

Waking the Garden in Spring

March 22, 2022

Spring is one of the most exciting times of the year! Seeing plants green up, temperatures warm, snow melt, and flowers bloom makes a gardener's heart flutter.

Starting spring off right can make a big difference for the rest of the growing season.

Learn about the many garden tasks you can do as the garden transitions away from winter into spring.

Garden Tasks for Spring

This is a list of Dos and Don'ts!

These garden tasks can be done between mid-February to early-May.

Survey the Garden – Make a Plan for the Growing Season

- What's been damaged?
- What needs to be done?
- Where are there gaps or things that died?
- What big or small projects will happen this year? When?
- What materials will I need? (mulch, compost, pavers, edging, etc.)

Fix Hardscape Issues, if needed

- Winter can heave pavers, move walls, etc.
- Fix these issues before plants emerge and get in the way

Pruning, Pruning, Pruning!

- Late Winter/early spring is the ideal time to prune nearly all plants
- Remove broken/damaged material first
- Then remove rubbing/crossing and structurally deficient branches (like double leaders)
- Finally, remove those branches that improve appearance
- Use the 3-cut method
- Do not remove lower branches on trees too soon!

Shade Trees

- Prune while dormant – January through early to mid- April
- Prioritize the removal of double leaders
- Prioritize those trees that are less than six or seven years old

Shrubs

- Most shrubs are best pruned while dormant – January through early to mid-April
- Early spring flowering shrubs can be pruned after flowering to maximize the flower display
- Suckering shrubs (red-twigs dogwood, lilac, and spirea) should have entire canes or stems removed a few inches from the base (helps reduce size and keep a natural habit)
- Shrubs with architectural branching (witch hazel, burning bush, and panicle hydrangeas) should have branches removed back to their point of origin (like you would a tree)

- Can do *rejuvenation pruning* – this is where you remove no more than one third of the branches to change the size and shape of the plant or promote new growth
- Or you can do *renewal pruning* - this is where the entire shrub is cut back to within a few inches of the ground and the plant resprouts from the base
 - Works well for some multi-stem/suckering shrubs like spirea, barberry, potentilla, and ninebark

Roses

- Prune in late dormant season before new growth begins – March & April
- Remove winter dieback
- Prune so new stems that sprout are pointed outwards
- If the rose is grafted (like hybrid tea, grandiflora, floribunda types), remove any suckers that come from below the graft union
- This same process applies to all tender shrubs/perennials (such as butterfly bush)

Fruits

- Prune while dormant – January through early to mid- April
- Two ways to train trees – strong central leader (apples, pears) or creating a canopy with a bowl shape or open center (cherry, plum, peach)
- Grapes should be cut back significantly – leaving behind four or six “arms” with 30 to 50 buds total
- Raspberries are pruned differently depending on whether they are summer or fall bearing

Conifers

- Most conifers are best pruned after the spring flush of growth in early summer – late May through early June
- Remove the new growth to maintain size
- Remember that once a conifer is cut back or limbed up it typically does not resprout

Conduct a Soil Test

- As soon as the soil can be worked (and isn't too wet) collect samples and submit them to a lab. Best \$25 you will spend!
- Soil samples should represent areas that are managed similarly or areas where the same crops/plants are grown
- Get a mixture of many small soil samples collected from 10-15 different locations across the area to be tested
- Use a small trowel to collect the samples from the top 3 to 6 inches of soil, remove plant material and large roots from the sample, and mix them together
- When you received results from the lab it will give recommendations for fertilizer (if needed)
- Be sure to have a garden or lawn soil test done – not one for agronomic crops (like corn or soybean)

Get Equipment Ready

- Tune-up equipment like lawnmowers and string trimmers (and store that snow blower!)
- Sharpen lawnmower and chainsaw blades. Sharpen spades and other tools
- Set up rain barrels, clean gutters, pull out hoses, put out the rain gauge
- Clean up water features, birdbaths, bird feeders, and other features. Set pumps, fill and run once freeze danger has passed
- Pull out patio furniture, containers. Clean and repair what's needed

Remove Winter Protection on Trees, Shrubs, Roses, & Perennials

- Remove tree wrap to prevent girdling
- Evaluate support staking for removal – most trees only need extra support for about one year after planting.
- Pull out temporary fencing around shrubs and trees
- Remove mulch “blankets” from roses, perennials, etc. Often this has to be done in stages as the upper layer will thaw but the lower layer may still be frozen

Propagate Woody Plants by Hardwood Cuttings

- This is the best form of propagation for several trees and shrubs like, willow, poplar, dogwood, forsythia, grape, and gooseberry
- Collect stem material while plant is dormant
- Store in refrigerator and keep moist until they can be stuck in the ground in spring (when ground thaws) to root. Utilize a root hormone

Monitor and Treat for Fruit Tree Pests & Diseases

- Dormant oils should be applied in late March or early April before bud break
 - They are helpful for controlling mites, scale, and aphids (if they were a problem in the past)
- Create a plan for treatment of the other important pests and diseases on tree fruits
 - Most are sprayed as the buds emerge and immediately following petal drop.
 - A home orchard spray is a straight-forward product. Use as the label directs.

Start Seedlings Indoors

- Consult seed packages for annuals and vegetables to determine how soon before the frost-free date seed should be started indoors – do not start too early!
- Use clean containers and germination mix
- Provide warm humid conditions for germination
- Provide ample light – usually have best results with supplemental light from a fluorescent or LED fixture
- Do not over water!
- Harden off all transplants before putting them outside

Clean-up Perennial Beds

- If you took my advice in the fall, you left the material there all winter – start clean-up in mid to late March through April
- What about those pollinators you were trying to help? Some beneficial and native insects overwinter in the plant debris (others over winter in the soil). Wait until temperatures are consistently at 50°F before removing spent plant material to protect these insects
 - The magnitude of waiting to clean up has on population size is not yet well-known. Early research shows that it has a relatively small affect on insect populations so if you can't wait, don't fret. But if you can wait, every little bit helps!
- Don't work in wet soil (it will cause lots of soil compaction)
- Refresh the edging – fix edging materials or re-cut sod to create a nice clean edge
- Add any stakes, trellis, etc. needed for certain perennials like peony so plants can grow through them
- Don't forget to weed while you clean-up. Do not leave any unwanted plant material in the garden. Get them while they're small!

Divide & Transplant Perennials & Shrubs

- As the perennial is just emerging from the ground is a great time to divide or move – you can see where its located and you don't have foliage in the way
- Dig and move shrubs and other woody plants while they are still dormant but after the ground has thawed

Lay Down a Fresh Layer of Mulch

- Early in the spring before perennials emerge is a perfect time as its easy to spread mulch without the foliage in the way
 - Just don't bury plant crowns or create mulch volcanoes around trees and shrubs

Fertilize Where Needed

- A soil test will tell you where and how much
- An all-purpose, balanced fertilizer is best for most situations
- Most fertilizers can be applied around perennials, roses, and shrubs as new growth emerges
- Apply sulfur to the soils around acid-loving plants such as azaleas, rhododendrons, and blueberries. Use a granular formulation at the rate of 1/2 pound per 100 square feet

Start a Compost Pile

- If you haven't started one yet, now is the time, especially since you've just cleaned up all the perennial beds!
- You don't need fancy equipment – any pile of organic matter piled no more than 3'x3'x3' will eventually turn to compost
- Utilizing good set-ups/equipment, maintaining good moisture and air balance, and making sure the carbon-nitrogen (C:N) ratio is good will get you compost faster

Create New Planting Beds

- If you started them in the fall, then check for weeds and add mulch or remove weeds as needed
- Can create them in the early spring season too. Kill turf with herbicide (as long as its green and growing), smother with thick layer of newspaper and/or cardboard, or rototill
 - or a combo of any (or all) of these techniques!

Prepare the Vegetable Garden

- Clean up any debris from fall or winter (most should have been removed in fall)
- Do not work in the garden if the soil is wet!
- To till or not to till? There are advantages and disadvantages
 - Advantages to tilling include: aerates the soil, breaks up compaction, creates a nice seed bed for sowing, allows roots (especially large roots, bulbs, tubers) to more easily grow and expand, helps warm the soil faster
 - Disadvantages to tilling include: increases erosion potential, brings weed seeds to the surface for germination, breaks apart soil aggregates changing the water and air holding capacity, speeds the loss of organic material, promotes crusting
 - Light tilling is all that is typically needed – simply turn soil with fork, shovel, hoe, or rake
 - This will only minimally disturb soils allowing you many of the advantages, without many of the disadvantages
 - Never till soil when its wet – leads to compaction
 - Soil that is too wet will stick to a shovel or shoes and will maintain a ball instead of crumbling when squeezed
 - If turning soil, utilize this time to add organic matter
 - Perfect time to empty that compost bin and make room to start new compost

- Set up soaker hoses or other trickle irrigation systems in the vegetable garden for use later in the summer season

Plant Cool-Season Vegetables

- April is the time to plant radish, lettuce, spinach, peas, onions, kale, broccoli, cauliflower, collards, cabbage, kohlrabi, carrots, beets, chard, turnips, and potatoes
- Some of these crops will be done by mid-May and can be replaced with warm-season vegetable crops, others will be in the garden until mid to late summer

Start Spring Lawn Care

- Clear lawn of winter debris – rake to remove leaves, twigs, and other debris that accumulated over winter
- Clean up lawn edges from sidewalks and used over winter
- Should I seed?
 - Late summer/fall is the best time to start new lawns from seed, so don't renovate any lawn areas in spring
 - But any bare spots left in spring will be full of weeds very quickly
 - Seed bare spots in early April
 - Water when needed
- What about weed control?
 - Fall is the best time for broadleaf weed control using herbicides
 - Don't apply herbicides in spring as they will not be very effective (and a waste of money)
 - Hand pull weeds as needed (or make plans to treat it appropriately in the fall)
 - Preemergent herbicides for crabgrass and other summer annuals must be put down at the right time
 - Too early and they wash away – too late and they don't work
 - Spread crabgrass control herbicide when soil temperatures reach 55°F (usually about when the forsythia finishes bloom – Mid to late April)
- Fertilize the lawn, if needed
 - Fall applications of fertilizer are more appropriate, but an additional spring application at ~0.75 to 1 lbs/1,000 sqft can be applied in April through mid-May
 - A soil test will tell you if its needed and how much
- Aerification can be performed in spring, late summer, or fall (Fall is best)
 - Aerification helps reduce compaction, thatch, and promote better growth
 - Aerify while grass is actively growing and before preemergence herbicides are applied to prevent crabgrass
 - Aerification machines that pull a plug work better than machines that only spike the yard
- Start Mowing
 - There is no set date to start mowing – it will depend on the growing conditions and the type of grass growing in the area
 - Set mowers to cut at 2 to 3" in height. Mow once grass reaches 3 to 4" tall so you never remove more than one third of the leaf blade in a single mowing
 - Mowing will need to be done frequently as the cool-season lawns in Iowa love the cool spring temperatures and abundant spring rains

Start Shopping for Plants and Seed – online, in-person

- Start online shopping early for the best selection
- Get out in nurseries and garden centers (this is the fun part about this time of year!)
- Be sure while you're shopping don't just buy the stuff that looks good right now (in spring) or you won't have anything in bloom in fall!

Plant Trees, Shrubs, & Perennials

- Perennials may need to be hardened-off before planting depending on where they are grown (greenhouse vs. nursery field)
- Containerized and balled and burlapped (B&B) materials can be planted at any point in spring. Remove from container and plant at appropriate depth
 - For trees be sure the trunk flare at soil level
 - May need to remove upper layer of soil to find it, especially on B&B material
 - Shrubs and perennials should be planted at the same level as they are in the container
 - Square-off root balls with excessive, circling roots
- Bareroot material should be planted as soon as possible after its received
 - Hold material in root cellar or fridge and keep damp (not wet) until planting if can't be planted right away
 - Trim broken or dead roots and stem
 - Soak roots in water for several hours
 - Dig a hole wide and only deep enough to accommodate the root system and place the plant at the right height in the soil
 - Trees should have the trunk flare at soil level
 - Shrubs should have the upper most roots just below the soil surface
 - Perennials should have crowns oriented no more than 1 inch below soil surface
 - Backfill with the soil that came out of the hole
 - Don't over compress or pack
- All newly planted plants should be watered regularly the entire first growing season
 - Check frequently (several times a week) at first, reduce frequency as the growing season goes along
 - Water only when root zone is dry

Plant Cool-Season Annuals

- These annuals love the cool temperatures of late March through early May
- They can take light freezes and are a great way to add color early in the season
- Replace with summer annuals in mid-May
- Popular cool-season annuals include: pansy, ornamental cabbage and kale, snapdragons, stock, bachelor's buttons, lobelia, nasturtium, Nierembergia, sweet alyssum, cape daisy, sweet pea, nemesia, pinks, and sweet William

Be Ready for Freezing Temperatures

- The typical frost-free date for most of Iowa is between the last week in April and the second week in May. A freeze (even a snow) can come any time before that
- Have a plan in place to cover and protect, especially newly planted perennials, annuals, and vegetables
- Don't leave hoses connected where they may freeze and damage spigots, especially early in the season
- Don't be fooled by warm temps in March and April! Its not uncommon to have streaks of 50s and 60s in these early spring months, but its still possible to get cold again!

It's Never Too Early to Start Weeding!

- Every time you are in the garden pull weeds when you see them
- Many weeds can become problems before perennials and other plants fill in and shade the ground
- Getting weeds while they are small will make all the difference later in the season

Move Indoor Plants Outside When the Danger of Frost has Passed

- Move to full or part shade outside – don't give them too much sun too quickly!

Presented by:

Aaron Steil

Consumer Horticulture Extension Specialist

Department of Horticulture | Iowa State University

<https://hortnews.extension.iastate.edu/>