

YARD & GARDEN REPORT

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Improve Your Soil—Naturally

Do you want to grow a great garden? You need great soil.

One of the best ways to improve your soil is to add organic matter, and this is where growing cover crops can help. It's a popular trend in gardening (and farming) today. A cover crop:

Adds nutrients. The deep roots of cover crops absorb and pump up nutrients from deep in the soil that your garden plants can't reach. These nutrients are then slowly released to your plants. As a bonus, some cover crops convert nitrogen from the air into nitrogen in the soil.

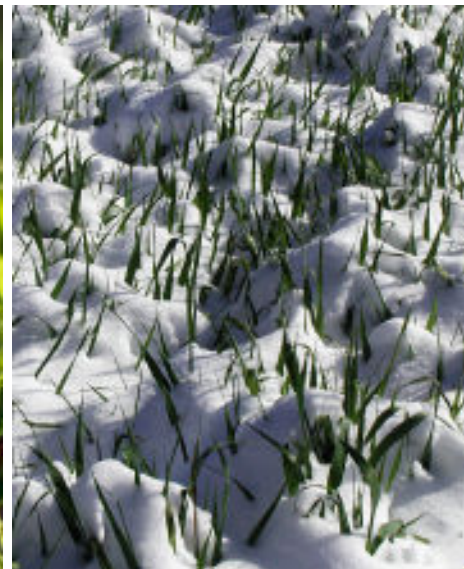
Holds onto nutrients. Roots of cover crops bind onto nutrients in the soil, preventing them from leaching away.

Boosts soil moisture. A soil covered with a cover crop loses less water from evaporation compared to an exposed soil. Cover crops improve soil structure, allowing rain to infiltrate, rather than run off the land. Cover crops collect snow over winter, which can melt into your soil.

Loosens hard ground. Roots of cover crops penetrate compacted soils, breaking them up. This allows for better drainage and aeration.

Reduces erosion. Cover crops blanket the land, preventing the soil from blowing or washing away.

Reduces weeds. Cover crops smother and kill weed seedlings.



Growing a cover crop in the garden is becoming a popular trend. It is one of the most natural and affordable ways to improve the quality of your soil.

Lots of different grains and legumes may be used as cover crops. At this time of year, winter rye (*Secale cereale*) is preferred. Sow it anytime this month (the sooner, the better). The rye will grow vigorously this fall and begin growing again in spring.

Rye is best sown on land that will be planted in warm-season crops (tomato, squash and cucumber) next spring. Sow the rye seed in areas of the garden that are done producing or between rows of crops that are still producing.

In early May, mow and cultivate the rye into the soil. No-till gardeners can spray the grass with glyphosate (Roundup) to kill it. Give it a couple weeks to break down and then plant your crops at the end of May.

Be aware that rye emits chemicals as it decomposes that suppress the germination of weeds and small-seeded vegetables (lettuce and carrots) in spring. Large-seeded vegetables and transplants are much less affected.

Winter rye seed is available from catalogs and farm supply stores. Sow it at 3 ounces per 100 square feet.

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Fall Colors: Blazing Shrubs!



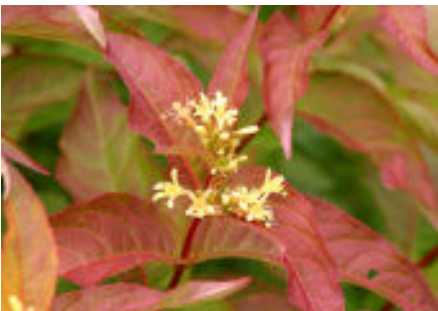
Burning Bush

(*Euonymus alata*). The all-time classic. Vibrant rose to red leaves, corky branches and red fruits. Glows brightest in full sun. Dwarf and standard sizes. Zone 4.



Chokeberry

(*Aronia* spp.). Bright orange-red leaves. Its fruits remain on the shrub into winter. This shrub resists pests and is adaptable to many soils. Zone 3/4.



Bush Honeysuckle

(*Diervilla sessilifolia*). A spreading shrub that tolerates drought and partial shade. Its blossoms attract bees. Zone 4.



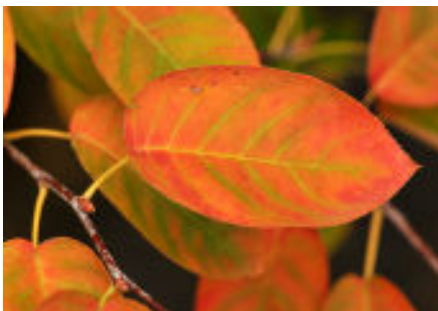
Fragrant Sumac

(*Rhus aromatica*). Low-growing, mounded shrub. Tolerates very dry soil. Great for naturalizing, borders. Zone 3.



Arrowwood Viburnum

(*Viburnum dentatum*). A quality, 8-foot hedge that is easy to grow. Tolerates salty soil. Its blue fruits will attract birds. The stems were used as arrow shafts by Native Americans. Zone 2.



Apple Serviceberry

(*Amelanchier x grandiflora*). Brilliant orange foliage. Grows 15 feet. Tolerates partial shade and alkaline soil. Used for naturalizing or as an informal hedge. White flowers, blue Juneberries. Zone 4.



Common Witchhazel

(*Hamamelis virginiana*). Delicate, fragrant blossoms appear late in fall. Yellow foliage. Grows 20 feet. It tolerates shade and is used in naturalized plantings. Zone 4.

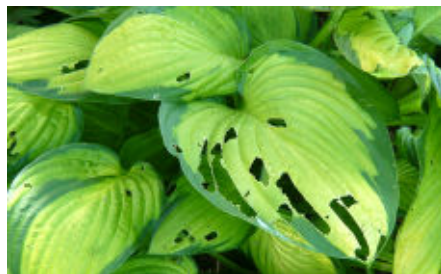
Plant Health Care

Flowers



Divide/Transplant Peony

Peony beds that are crowded and lack vigor can be divided now. Cut stems to the ground and dig up roots. Shake off the soil and cut the crown into sections. Each section needs 3–5 eyes and a strong root system. Space new sections 2–3 feet apart, with eyes only 1–2 inches deep. Mulch after the ground freezes.



Slugs on Perennials

Mature plants will tolerate damage late in the season. Iron phosphate baits may be used, if needed. Diatomaceous earth may be sprinkled around garden edge.



Planting Chrysanthemums

Select hardy, early blooming cultivars from garden centers (not florist shops). Plant ASAP. Mulch after the ground freezes. It's better to plant mums in spring to allow time for establishment.

Trees and Shrubs



Fall Needle Drop

Don't worry; old needles (located near the trunk) are supposed to turn brown. As long as the young needles (located near the tips of branches) are healthy, the tree is full of life.



Powdery Mildew

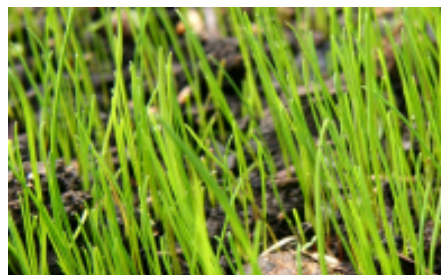
Gray blotches appear. Rose, lilac and honeysuckle are affected, especially in shady spots with poor air circulation. Rake fallen leaves. Prune next year to increase sunlight and air movement.

Lawns



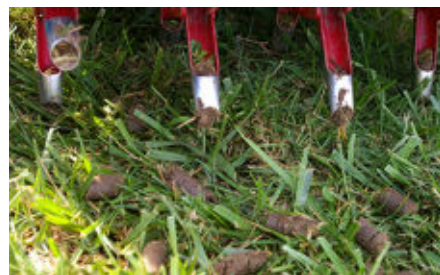
Fertilize

Early September is the most critical time to fertilize the lawn. This feeding will repair damage caused by summer, develop a thicker turf and root system, and prepare the lawn for winter.



Sow Seed

Sow seed ASAP to allow seedlings sufficient time to get established before winter. Prepare seed bed, fertilize and keep soil moist until seedlings emerge.



Aerate

Fall is the best time to aerate a lawn. Use a self-propelled unit with vertically operating, hollow tines. Two to four passes are best. Aeration is especially beneficial in compacted or thatchy soils.

Plant Health Care

Fruits and Vegetables



Slow Ripening Tomatoes

Be patient. Optimal ripening temps are 68–77°F. The more temps stray from this range, the slower ripening occurs. Clipping vines won't help. Tomatoes with a blush may ripen indoors.



Cracking Tomatoes

Caused by explosive growth of fruits, often after rains that fill fruits faster than their skins can allow. Mulch plants to maintain uniform moisture conditions. Use resistant varieties.



Flea Beetles

Tiny (1/8-inch) pests create shotholes in radish, kale and mustard. Young seedlings are very sensitive. Spray neem, soap, pyrethrin or Sevin if 10–30% defoliation occurs.



Harvesting Watermelon

Watermelons are ripe when the tendril next to the fruit dries (*shown*). The rind of a ripe melon is faded, not glossy. Mature melons feel heavy. The spot on the underside of fruit will be white or yellow and not greenish.



Harvesting Cantaloupe

A ripe fruit slips off with a gentle tug. The entire stem comes out (*full-slip stage*) as shown. Rind is yellowish. Fresh-market melons may be harvested with a firmer tug. Half of the stem attachment will remain in this case (*half-slip stage*).



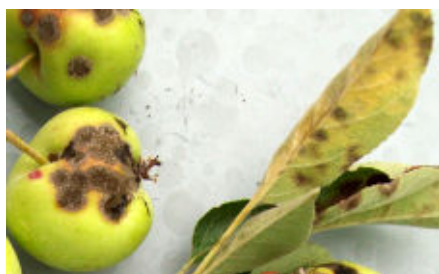
Sap Beetles

Found on corn ear tips, tomatoes, melons and overripe fruits. Harvest regularly. Do not discard fruits on soil. Spray only at last resort; use a chemical with a brief residual (pyrethrin, neem).



Harvesting Apples

The background color of the skin begins to turn from green to yellow. Fruit comes off easily when harvested. Use an upward, twisting motion when harvesting. Early varieties are ripe now. 'Honeycrisp' and other midseason varieties ripen in late September.



Apple Scab

Olive to brown spots appear on leaves; the leaves drop early. Corky scabs develop on fruits. Rake fallen leaves and fruits. Prune the tree in March to improve air circulation. Apply fungicides when leaves appear in spring.



Hornless Hornworm

Larvae of achemon sphinx moths are eating leaves of grape and Virginia creeper. The huge (5-inch) caterpillars lose their horns after molting, creating an eye-like spot (*photo*). They have amazing appetites but typically create little damage. Pick them off and destroy.

Weather Almanac for September 3–9, 2019

Site	TEMPERATURE ¹				RAINFALL ^{1,4}				GROWING DEGREE DAYS ^{1,5}			
	September 3–9				Sep 3–9		2019		Sep 3–9		2019	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	55	61	78	34	0.89	0.35	13.17	12.28	53	73	1702	1887
Bowman	61	62	92	42	0.60	0.28	12.03	10.36	73	80	1726	1953
Carrington	57	62	75	40	1.36	0.49	14.35	14.04	51	76	1769	2032
Crosby	57	59	83	37	0.93	0.30	13.88	10.71	56	70	1669	1750
Dickinson	60	61	87	43	3.31	0.34	14.35	11.84	64	80	1812	1930
Fargo	60	63	77	47	1.56	0.69	17.32	14.30	65	80	2079	2183
Grafton	56	61	74	38	1.34	0.62	8.54	14.06	49	74	1846	1895
Grand Forks	56	61	73	39	1.15	0.54	15.80	13.89	49	74	1816	1947
Hazen	58	63	82	39	2.45	0.34	16.60	12.03	60	86	1798	2120
Hillsboro	57	62	73	41	1.26	0.55	15.89	14.20	49	74	1894	2061
Jamestown	57	62	73	42	1.18	0.61	16.33	13.48	52	74	1743	2021
Langdon	53	59	71	37	0.99	0.42	11.02	13.93	41	63	1582	1624
Mandan	59	62	82	43	2.33	0.38	14.66	13.02	66	75	1854	2026
Minot	57	61	78	41	1.13	0.35	11.66	12.33	53	69	1758	1855
Mott	59	62	88	44	1.54	0.31	17.73	11.18	66	84	1772	2015
Rugby	56	60	78	40	0.62	0.44	9.50	13.69	52	73	1754	1880
Wahpeton	59	65	79	43	1.20	0.76	17.18	14.82	59	86	1984	2277
Watford City	60	61	89	47	1.51	0.26	12.14	10.39	64	76	1842	1945
Williston	60	64	88	46	3.16	0.30	14.88	10.24	64	86	1854	2194
Wishek	57	61	76	43	2.14	0.32	18.40	11.90	53	73	1685	1846

DAYLENGTH (Sep 9, McClusky, center of ND)²

Sunrise: 7:10 AM Daylength: 12h 58m
 Sunset: 8:08 PM Change since Sep 2: –24m

LONG-TERM OUTLOOKS³

Sep 15–19: Temp.: Above Normal; Precip.: Above Normal
 Sep 17–23: Temp.: Above Normal; Precip.: Above Normal

^{1,2,3} Sources: North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.

^{4,5} Rain data begin April 1. GDDs for garden vegetables are not available. GDD data in this table are for corn, which responds to temperature as most vegetables grown in gardens. Data begin May 1 with base minimum and maximum temperatures of 50 and 86°F, respectively.

Credits

Source:

Sustainable Agriculture Research and Education. 2007. Managing Cover Crops Profitably. Accessed online.

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