



# The VMGA Report

## The Voice for Virginia Master Gardeners

<https://vmga.net/wordpress/>

January/February 2022

Volume 27, Number 4

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### From the President Leslie Paulson, Prince William

This year really has flown by. We tried our first in-person meeting since I became President. It went pretty well. We will try again in April when we meet in Dillwyn. We will have 2 Units hosting; watch for more details in March's newsletter.

Elections are coming up soon. You can join our Nomination Committee by getting in touch with Frank Reilly. It's hard to believe that it is almost 2 years since I became President. Frank Reilly is also the person to let know if you would like to fill one of the openings we have on the Board. Please pass the word among your Unit that we need nominees who can carry on all the work that we do. Frank can be reached at [Frank@TheReillyGroup.net](mailto:Frank@TheReillyGroup.net)

As we approach our next Master Gardener College, we need to find a chair for the Scholarship Committee. This chair's job lasts only a few months. The needed committee members are chosen from previous scholarship winners. If you would like to help us out, please let me know. I'm sure that Tonya Harper would help explain the steps involved. [Ljp6651@comcast.net](mailto:Ljp6651@comcast.net) is my email address.

MG College is in Blacksburg this year. All the details are not quite worked out, but we will have great speakers and of course you will be able to see all your friends from across the state. This year the Steward program will be Land Steward. Save the dates June 22-26th.

As always, let me know if there are any questions or help you need. I encourage you all to consider helping serve our group. Please share our newsletter with nonmembers of VMGA as well. It is posted once it is sent out on our VMGA.net website: <https://vmga.net/wordpress/vmga-report-archive/>

I wish you all a very Happy Holiday and good health as we welcome 2022.

Leslie Paulson VMGA President

Thank you,  
Leslie Paulson

VMGA President – [president@vmga.net](mailto:president@vmga.net)

## 2022 VMGA BI-MONTHLY BOARD MEETINGS

February 12th      August 13th  
April 9th          October 8th  
June 25th          December 10th

VMGA Membership has its advantages:

- ◆ Unit Support
- ◆ Scholarships
- ◆ Newsletter
- ◆ Advanced Training
- ◆ Discount Event Fees
- ◆ Membership Directory
- ◆ Statewide Networking

### From the Editor

Deadline for Mar/Apr issue:  
**February 26th**

We would love to feature your unit's announcements, events or articles in the next issue. Articles can be about a favorite plant, tree, project, book review, or other topic of interest. This will encourage involvement around the state, getting more involved.

Please send to:

VMGA Newsletter Editor  
[newsletter@vmga.net](mailto:newsletter@vmga.net)

### NEWS AND NOTES FROM VCE LIAISON

Kathleen Reed, EMG Program State Coordinator

For updates, be sure to check out the Bi-weekly Update at

<https://mastergardener.ext.vt.edu/biweekly-update/>

### VMGA EDUCATION SPONSORSHIPS

VMGA is continuing to offer Unit Sponsorships for events that deliver Advanced Continuing Education. We had six units accept our sponsorship during 20/21. The purpose of our Sponsorship is threefold. We want to:

**Encourage Advanced Continuing Education for Virginia's EMGs.**  
**Demonstrate to units the value of VMGA.**  
**Have an opportunity to recruit members.**

We will sponsor in-person, virtual, and in-between formats. While our preference is large symposium or workshop events with lots of EMG in attendance, any size event can seek our sponsorship.

If you desire VMGA to defray the costs of your event, submit an application. For more information, please visit <https://vmga.net/wordpress/vmga-educational-sponsorships/>

If you have any questions, please reach out to Kirk Barley at [VMGAEdCmte@gmail.com](mailto:VMGAEdCmte@gmail.com)

### CALENDAR

**March 26, 2022**—Save the Date! The 2022 Gardening in the Northern Neck seminar will be held on **Saturday, March 26, 2022**. Plans are underway for the seminar to be held at the White Stone Church of the Nazarene in White Stone, with three guest speakers and presentations. Additional information will be available in early 2022 on our [website](#).

**March 19, 2022**—The Train the EMG Educator Day is March 19, 2022 at the Allegheny Mountain Institute Farm, Augusta Health, Fishersville VA. Tentative schedule is 9am to 3pm, with lunch available for a fee, or BYO. Anticipate ticket sales to open by 1 February. When you log-in to purchase, you will have final details, meal choices and class selection. We are planning in-person; rain or shine if the roads are open.

We are hosting this group of classes for the EMG who knows enough, but isn't necessarily comfortable engaging the public. These classes should tell YOU, the Student, how to teach the material, where to source resources and class aids, and give you some opportunity to apply your newly honed skills.

Please note the Shenandoah Valley Plant Symposium, hosted by the Waynesboro Parks and Recreation Department, is scheduled for March 18th at the Best Western. Details are at this link: <https://www.waynesboro.va.us/971/Shenandoah-Valley-Plant-Symposium>

For ideas or to clarify reach out to Kirk at [VMGAEdCmte@gmail.com](mailto:VMGAEdCmte@gmail.com) or 540.299.3940

**June 22-26, 2022**—MG College is in Blacksburg this year. All the details are not quite worked out, but we will have great speakers and of course you will be able to see all your friends from across the state. This year the Steward program will be Land Steward.

## FUNDRAISING

The Fundraising Committee is working to bring this process online. We have been implementing an entirely new system and establishing procedures for distance deliveries. Samples will be made available for each unit representative to share with their membership.

I wish to share with membership, ordering will take place the first of every month that we meet minimums. Product will be distributed the first and fifteenth of each month as available. Our returning in-person gatherings will resume in December 2021. I hope this schedule and sample availability will aid in the decision making process for our membership. The current inventory has a wide range of sizing in the actual product line. We will improve upon this moving forward.

You are appreciated and we welcome your contributions to the refinement of this process. Please feel free to telephone Mary directly at 703.216.1479.

Thank you in advance.  
Mary Martinez-Rigo  
VMGA, PWC, 2007

## VMGA CALL FOR TOPICS AND INSTRUCTORS

The Education Committee is planning an in-person training event for March 2022.

We are looking for recommendations for both topics and instructors. Self-nominations are welcome.

The theme of this one-day workshop will be *Training the EMG Educator*. We are looking for classes that focus on making the EMG confident and well-equipped to present the topic to the public.

To be clear, the typical class would orient the EMG students to the classroom, discuss enabling points like how to create or source props or handouts, then offer the EMG the chance to present the topic in whole or part. Each class will be different, as long as the student can present the topic, the details are up to the instructor.

So please share your ideas, recommendations, or nominations with Kirk Barley [VMGAEdCmte@gmail.com](mailto:VMGAEdCmte@gmail.com)

## Would you like to be more involved in the VMGA??

We are asking for volunteers for our Nominating Committee for our VMGA Elections in the spring. If you are interested, get in touch with Frank Reilly at [communications@vmga.net](mailto:communications@vmga.net).

We also are looking for people who would like to join our Executive Board or one of our committees. Please consider joining us as we work hard for all the Master Gardeners around the state. If you are interested, get in touch with Leslie Paulson at [president@vmga.net](mailto:president@vmga.net)

## NEWSWORTHY NOTES FROM NOTABLE NEWSLETTERS

The VMGA Report is always looking for submissions from EMGs, Unit Representatives, VMGA Committee Chairs, VCE Agents, and VCE Program Associates. What can you submit? All the news that's fit to print! Here are a few suggestions to get you started:

- Training recaps. Tell us your takeaways!
- Highlights of your successes in programming, lessons learned, photos of volunteers in action
- Upcoming events offered by your unit
- Book reviews
- Plant or garden spotlights.
- Photos of your plants
- Recipes using produce from your garden or a farmer's market
- Garden-related poems and other creative writing

Be sure to include your name and unit name. Submit your content by email to [newsletter@vmga.net](mailto:newsletter@vmga.net).

### Garden to Table: How to Grow Mushrooms

By Maria Stewart, Master Gardener  
Prince William County Master Gardeners

July 10th at [The Teaching Garden in Bristow](#), featured Extension Forestry Specialist, Adam Downing showed us how to grow shiitake and other mushrooms. Here are a few highlights, in case you missed it.



Nancy Berlin cooking mushrooms to sample;  
photo by Pam Dixon

- ◆ Shiitake mushrooms are best grown on logs cut from live trees after leaves fall in autumn and before leaf buds open in spring. Oak is best, and white oak, with its longer lasting, tighter structure, is better than red oak.
- ◆ Use live logs, but let them rest before inoculating. Trees have anti-fungal properties that need to dissipate.
- ◆ Lay inoculated logs on leaf litter (not soil) in the woods for about 1 year. Then stand them up against your house or a tree. Handling, moving, or banging the logs will cause them to flush with mushrooms.

Slugs are the main pest, but it's ok to eat mushrooms they've nibbled first.

Size doesn't impact flavor. And if a mushroom dries on the log, it's still good to eat.

To learn more see Virginia Cooperative Extension [“The Basics of Hardwood-Log Shiitake Mushroom Production and Marketing \(pub. ANR-102P\).”](#)



drilling holes to inoculate the log  
photo by Florence Pullo



inoculating the log  
photo by Florence Pullo



inoculated logs given away to  
lucky participants  
photo by Pam Dixon

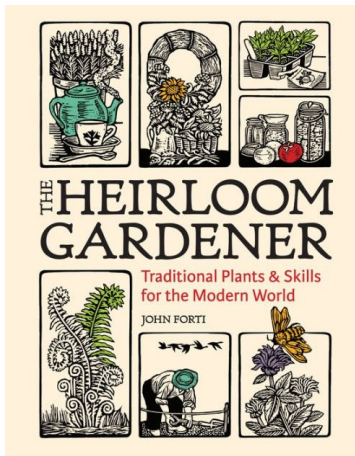
## The GraineThumb

Heirloom Gardening: The Old is New Again

By George Graine, Fairfax Master Gardener

“We don’t grow plants because they’re heirlooms, we grow plants because it worked well long enough that they become heirlooms.”

-Felder Rushings



These days, we probably would not consider our daily life without many technical wonders that are readily available to us. Perhaps we tend to forget that the old ways of doing something are still worthwhile. You will find out why the new and the old are not in conflict in a new book by John Forti called “The Heirloom Gardener: Traditional Plants & Skills for the

Modern World” (Timber Press, 2021). This book is a series of essays, arranged alphabetically, but not limited to plants so that you may be surprised to read so much about garden wisdom. Do not let the book title fool you because it is far from a stodgy text you might have found in your Granny’s attic. Forti does not discuss antiques but rather he notes that “...heirlooms are artifacts of our life experience that beckon us to preserve them.”

Now take a few moments to consider the Earth because the Earth that was here in yesteryear is still here today. That means our connection to the earth continues to provide us with the necessities of life. Moving on, just as many of us learned a variety of how-to skills and knowledge from parents and grand-parents, so too there is much that can be learned from elder horticultural gardeners. Forti says “We are seeking artisanal goods in a throwaway world, healing from a scarred environment.” He waves a caution flag when he writes “Our stewardship of the land and protection of our shared environment are at a crossroads.” Can you argue with that? Do not despair as “The Heirloom Gardener” book will show us the renaissance that is happening all around us. There is a way forward as long as we are able to remember the past and chose those heirloom (traditional) ways. Forti goes on to say “...to adapt them to foster a more sustainable future.”

Note that each short essay, although based on many old ways, is updated by employing the most recent scientific and technological precepts and this should help to enhance your gardening experience. In other words, consider how old ways can be revised and made new again. We now have ways of incorporating past methods into a more efficient way to garden. The essays include an explanation of how historical gardeners went about their chores. You might wonder why this methodology is foreign to you. On the other hand, some methods have stood the test of time. How to have a successful experience regarding canning and preserving some foods is a good example. Forti’s writing

shows us how to reconnect with nature using the word symbiosis, that is, when mutually beneficial is perhaps a more accurate term. He uses plants to tell a story and has an innate ability to capture their nuance in today’s world.

The alphabetical index noted earlier starts with the herb angelica and as you might expect, ends with zucchini. In addition to essays on many plants, Forti touches on underused garden remedies, organic growing practices, seasonality, ethnobotany, bio-diversity and so much more in his multi-purpose philosophical guide. The fact is that our mental health benefits from gardening go deeper than you might have imagined and beyond what you may have thought about gardening, Forti claims that gardening is a craft that provides important and valuable information. He goes on to explain how plants, garden lore and timeless practices will keep us grounded (pardon the pun).

The author’s words and his wisdom are just the ticket to help us take a step backward from our go-go-go world. Enjoy the environment that we are able to create for ourselves as well as the benefits that we are able to derive from simple pleasures. In the introduction to the book, Forti says “Heirlooms hold the keys to the past, though their patina may have changed over time.” He also notes that his “...goal is not to live in the past but to be present and participate in the betterment of my corner of the world.” How is your corner? We all can learn something, many things from “The Heirloom Gardener.” This book explains and teaches us about many varied horticultural practices. Is it time to apply the tried-and-true methods to your modern life style?

# Winter Color or How to Trick Your Bulbs into Thinking It's Already Spring

By Elizabeth Campanella, Master Gardener

Loudoun County Master Gardeners



<https://enewsletters.k-state.edu/postrockdistrictfcs/files/2020/12/Forcing-bulbs-260x173.jpg>

It's not nice to trick people. But tricking your bulbs into thinking it's already spring can be great fun, and you won't hurt their feelings at all. When winter is around the corner, you know that most of the color outside is going to disappear. Instead of being sad about that, we can plan ahead to bring some of that spring color into our homes months before mother nature will bring it to us in our yards.

There are four steps to forcing your bulbs to flower for winter color:

1. Choose which bulbs you want to use based on color, height, fragrance or whatever criteria you like. No need to choose just one variety, but they may have different rooting times, so you'll need to stagger the plantings if you want them to bloom at the same time.
2. Planting the bulbs. A good medium for planting is an equal amount each of potting soil, sphagnum peat moss and perlite. Since the whole point of bulbs is that they store their own food there should be no need to fertilize. A rule of thumb for planting/blooming times is:

## Planting

Mid-September

Mid-October

Mid-November

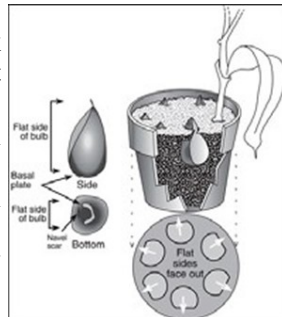
## Blooming

Late December

February

March and April

Use clean pots with drainage holes, and if you use terra cotta pots, soak them first overnight so they don't draw all the moisture out of the soil. Put your soil ingredients into a clean bucket or bin and mix thoroughly so when you use it for planting, you'll have a nice combination of all three materials. Do this outside as it may kick up a bit of dust.



When potting tulip bulbs, place the flat side of the bulb toward the outside of the pot. Photo: <https://extension.missouri.edu/publications/g6350>

Fill your pots loosely with soil mixture. For reference, a 6" pot can hold 15 crocuses, 6 daffodils, 6 tulips or 3 hyacinths. Work the bulbs

gently into the soil. They should be crowded, but not touching. Tulips and daffodils can have their top stem piece exposed, but the smaller bulbs (snowdrop, crocus, grape hyacinth) can be covered completely. Allow for 2" of soil beneath the bulbs to give room for the roots. Tulip bulbs should have the flat side facing the pot so that when they start to put out leaves, they'll arch over the pot and give a nice uniform look.

After setting the bulbs, fill the pot to 1/2" to 1/4" of the rim and water until you get drips out of the drainage holes. Label each pot with which flower you planted, and put the date on the label.

3. Chilling. This phase mimics the winter cold spell that bulbs need to experience in order to bloom in the spring. This can be done in a dark area of a cold basement or shed (do not allow the bulbs to freeze) that maintains a 35 to 45 degree temperature. It can also be done in the refrigerator, but the bulbs should be kept away from fruit since the off-gassing of ethylene during ripening can damage the bulbs.
4. Forcing into Flowering. Here they are taken out of storage and reintroduced to warmth and light which their genetics will interpret as time to come out of hibernation. Remove the pots from their chilling location and move them to a cool spot (about 60 to 65 degrees) with indirect sunlight. Keep the soil moist but not wet. The bulbs may have white shoots when brought out, but the sunlight will turn them green as photosynthesis begins. When this happens, move the pots to a warmer location with more light to stimulate growth. Rotate the pots regularly so all flowers get an equal amount of sunlight. You should start to see buds within 3 or 4 weeks. When they start to flower, keep them out of direct sunlight for longer bloom time. Moving the pots into a cool room at night will also prolong the blooms. After flowering, you can let the foliage die back and plant the bulbs outside in the fall, or you can plant them in the spring, but they may not flower again for a year or two, and some may not bloom again at all. If they don't, you're still adding organic material to your garden, so either way... win win!

If you like, you can do chilling before planting to save room in the fridge. Keep the bulbs in a mesh or paper bag so they can breathe, but be doubly sure to keep them away from fruit or

they may not flower.

This is a great project to do with kids too...mixing soil... filling pots...nestling bulbs...all things that kids can get their hands into. Good clean dirty fun!

### Recommended Rooting Times for Cold-Hardy Bulbs

Anemone (Windflower), 8-10 weeks

Chionodoxa (Glories of the Snow), 10-12weeks

Crocus (Spring-blooming Crocus), 8-10weeks

Galanthus (Snowdrops), 10-12 weeks

Hyacinthus (Hyacinth), 12-14 weeks

Dwarf Iris (Iris reticulata and other spring-blooming bulbous species), 10-12 weeks

Leucojum (Summer Snowflake), 8-10 weeks

Muscari (Grape Hyacinth, to keep the leaves shorter, store cool and dry for 6-8 weeks, then give 2 weeks of cool rootingtime)

Trumpet Daffodils, 14-16 weeks

Large-Cupped Daffodils, 15-17 weeks

Small-Cupped Daffodils, 16-18 weeks

Double-Flowered Daffodils, 16-18 weeks

Split-Corona Daffodils, 14-16 weeks

Narcissus (Triandrus), 16-17 weeks

Narcissus (Cyclamineus), 14-15 weeks

Narcissus (Jonquilla), 15-16 weeks

Narcissus (Tazetta), 14-15 weeks

Narcissus (Miniature), 14-16 weeks

Scilla (Squill), 10-12 weeks

Tulipa (Tulip), 14-16 weeks



*Forced red tulips* Photo: <https://hort.extension.wisc.edu/files/2015/12/ForcedBulbs-redtulips.jpg>

--about ¼ of bulb covered.

4. Keep in a cool 50 to 55-degree room under low light until roots form and shoots appear-- about two to three weeks. Maintain water level below bulb.
5. Slowly expose container to light and warmer temperatures in a southern exposure until blooms appear-- another two to three weeks. Move to indirect light to maximize bloom time.
6. Plant bulbs in two-week intervals using several different containers so you can enjoy them for months! Discard after blooming. (Photo below from).



*Paperwhites* Photo White Flower Farm

There are also a couple of options for forcing bulbs that are native to warmer climates that don't require chilling at all. Paperwhite narcissus, hyacinths, and amaryllis are three nice varieties for holiday season arrangements.

1. Use a clean decorative bowl, vase, or non-holed container of your choice. Glass allows you to watch the roots grow!
2. Fill to within one inch of the top with pebbles, pea gravel, or coarse sand. Add water to just below the surface of the medium.
3. Place narcissus bulb on top and cover with more medium



*Hyacinths* Photo Jason Donnelly <https://www.bhg.com/gardening/flowers/bulbs/howto-force-hyacinth-bulbs-in-a-vase/>

# Who Can Hügelkultur? YOU Can Hügelkultur!

By Jeanette Gandhi

Loudoun County Extension Master Gardener

For at least four years now, my patio has overlooked logs neatly stacked against my fence. Long story short--the two ash trees that steadfastly shaded my backyard for at least 40 years (probably longer) fell victim to emerald ash borer (EAB). A tree service was dispatched to fell the sick trees. Apparently the service lacked a chipper, loader, and large truck, and not wanting to tear out and



My well-rotted ash logs destined for a someday Hügelkultur bed beyond my fence.

rebuild a section of the fence, the service stacked the logs neatly against the fence. (Logs infested with EAB can be chipped or used for firewood, but should not be moved more than 50 miles away from where they were cut.)

I had done a bit of simple lasagna gardening, by outlining a bed, cutting the grass super-short, and laying down cardboard and newspapers. I then layered green materials (fruit and vegetable scraps, fresh grass clippings and fresh leaves, fresh garden trimmings, etc.) with brown materials (dried leaves, shredded newspaper, peat, pine needles, etc.). The work was less back-breaking, and the results were good.

Searching for landscaping ideas that utilize logs, I found many websites, blogs, vlogs, articles, pictures, and videos that talked about a technique for building raised beds using logs, branches, and tree clippings. This technique has a name--Hügelkultur, which rhymes with "Google-culture," and translates from German as hill-mound or hill-garden. Simply put, it is wood covered with soil, or the practice of creating no-dig raised beds using rotting logs. (Lucky me, with my surplus of rotting logs.) Simply put, hügelkultur is the concept of building soil and fungal communities through the slow decomposition of multiple layers of woody plants. (I'm thinking lasagna gardening on steroids.)

The origins of hügelkultur are not clear. Some say that it is a centuries-old practice; others say it is a modern permaculture method. Permaculture, simply put, is an agricultural ecosystem intended to be sustainable and self-sufficient. "Bill Mollison, the Tasmanian son of a fisherman who first coined the term in 1978, defined permaculture as the conscious design and maintenance of agriculturally productive systems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of the landscape with people providing their food, energy, shelter and other material and non-

material needs in a sustainable way."<sup>(1)</sup> A good local example of permaculture would be the 180,000 square foot green roof installed atop the Howard Hughes Medical Institute (HHMI) in 2006 in eastern Loudoun County.

Hügelkultur was first documented in a German brochure written in 1962 by an avid gardener named Herrman Andrä. Andrä is said to have taken special notice of the diversity of plants happily growing in a pile of woody debris in the corner of his grandmother's garden.

Today, Sepp Holzer, an Austrian farmer and permaculture enthusiast, is widely credited with starting the modern hügelkultur movement and has been coined the "Dalai Lama of Permaculture." Full disclosure at this point: "There are no peer-reviewed, scientific studies on Hügelkultur. A few university students have conducted projects (Adams 2013; Laffoon 2016), but these have not been published in scientific journals. Thus, gardeners rely on popular books and websites for hügelkultur information."<sup>(2)</sup>

If the origins of Hügelkultur are murky, the benefits to the home or backyard gardener, even if attempted on a small scale, are clearer <sup>(3)</sup>:

1. The beds create different microclimates and conditions suitable for the varied needs of different plants. The side facing the sun can be used for heat and sun loving plants for example.
2. The soil warms up quicker in the spring allowing for an earlier start of growth.
3. They retain water better, reducing the need for watering. The wood acts like a sponge and balances moisture levels.
4. The soil is loose and well aerated. This slows freezing of the soil in cold areas.
5. The decomposition of the wood inside creates heat, which helps the growth and germination of seeds, particularly in the spring.
6. The nutrients locked up in the wood get released slowly over a period of several years. Even vegetables with a high demand of nutrients can be grown without the use of additional fertilizer.
7. The method of hilling or sloping the raised bed increases the surface area, allowing more area for growing. This is particularly in small gardens with limited space.

Some may be swayed from starting a hügelkultur by thinking that you need to dig a long, wide, deep trench and fill it with large logs until you have a long, wide, high serpentine mound. (And if you have an HOA, what will they have to say about THAT?) The good news is that a hügelkultur can take many forms.

You can start with a mound of logs, or rows of logs, and layer branches, leaves, grass clippings, straw, cardboard, newspapers, manure, compost, or any other biomass you

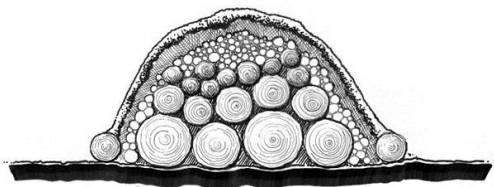


may have on hand. Top with soil, plant your veggies, and voila. hügelkultur.

You can dig a trench and lay the logs in the trench or create borders of large logs and lay smaller logs inside. The trick is to try to fill the gaps as tightly as you can with biomass before topping off with soil. Also, locate your hügelkultur beds at least 30 feet from any structures to avoid termite problems.

The beds will compact over time, so you will initially want to build them at least 2 feet high, and if you are so inclined,

building them 6 feet high is even better. To encourage compaction, you can whack them down with a shovel or some other

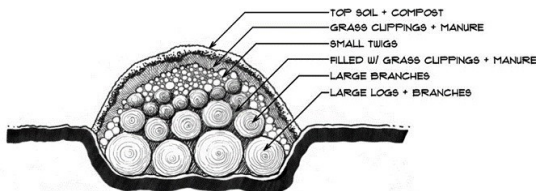


My preference: Above-ground hügelkultur bed with wood border. Photo: Oklahoma State University Extension

compaction tool.

To get your hügelkultur bed off to a good start, follow these principles:

1. Gather materials for the project: Find a sunny location at least 30



Cross-section of an in-ground hügelkultur bed. Photo: Oklahoma State University Extension.

feet away from any structures (to cut down on potential termite and rodent problems) and select an area measuring approximately 6 feet by 3 feet. Remember, these dimensions are approximate. A high hügelkultur bed, say 6 feet or so, should be oriented north-south to take full advantage of the sun on both sides.

2. Gather materials for the project (essentially any materials you would put into a compost pile):

- Newspaper. The best wood to use is any wood that you have available, EXCEPT for woods that are alleopathic
- Fallen logs, branches, twigs, fallen leaves, grass clippings, shredded or rot resistant like black walnut, black locust, or cedar.
- Nitrogen-rich material; kitchen waste works well, as does manure, if you have access to it. These materials will help to maintain a proper carbon to nitrogen ratio.
- Top soil (enough to cover the other layers of the bed with a depth of 1 to 2") and some mulching material (straw works well).

3. Lay the largest logs down as the first layer of the hügelkultur bed. Next, add a layer of branches, and then add layers of small sticks and twigs. The best hügelkultur beds are approximately 3 feet high, but there is no hard and fast rule for height. Hügelkultur is very forgiving, and beds can range from 2 feet to 6 feet. Remember that they will compact over time.

4. Water all these layers well.

5. Begin filling in the spaces between the logs by scattering twigs and branches, leaf litter, kitchen scraps, and manure. Remember that you want to leave as few air pockets as possible.

6. Finally, top off the bed with 1 to 2" of top soil and a layer of mulch.. The top soil could be sod that you have stripped from another area and placed upside down, and the mulch could be arborist mulch. The bed is best left to cure for a bit, so fall is a great time to start a hügelkultur bed and leave it to over-winter for the spring planting. Luckily, we have mild winter days here in Zone 7 so that the project can be stretched out through early winter. That said, a hügelkultur bed can also be planted immediately.



Fill in the gaps between the logs to keep the area moist and prevent rodent problems. Photo Daron Williams, [Permie.com](http://Permie.com)

You can either plant seeds or place transplants in the hügelkultur bed, just as you would in any other garden bed. The hügelkultur bed will benefit from "curing" a bit, so it is best to prepare the bed several months prior to planting time (prepare the bed in the fall for a spring planting, for example, in temperate northern climates), but hügelkultur beds can be planted immediately. The "three sisters" (squash or pumpkins, corn, and beans) do especially well in a hügelkultur environment. If the location is sunny enough, tomatoes will grow well, too.



Raised garden bed hügelkultur after one month

<https://richsoil.com/hugelkultur/>.



Raised garden bed hügelkultur after one year



Raised garden bed hügelkultur after two years.



Raised garden bed hügelkultur after 20 years.

## Have a Happy Hügelkultur!

### References and Resources

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# Virginia Master Gardener Recipes

## Mushroom Quinoa

### INGREDIENTS

- 1 cup uncooked quinoa
- 1 tablespoon oil (canola, olive, or vegetable)
- 1 package (8 ounces) fresh sliced mushrooms
- 1 onion, diced (about 1 cup)
- 2 cloves garlic, minced
- 1/2 teaspoon dried herb (basil, oregano, thyme)
- 1/8 teaspoon ground black pepper
- 1/4 teaspoon salt
- Optional: shredded cheese (mozzarella, parmesan, Swiss)

### INSTRUCTIONS

- 1) Cook quinoa according to package directions. Reserve 1 1/2 cups for this recipe. Store remaining quinoa for use in another recipe.
- 2) Heat oil in a skillet over medium high heat. Add mushrooms, onion, garlic, dried herb, ground black pepper, and salt. Cook 6 minutes, until mushrooms and onions are tender, stirring often.
- 3) Stir reserved 1 1/2 cups quinoa into skillet of cooked vegetables.
- 4) Top with shredded cheese, if desired.

source:[Iowa State University Extension and Outreach](#)

