It's shocking how quickly garlic mustard colonized both disturbed woodlands and established native woodlands alike. This Eurasian species was brought here as a food source. It wasn't until the mid 1990's when midwestern resource managers and horticulture agents started noticing the menacing potential of this innocent looking salad green. But their warnings didn't spread as fast as the garlic mustard did.

Garlic mustard is a biennial (two-year life-span), and it prefers cool temperatures and moist conditions. A long dry spell in the heat of mid-summer can kill the first year garlic mustard plants. But the garlic mustard plants that survive to the second year will flower and drop thousands of seeds before the heat of July sets in.

Back in 2001, native flowers like jack-in-the-pulpits, trout lilies, Solomon's seal, and nodding trilliums were still common in Como Park's woodlands. Within six years garlic mustard had spread into the shady forests and within eight years it was out competing those same native wildflowers. How did this newcomer take over so quickly?

We humans did not invent chemical warfare – plants did. Many plants vie with neighboring plants by producing chemicals that inhibits the germination of their neighbors' seeds. However, garlic mustard employs an even more cunning form of allelopathy in its fight for supremacy.

Garlic mustard produces chemicals that kill soil mycorrhizae (the fungal partners that help many species of plants take up nutrients). Garlic mustard also overshadows native spring flowers because garlic mustard stays green through the winter. It is ready to shoot up with new growth before the native plants have even come up out of the ground. And, because garlic mustard is not native to our continent, it has no natural predators here – yet.

Luckily, garlic mustard isn't infallible. Bio scientists in Switzerland are studying which of garlic mustard's natural European insect predators would make a good

candidate for release here in America. Some tenacious native plants, like jewelweed (*Impatiens capensis*), can out-compete garlic mustard on their own. And if we humans, who brought this plant to North America as a food plant, started pulling up all the wild garlic mustard by the roots and taking it home to eat, we would be on the way to eradicating this invasive plant in no time.

Until the general public discovers the great taste of garlic mustard, we'll have to depend on the tenacious weed-pulling volunteers from Como Park High School, the Como Woodland Advisory Committee, and EcoPartners to protect our native woodland plants.

A group of 31 volunteers came out on May 16 to help pull up flowering garlic mustard before it dropped a new crop of garlic mustard seeds in the Como Woodland. Amazingly, growing under the garlic mustard were native flowers struggling to survive. We tiptoed around the native plants as best we could and yanked out trash bags full of garlic mustard.

We were not able to eliminate garlic mustard from the entire woodland with our bare hands. However, we are trying to keep a few areas in the woodland free of garlic mustard. Those areas will act as safe-havens where some native wildflowers will be able to survive until we can figure out how to control the garlic mustard over the long haul.

Floodwaters can spread the seeds, but garlic mustard's primary mode of travel is on the tires of bikes, ATVs, and machinery. In other words, humans are the main vectors for infesting our woodlands with this invasive plant.

It would have been easier to pull up the first wave of invaders rather than allowing this invasive to dominate the forest floor before action was taken, but better late than never. And the best revenge would be to pull all the garlic mustard out of our woodlands, purée it into a pesto, add pasta, and enjoy.

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Endnotes: *For more information about invasive plants, visit the Natural Resources Dept. of Cornell University: www.invasiveplants.net or visit the Minnesota Invasive Species Advisory Council website: www.mda.state.mn.us/plants/pestmanagement/misac/

WINNING RECIPES from **The Garlic Mustard Cook's Challenge** of *Friends of Patapsco Valley and Heritage Greenway* (an organization of citizens who protect, preserve and interpret the natural, historic, and cultural resources of the central Patapsco

Valley); to see pictures of the recipes featured below, visit:
<http://www.patapscoheritagegreenway.org/garlic07/index.html>

PROFESSIONAL CHEF:

Robert Dunn, Executive Chef, Belmont Conference Center

Garlic Mustard and Spinach Raviolis with Garlic Mustard Pesto

Raviolis:

4 shallots / 1 clove garlic

2 cups spinach

2 cups garlic mustard

4 oz. ricotta cheese

2 oz. Parmesan cheese

2 oz. chopped sundried tomatoes

6 sheets fresh pasta

Sauté shallots and garlic in 2 Tbl butter until tender. Add spinach and garlic mustard greens & wilt. Season with salt and pepper. Remove from pan and cool slightly. Squeeze excess liquid from green and chop. Combine all ingredients and season to taste. Cut pasta sheets to desired size. Egg wash pasta and fill with garlic mustard and spinach mixture.

Pesto:

1-cup garlic mustard and 1 cup basil leaves

3 cloves garlic

2 oz. toasted pinenuts

4 oz. olive oil

juice of 1 lemon

In food processor combine all ingredients except olive oil. Puree and add olive oil with processor running. Toss cooked raviolis with pesto.

Time required: 1 hr. Serves 10.

YOUTH:

Garlic Mustard Scallion Cakes

Submitted by Jay Voris

2 eggs

1 bunch scallions, chopped

1 pkg flour tortilla

1 cup garlic mustard, chopped

2 tsp sesame oil

oil for frying

Mix scallions and garlic mustard. Beat together eggs and sesame oil. Brush on side of a tortilla with egg mixture. Sprinkle on scallion/garlic mustard mixture. Brush egg mix on another tortilla, then put on top of 1st tortilla with egg side down (repeat until all tortillas are used). Cover with plate and weigh down with cans to seal tortilla (about 15 minutes). (Separate cakes with wax paper.) Heat oil in heavy pan. Brown cakes on both sides (~2 minutes total). Drain on paper towel. Cut into wedges and serve.

WINNING RECIPES

The Garlic Mustard Cook's Challenge 2002

YOUTH:

Garlic Mustard Pasta

Submitted by Alex Streat, age 12

1 pound linguine

2 TBSP. Butter

cup garlic mustard, washed, crisped and chopped

Cook linguine according to directions on box. Sauté garlic mustard in butter. Blend with cooked linguine. Garnish with garlic mustard stems. Serve hot or chilled.

WINNING RECIPES

The Garlic Mustard Cook's Challenge 2001

Stuffed Garlic Mustard Leaves

Submitted by Alex Streat, age 11

20 medium garlic mustard leaves

5 wooden spoonfuls of sausage
4 wooden spoonfuls of rice
2 TBSP. Chopped garlic mustard leaves
1TBSP. Lemon juice.

Mix rice and sausage and stir well. Add chopped leaves and lemon and toss. Put a teaspoon of this mix on a medium leaf of garlic mustard. Hold leaf together with a toothpick. Serve on a plate.

Sally's Tossed Salad

Submitted by Sally Voris

4-6 leaves ruby red leaf lettuce
4-6 leaves Romaine Lettuce
1-2 handfuls tender garlic mustard leaves
French sorrel and bronze fennel, one leaf each
1/3 cup mandarin orange slices, drained
1 slice of smoked salmon
1/8 cup sunflower seeds
Croutons

Wash and crisp all the leaves and tear the lettuce leaves into a salad bowl. Cut the garlic mustard leaves, the French sorrel, and the fennel into narrow strips and add to the salad. Cut the oranges and the smoked salmon into thin strips and place in the salad. Sprinkle on sunflower seeds and fresh, herbed croutons. Dress lightly with Italian dressing. Serve immediately.

Alex's Bulgur

Submitted by Alex Streat 7

1 c. bulger
pinch salt
one or two handfuls, fresh, tender garlic mustard leaves
1 TB butter

Cayenne pepper

Soy sauce

Put two cups of water, a pinch of salt and one cup bulgur into a saucepan. Cover the container, bring contents to a boil and cook slowly for about 15 minutes. Place bulgur into a serving dish; cut the garlic mustard leaves in thin strips onto the steaming bulgur. The mustard will wilt. Add the butter, cayenne pepper and soy sauce to taste and serve immediately. (It can be chilled and served cold as well.)