

April/May 2020

Turnip News



Master Gardeners Prince William

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MG President's Message

In normal times, April is one of my favorite times of the year. Everything is starting to grow and I feel like winter is over. I hope this finds everybody safe and looking forward to happier times in the not too distant future. Our daffodils are pretty much in the end stages at this point but were great for several weeks early on. The *Viburnum juddi* is just starting to bloom and will be in full bloom in about one week. Behind it, covering the porch rail is a large American Wisteria that is just starting to bud. They will bloom one after the other.

I start with the spring blooms because it brings joy to my heart and I think many Master Gardeners feel the same way. Enjoy the pleasures that your gardens can bring to you all thru the year.

It is such a sad time we are in.



photo by David Robison

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My son is an ER doctor in the Bronx and we talk every day. It is bad up in NYC and getting worse every day. I hope and pray for him and all the folks working in the hospitals in NYC and elsewhere, first responders, and patients everywhere. Please stay in your homes if you can; exercise safe distance rules and wear a mask if you go out. We do not get out too much now – we are lucky – I have heart disease and covid-19 would not be a walk in the park for me and millions of others with underlying health issues.

What is on tap for the Master Gardener Program this spring and summer? Who knows. The Governor has directed us to stay locked down to the extent possible until mid-June as of now. I know that Leslie and others are out at the Teaching Garden at times thru the week – and exercising safe distance rules -- but we have no plans for public or face-to-face sessions of any kind for the next couple of months. Maybe web-based programs can be put together. I know folks are working on putting something together in that world. We will have to start to return to some kind of business in June but have no idea yet as to what that might look like.

Nancy Berlin and the staff have done a great job in keeping us up to date (as best they can) on what the thinking and current status is.

I do not know if you have noticed that all the park car lots are closed, as are all the sports fields. However, if you go to the Parks and Rec web-site they say the trails are open for use as long as you find a legal place to park. We walk two 1.25 mile trails at the Bristow Station Battlefield almost daily now and really enjoy getting out of the house to exercise. You might consider that as an exercise option – remember a mask and safe distancing if others are on the trail. With the parking lots closed, few people are on the trails though.

Thank you for all that you do and stay safe!

David

-David Robison, President, MGPW, President@MGPW.org

Editor's Note:

Be on the lookout for changes coming to the *Turnip News*. We will be relaunching the newsletter as *In Season*, a quarterly journal of MGPW with an eye to including relevant information for Master Gardeners as well as the general public.

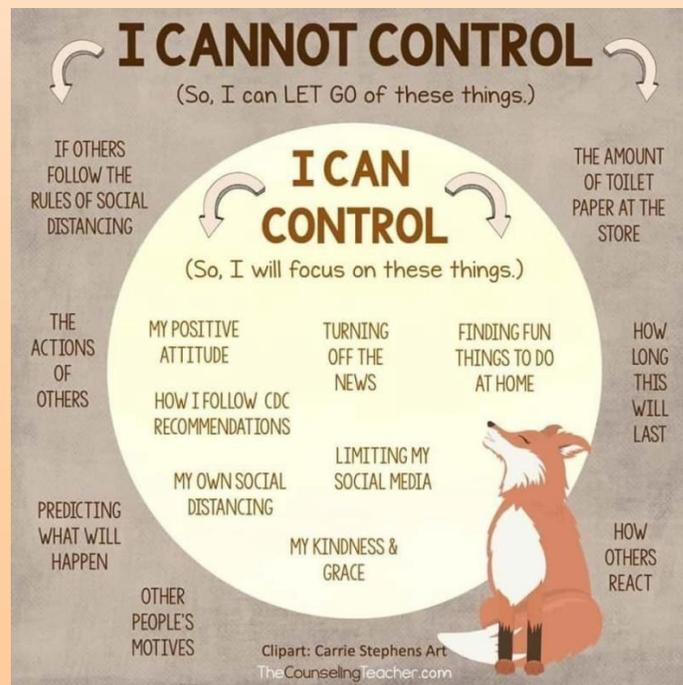
We hope to release the first *In Season* in June.

Stay-at-Home Toolkit

*We're all facing challenges on a global and personal level.
Here are some resources you may find helpful.*

(click each item below for link)

- ◆ **World Health Organization (WHO)**
- ◆ **Centers for Disease Control and Prevention (CDC)**
- ◆ **Virginia Department of Health**
- ◆ **eNotifications** - stayed informed about news, events, and information in Prince William County
- ◆ **Virginia Cooperative Extension: Resources for Vegetable and Fruit Gardening in Virginia**
- ◆ **City of Manassas Farmer's Market** - pre-order/pickup and delivery options
- ◆ **LocalHarvest** - find CSAs in our area, and around the country
- ◆ **Zoom** - stay in touch with virtual visits (they have a free option)
- ◆ **Gardening activities for kids**
- ◆ **"Discover the World of Orchids"** - U.S. Botanic Garden's virtual orchid tour



Stay safe and be well!

The Teaching Garden

by Leslie Paulson, Master Gardener

Did any of us think that we would be so restricted and just yearning to get back to each of our normal lives? For me, at the top of that list, is our Teaching Garden. Considering our reduced work force, we are doing ok. Understand that except for vegetable gardening, Virginia Cooperative Extension isn't supporting community gardens at this time. The exercise I need for my mental health, and which is okayed by the Federal Government, allows me to exercise there, six plus feet away from others. When I go, I suggest ten feet and feel free to wear a mask.

The Monastery is still welcoming the public to



walk and ride bikes on the property. In other words, exercise. Isn't it even a type of meditation? I think so. Please be advised that the

restrooms are not available at this time.

I took a few pictures last week. The Purple Martins are back and even with a spiffy new house nearby they preferred ours. They can be pretty noisy but I'm glad they are there to eat mosquitoes and other insects. I wish they liked ticks. Be aware the ticks are alive and moving around. Three of us have had them already this year.

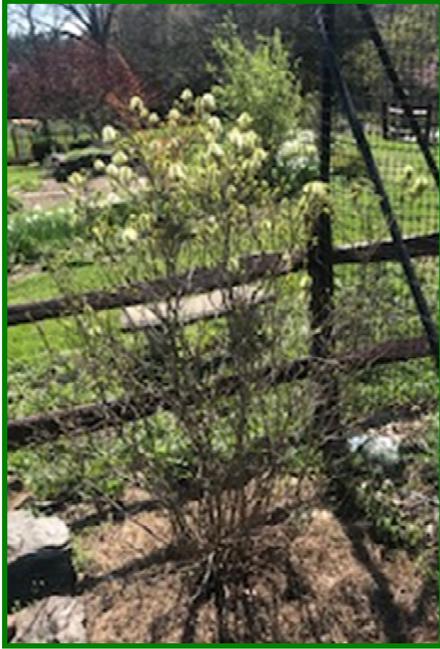
The Garden is always beautiful in spring; so many daffodils. Sally Peterson has now replaced the edging on the Zen bed with help from Jan Rice. It really looks nice as do all the flowering trees we have there. The small Don Egolf Redbud really burst out in flowers this year. Do you all know that the blossom



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looks like a hummingbird if turned sideways?

In the meantime, let's hope and pray we can have our plant sale in September. Any questions just let me know (Leslie ljp6651@comcast.net).



Marestail: A Farmer's Challenge

by Abbie and Vincent Panettiere, Master Gardeners

Some time back I was chatting with a Master Gardener friend who told me she'd gone to help a neighbor work in her garden and had found herself pulling marestail all weekend. From the expression on her face, this had not been an enjoyable task which led me to wonder what marestail might be like or how it could be responsible for destroying a garden. And importantly, did we have it in our garden without knowing it, under a different name?

Marestail's scientific name is *Conyza Canadensis* or a synonym, *Erigeron canadensis L.* It is an opportunistic annual weed, native to and found all over North America. It also naturalized in several forms in most of the temperate zones of Eurasia and Australia.

It has other names: horseweed, Canadian horseweed, Canadian fleabane, colts-tail and butterweed. It grows best in dry disturbed soil. The name, marestail, fits because the plants, after they've bolted, have tall (5' to 6") unbranched stems with willow-like leaves, that to some resemble horse's tails.

Marestail can emerge from the ground either in spring or in fall as a rosette. At this stage, it is much easier to remove. The fall-emerging plants become dormant over the winter, then bolt, set seed and die the following year. Fifty-nine to ninety-one percent of fall-emerging plants survive the winter. Once marestail bolts, flowers, and sets seed, it is very difficult to control. Part of the reason is because of its enthusiastic seed production. The number of seeds per plant rang-

es from 50,000 to 200,000 to 1,000,000. Even at the lower estimated range, the result is certainly a great number of possible marestail plants germinating from the wind borne seeds which can travel quite a distance on air currents.

Although in modern times marestail is almost universally unloved, apparently it was more respected by early Native Americans for various reasons, including as a preferred material for combustion. It was used for friction with a hand-drill to make a fire. The Zuni people used it as a sort of snuff, putting crushed flowers into their nostrils to cause sneezing which gave some relief to rhinitis. The raw, pulverized leaves and tender tops were said to have a flavor similar to onions, and were used as food by various peoples. Navajos made a cold infusion lotion as a snake bite remedy; Ojibwa smoked the florets as a hunting charm; the Potawatomi used it as a medicine for horses. A use that the Seminole had, that I've warned my husband was not healthy to try: he might have a "doctor" rub the plant on his body to rid himself of his wife.

For our purposes, however, marestail has had most significance and notoriety in its effect on farming. It was not considered much of a threat as a weed until two things happened. First, farmers began to change from ploughing their fields to what's called "conservation tillage," a partial or complete no-till system. When ground is ploughed, it is thoroughly turned over to a certain depth, the crop residues are buried and the bare soil exposed which makes erosion during the winter months more likely. The sub-surface

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web of soil life is disturbed by plowing and, in order to sow a crop the following year, farmers would need to use such things as disk plowing and chisel plowing to smooth out the soil and create furrows for seeds to drop into. Plowing was not favorable for marestail.

On the other hand, rather than plough the soil, in conservation tillage, the farmer uses either disking or chiseling, or both, to prepare his fields for the next crop.

These methods leave a portion of crop residue on the surface which holds the soil, preventing erosion, and also allows extended grazing of the stalks by farm animals. Also, it causes less disturbance under the surface of the soil.

I'm indebted to two sisters-in-law for information on these two methods of tilling: one sister-in-law grew up

on a farm and remembered: "... a disc harrow as a series of metal discs that are slightly convex/concave, each with a rather sharp circumferential edge, with a hole in each center, and all mounted perpendicular to each other, on a rod running through the holes. The discs are parallel to each other, and they roll around the central axis." And, "as the horse or tractor drags the array, the discs cut into the soil, while the concavity pushes each 'strip' of loosened soil slightly over to the side."

Chisel plowing also harrows the soil doing less damage to the soil structure. The blades attached to the back of the tractor look like the tines of a fork, but curved into a semi-circle, giving them an appearance similar to the hands of the "wicked old witches" you might have encountered in early fairy tales. They cut through the crop stubble leaving rows ready for sowing in the spring.



Horseweed (Marestail) (*Conyza canadensis* (L.) Cronq.)

source: Michigan State University, <https://www.canr.msu.edu/weeds/extension/marestail-horseweed>

And of course, crop residue might include some marestail busily making their thousands of seeds which fly off in all directions.

For farmers trying to control it, there's the problem that it takes less than five years for the weed to develop a resistance to herbicides. In order to protect their crops, farmers planted seed resistant to herbicides, such as glyphosate, in the stubble left from

last year's growth, then sprayed the whole area with the herbicide. Anything resistant – the crop seeds – would survive; anything not resistant – the weeds - would be killed. However, marestail was the first weed to develop resistance to glyphosate, reported in 2001 from Delaware, and quickly became resistant to many herbicides, including atrazine, paraquat and ALS inhibitors.

Marestail doesn't require much of a period of dormancy and it has up to an 86% germination rate. Several sources mention the loss of 64% of

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sugar beet crops, 83% of soybean crops and other serious losses when marestalk could not be contained.

In fighting the weed, it was said that marestalk could be controlled in the rosette stage but farmers were warned to control the plant before it began to bolt, sending up a 5' to 6' stem. When it reaches that size, it can survive most herbicide applications.

For More Information see:

<https://www.uaex.edu/yard-garden/resource-library/plant-week/horseweed-8-5-05.aspx>

University of Arkansas
Division of Agriculture, Research & Extension
Plant of the Week: Horseweed, Marestalk

<https://www.youtube.com/watch?v=a4EF1j1uGNU&feature=youtu.be>

YouTube
Using a Disc Harrow (Discing a field), Sept. 12, 2017

<https://www.canr.msu.edu/weeds/extension/marestalk-horseweed>

Michigan State University
Horseweed (Marestalk) (*Conyza canadensis* (L.) Cronq.)

<https://integratedweedmanagement.org/index.php/2017/03/28/weed-of-the-week-horseweed/>

GROW – No Seeds No Weeds
Getting rid of weeds through Integrated Weed Management
Weed of the Week: Horseweed (marestalk) March 28, 2017

<https://cropwatch.unl.edu/2017/pest-month-horseweed>

University of Nebraska - Lincoln
Institute of Agriculture and Natural Resources
CropWatch, Nebraska Extension Pest of The Month: Horseweed
January 5, 2017
Greg Kruger - Weed Science and Application

On the somewhat brighter side, marestalk cannot compete well in shade. Other than that, tillage is given as an effective control.

I'm pleasantly surprised that, considering how prolific and persistent this weed is, it hasn't found its way into my garden. Maybe it feels it's too high class to mix with the other green monsters who have already found homes here.

Technology Specialist
Chris Proctor - Weed Management Extension
Educator

<https://cropwatch.unl.edu/tillage/disk>

University of Nebraska-Lincoln
Institute of Agriculture and Natural Resources
CropWatch

<https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/chisel-ploughing>

ScienceDirect
Cropping techniques
H.J.S. Finch, ... G.P.F. Lane, in Lockhart & Wiseman's Crop Husbandry Including Grassland (Ninth Edition), 2014

<https://cropwatch.unl.edu/tillage/chisel>

University of Nebraska – Lincoln
Institute of Agriculture and Natural Resources
CropWatch, Chisel

<https://calscape.org/Erigeron-canadensis-0>

California Native Plant Society
About Horseweed (*Erigeron canadensis*)

<http://naeb.brit.org/uses/search/?string=conyza+canadensis>

NAEB Text Search

https://en.wikipedia.org/wiki/Erigeron_canadensis

Erigeron canadensis
From Wikipedia, the free encyclopedia

Virginia Master Gardeners Association (VMGA) Report by Leslie Paulson, VMGA President

Usually by now we would be getting ready to decide if we wanted to make a trip to Blacksburg for Master Gardener College in June. Due to the pandemic, Master Gardener College will be a bit different this year.

We know it will start on Thursday June 25th and this year it will be done in a virtual format. The cost will be \$50 per person. You can sign up to watch specific classes and keynote speakers. All sessions will be recorded. This means for \$50 you will be able to get many educational hours. We are hoping for 6 keynote speakers and 20-25 breakout sessions. Unfortunately, there will be no fun tours this year or any Steward Training. It was just too much to figure out under the circumstances.

There will be no discounts given this year for specific hour achievements. Any milestone you reached can be used next year. Also, because of the low cost, there will be no scholarships given by VMGA this year. Instead, the money will be put to scholarships for International Master

Gardener College next year.

If you are a member of VMGA but not a Lifetime member, your renewal is due by May 31st. If you are not a member, please consider joining the group. There is a trifold on the benefits of membership at: <http://vmga.net/PDF/recruitingbrochure.pdf>

You can also download a membership form, fill it out, and return to Deb Straw. It is found here: <http://vmga.net/PDF/VMGA%20Membership%20Applicationand%20RenewalForm8-2019.pdf>



MG College, Virginia Tech

photo by Harriet Carter, MG the units across Virginia, and be eligible for Master Gardener College scholarships in the future. You will join a larger group whose voice helps Master Gardeners be stronger. We have educational events across the Commonwealth for which VMGA members get a discount.

I hope you will consider joining VMGA. If you have any questions, let me know (Leslie ljp6651@comcast.net).

VMGA membership dues of \$12 per month or \$120 for a lifetime membership, have not changed in quite some time. That could change in fiscal year 2021. If you join, you will receive the newsletter, be connected to all

Audubon At Home Wildlife Habitat Program Update by Leslie Paulson, AAH Coordinator for Prince William County

I hope we can reschedule the training time for new Ambassadors in the fall. Right now, we are on hold like everything else.

In the meantime, I will just give you an update on the program. Prince William County will soon have new partners as Fauquier and Rappahannock Counties are joining us. Dawn Filipowicz, former AAH Ambassador for Prince William County, will now be the Coordinator for Rappahannock County. Dawn transferred when she and her husband Leo bought a home on ten acres in Amissville. We are also looking to include Shenandoah County in the AAH program.

The National Wildlife Federation has a website that you might find very helpful. It lists native plants appropriate for your location. Just enter your zip code: <https://www.nwf.org/nativePlantFinder/plants>

For now, as you see all your neighbors out gardening, consider sending them an email with the website for Audubon At Home, and invite them to participate: <https://www.audubonva.org/audubon-at-home>. If we train more Ambassadors, we will need more clients as well.

Thank you for your help.



Eastern-tailed Blue, *Everes comyntas*

photo by Jason Alexander, MG

A Moment in the Garden:

Wild violet, *Viola sororia*

photo by Jason Alexander, Master Gardener

