

"Green" Up Outside

Leaders Guide

A beautiful yard, with birds singing and colorful flowers is a calming, soul renewing, oasis. We work hard to have this little piece of nature in our lives. It is no wonder, we want to use gardening methods that keep our outdoor spaces lovely, for as long as possible. Until recently, our choices for yard care were limited to whatever the stores sold.

Our Grandparents used organic, common household items, such as vinegar, soapy water and compost heaps to provide their gardening needs. These items were organic and eco-friendly and they worked. Then, the age of chemicals was ushered in. Chemicals were convenient and effective, but these chemicals were indiscriminate. We were not only killing bugs and plant diseases, we were killing song birds and butterflies. We were harming our children, our pets and ourselves. What is the solution? Return to the "green" methods of gardening, that Grand Pa and Grand Ma used.

What are these green methods of gardening? How do we handle common problems in our yards? I'm glad you asked. We will offer eco-friendly suggestions on how to take care of those problems. We will give you suggestions on how to improve your soil, feed your plants, control insects and diseases, and repel our critter friends. We also have ideas on controlling weeds and conserving water.

Make Smart Choices

To begin with, try to choose plants that are native to your area. Choose plants that grow in your temperature zone, soil type, and humidity level. This will save you a lot of work and grief. Your success level will increase. You may want to consider plants that are disease resistant and draught resistant. Consider plants that are not popular with the critter crowd. (Although, if they are hungry enough, critters will eat almost any plant.)

Compost

A soil rich in nutrients, will greatly increase your garden's happiness. Compost is the answer. Compost is easy to make and very inexpensive. There are many recipes for making compost. Compost is a natural process. Composting will happen, assisted or not. Gather together your garden clippings, leaves, and grass. Add your kitchen scraps. Do not include meat scraps and avoid putting weeds in you mixture. Cover your compost pile with a lid or a tarp or a sheet of plastic. If you live in an urban

or suburban area, you may want to use a closed bin. (The aroma may not agree with your neighbors.) Turn your pile weekly. This will speed up the decomposition process. Your compost is ready to use, when it is a crumbly brown "soil like" substance. It takes about 1 to 1 ½ months. Organic compost is also available, ready to use, at many stores.

Fertilizers

Fertilizer serves your plant's special needs. Think of fertilizers as vitamins for your plants. Fertilizers come in many forms. There is liquid bone meal, bat guano, steer, horse or chicken manure, cricket poop, sea kelp meal, sugar beet root, fish emulsion, Epsom salt, etc, etc, etc. Fertilizer can be purchased in garden shops or on line, or by mail. Be careful to follow directions. Get the right fertilizer for each plant. Do not over fertilize. You could burn your plants. If you have access to fresh manure, let it age at least a year before you use it.

Weeds

Weeds are the scourge of any garden. Unfortunately, the most ecological way to deal with weeds is to pull them, one by one. Be sure to kill weeds before they bloom and set seeds. This will reduce their propagation. To reduce the spread of weeds, from one flower bed to the next, try separating the beds with edging material. Some examples of edging material are bricks, rocks, or wood. To organically remove weeds from your driveway or walkway, try boiling 1 quart water with 2 tablespoons salt and 5 tablespoons vinegar. Pour mixture on weeds while it is hot. Vinegar is a natural herbicide. The best way to reduce the number of weeds in our flower beds is MULCH.

Mulch

Mulch, spread in your flower beds, will reduce your weed population, and reduce the amount of water evaporation in your flower beds. This will help conserve water. Organic Mulch includes pine or cedar chips, sawdust, peat moss, pine needles, bark, even black and white newspaper. Take 4 to 5 sheets of black and white newspaper, wet it, and cover with soil. You have mulch. Landscaping fabrics and gravel are other options.

Insects

When you discover insects dining on your plants, it is a great temptation to get the meanest, nastiest bug spray you can find and blast them. **Stop! Think!** You will be poisoning your garden. Insect spray kills indiscriminately. Your children, your pets and you could be poisoned. Birds, butterflies, friendly bugs and frogs will die too.

Instead of insect spray, try planting basil, marigolds, onions, leeks, or garlic around your garden to deter bugs. Or try some of our bug cocktails and organic alternatives.

- For Aphids:
- Yellow bowl with soapy water in it
 - Scrape eggs off of the leaves by hand
 - Put banana peel under the plant
 - 1 TBSP garlic, 3 drops dishwashing liquid, 1 quart water
- Spray on plant
- For Whiteflies:
- 1 cup sour milk
 - 2 TBSP flour
 - 1 quart water
- Spray on plant
- Ants:
- Pour vinegar, salt or ground clove in areas where they gather
 - Spray "Skin so soft" by Avon or clove oil on their trails
 - Try planting mint, ants hate mint
- Slugs and Snails:
- pick them off plants and put in bucket of ammonia, vinegar, salt, or alcohol, YUCK!
- BANANA SLUGS ARE OUR FRIENDS
- All Purpose Bugs:
- 1tsp baking soda
 - 1 drop liquid soap
 - 2 quarts water
- Spray on plant
- Plant basil, marigolds, onions or garlic to deter bugs
- Mosquitoes:
- Remove standing water, if this is not possible, pour caffeinated coffee or vegetable oil on water
 - Put mosquito control ring in water gardens or ponds
 - Remove algae
 - Bats and swallows eat mosquitos, install bathhouses or birdhouses
 - Use natural repellents: try "Listerin" or tea tree oil

- Try "Mosquito Lemon Aid", 1 cup lemon scented ammonia, 1 cup lemon scented dish detergent, put in 20 gallon hose end sprayer, spray yard, in morning or evening, 3 times a week
- Change water in bird baths and water features, weekly
- Get your neighbors to join the battle

Plant Diseases

Plant diseases are possibly, the most difficult challenges in gardening. The best advise we have, is to take a sample of the diseased plant to your local nursery for analysis and suggestions. The problem could be anything from over watering, the wrong soil, or a variety of diseases. Once you discover the problem, try to find an organic solution. There are many organic fungicides on the market. Trimming out the diseased portion of the plant, may help prevent the spread of the disease.

Preventing diseases may be easier than curing them. Make sure your soil is fertile. Use a high level of organic matter, also known as "COMPOST" in your soil. Be sure you have good soil drainage. Clean up plant debris and trimmings. Remove infested plants. Plant disease free plants, purchased from a nursery with a good reputation. Disinfect your garden tools, implements, shoes and gloves. Vinegar is a good disinfectant.

Furry Pests

Do you have cute little critters dining on your plants? Dealing with bunnies, chipmunks, ground squirrels, moles, and deer in a humane way, takes clever and creative solutions.

Humane traps catch the little animals harmlessly, but you have to let them go somewhere. Be wise. Don't let them go, in some arbitrary place. Please, ask the property owner for permission to release the animal, first. Another idea, would be to contact the Fish and Wildlife Department for suggestions.

Garden Nets, placed over your fruit and vegetable plants, may prevent birds and small animals from eating your produce. Be sure to check your nets daily. These little critters can get caught in the net and may need your help to get free.

To keep ground squirrels and moles from eating your plant and tree roots, try this. Dig a hole larger than required, then line the hole with mesh wire. Place the plant in the hole and cover with dirt. Or, try sprinkling a mixture of ½ black pepper and ½ garlic powder around your plants.

Mice a problem? Try placing dryer sheets or mothballs in their favorite hangouts.

Here is a list of suggestions, to chase off furry pests:

- Plant garlic, chives or onions next to plants
- Put pieces of a strong deoderent soap in flower beds
- Dried blood or blood meal spread in garden (Use ONLY on decorative plants)
- Spray vegetable oil on plants (critters don't like oil on their fur)
- Toy snake, dog poop, moth balls, plastic owl, scare crow, urine of predators
- Hang metal pie pans in trees
- Make up pepper spray by mixing 6 habanero peppers, (strained) with 1 cup water in blender, add to 3 gallons water and 1tsp dish detergent, spray on ground around plants. Wear gloves and eye protection

To repulse deer, try these ideas:

- Mix 2 eggs, 2tsp beef broth and 1 gallon water, let stand 2 days or until it smells really bad. Spray on plants and edge of flower bed
- Hang human hair or dog hair in trees

Our furry pests will eventually realize some of our deterrents are harmless and ignore them, so you will need to change deterrents from time to time.

To keep CATS out of your flower beds, try chopping up pine cones and spread them around your flower beds. Cats don't like walking on the stickers

For DOGS, a fence is the best solution OR try this concoction, 2 cloves, 2 small onions, 1 jalapeno pepper, finely chopped. Add 1 TBSP Tabasco sauce, 1 TBSP chili powder, 1 TBSP dish detergent and 1 quart warm water. Mix together and let sit 24 hours. Strain and sprinkle on any dog problem area. Repeat after it rains

Damage from DOG urine can be repaired as follows. If it is an old stain, dig out damaged grass, flush with water, then reseed. You may want to try a Lawn Saver Tonic, ½ can beer, ½ can cola (not diet), ½ cup ammonia, mixed together. Put in a 20 gallon hose end sprayer and saturate the whole lawn. Please, try a small patch first.

BE WISE. Please test the concoctions on one plant, to be sure they are harmless before your spray your other plants. You will have to respray any mixture, after it rains. Be careful with sprays and nets and traps around your pets and children.

Watering

Watering your yard and garden can be an expensive proposition, if you live in an urban or suburban neighborhood. However, there are many places to get a supply of recycled water. You can collect runoff from your roof, in rain barrels. Collect rinse water from your washer machine or save your bath water. Divert water from your driveway to your landscaping by making a trench. Terrace your landscaping. Make shallow ditches from one flower bed to the next. Build moats around your trees to retain water. Use mulch in your flower beds, to reduce water evaporation.

When you water your grass, a deep soaking, once or twice a week, is better than watering daily. The roots will grow deeper, which will make the grass hardier, and more draught resistant. Water evaporates more quickly when you water every day.

A drip system is a very efficient watering method. The water goes directly to the base of the plant, instead of on top. This reduces weeds and diseases. There is also less wasted water from runoff. A timer attached to a drip system will prevent over watering.

Conclusion

As you can see, there is a "green" solution to every outdoor problem. Having a beautiful landscape and having a eco-friendly yard can go hand in hand. It may take a little more thought and work, but look at what you gain. Your family and pets will be safer and healthier. The birds and butterflies will still be around for us to enjoy. You may even come up with your own "green" methods of dealing with outdoor challenges. Share them.

Your Grandparents would be so proud.

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The Innovative Gardener by Kathy LaLiberte

Insect Disease and Weed ID Guide by Anna Carr, Linda Gilkerson and Miranda Smith

Critter Control and Pest Prevention by Jerry Baker

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Oregon State University Extension Office-Klamath Falls, OR

Web Sites

cleanairgardening.com

gardeners.com

hgtv/gardening by the yard

hgtv/seasoned gardener

taunton.com/fine gardening

"Green" Up Outside

Members Handout

The following recipes and suggestions have been taken from books, web sites, and word of mouth. Test them on one plant to make sure they do no harm, before continuing to other plants. Use gloves and eye protection. Be careful when using sprays, concoctions, nets and traps around children and pets.

Make Smart Choices

Try to choose plants that are native to your area. Choose plants that grow in your temperature zone, soil type, and humidity level. You may want to consider plants that are not popular with the critter crowd and disease resistant.

Compost

Combine: grass clippings, plant trimmings and kitchen scraps

Do not include meat scraps or weed trimmings. Add a little water. Stir at least once a week. Cover with a lid, or a tarp, or a sheet of plastic. When compost is brown and a soil like consistency it is ready to use. It takes about 1 to 1 ½ months. Ready to use compost can be purchased at any garden store.

Fertilizer

Organic fertilizers include bat guano, blood meal (use on ornamental plants only), fish emulsion, cow, horse or chicken manure (let manure rest for at least a year before putting it on plants), sea weed, cricket poop, sugar beet root, Epson salt, wood ashes, peat moss, sea kelp meal and so on. Follow directions carefully to avoid burning your plants.

Epson salt - For shrubs: 1 TBSP per 9 square feet, apply to root zone every 2-4 weeks.
For trees: 2 TBSP per 9 square feet, For lawns: 3 pounds for every 1250 feet diluted in water

Compost tea - mix 1 part finished compost to 5-8 parts water, strain liquid, then apply to Plant

Weeds

The most ecological way to get rid of weeds is to pull them, one by one. Be sure to pull them before they bloom and set seeds.

To reduce the spread of weeds, separate the flowerbeds with a border of edging material such as bricks, or rock.

In driveways and walkways - Boil 1 quart water with 2 TBSP salt, and 5 TBSP vinegar, Pour on weeds while mixture is hot. Vinegar is a natural herbicide.

Corn gluten meal - kills weeds without affecting growing plants. It is great for lawns. It must be used before weeds form roots, so that would be, in the spring. It is organic and safe around pets and children.

Mulch will reduce the number of weeds in your garden.

Mulch

Mulch helps reduce the number of weeds in your garden. It also, reduces water evaporation, so you can water less often. Mulch can be pine or cedar chips, sawdust, peat moss, pine needles, gravel, landscape fabric and even newspaper. Take 4-5 sheets of black and white newspaper, wet them and cover with soil and you have mulch. Spread the mulch of your choice around your flower beds. You will probably need to add more mulch every year or so.

Insects

We have various eco-friendly recipes and ideas. Try planting basil, marigolds, onions, leeks or garlic around your garden to deter bugs.

All purpose bug spray: 1-2 TBSP liquid soap, 1 gallon water, spray on plants, OR 1 tsp baking soda, 1 drop liquid soap and 2 quarts water, spray on plants

Aphids: yellow bowl of soapy water, OR banana peels on ground around plants. Scrape eggs off plant leaves, Try 1 TBSP garlic oil, 3 drops dish detergent, 1 quart water, Mix and spray on plants

White flies: 1 cup sour milk, 2 TBSP flour, 1 quart warm water, spray on plant

Mealy Bugs and Scales: 1 cup vegetable oil, 1 TBSP liquid soap, Mix together, add 1 TBSP mix to 1 quart water, spray on DORMANT trees.

Ants: salt or vinegar, where ants gather. "Skin So Soft" by Avon, cloves or clove oil on ant trails. Plant mint. (ants hate mint)

Cabbage Moth: Plant mint, thyme, dill or sage to fend them off

Slugs and Snails: Garter Snakes eat slugs, snails and mice. OR, Shortly after dusk, organize a hunting party. Pick off the snails and slugs and put them in a bucket of vinegar, alcohol or ammonia. YUCK!

BANNANA SLUGS ARE NOT PESTS. THEY ARE OUR FRIENDS.

Mosquitoes: The Battle Plan

1. Reduce the number of breeding sights by getting rid of standing water. If you can not get rid of standing water, pour old caffeinated coffee or vegetable oil in water.
2. Change bird baths, water features and pet water at least weekly.
3. Put mosquito rings in water gardens and ponds. These should eliminate mosquitos without harming fish or plants. Read instructions carefully.
4. Bats and Swallows eat mosquitos, so put up bathouses and birdhouses
5. To repel the blood suckers from your living space, try mosquito and gnat powder. Another option is a Solar Mosquito Inhibitor. A Solar Mosquito Inhibitor runs on solar power. It blocks a mosquito's sense of smell, so it can't pick up the scent of carbon dioxide and octenol, given off by humans. It is supposed to work up to 100 feet. Or, try a Mosquito Lemon Aid. Mix 1 cup lemon scented ammonia and 1 cup lemon scented dish detergent, put in a 20 gallon hose end sprayer. Spray in the morning or evening, 3 times a week.
6. Natural repellents- "Listerine" mouthwash, tea tree oil, lemons
7. Get your neighbors to join the battle

Diseases

Plant diseases can be difficult to diagnose. The problem could be anything. It could be over watering, wrong soil, sunburn, or a variety of diseases. It is best to take a sample of the diseased plant to a local nursery for analysis and suggestions. There are many organic fungicides on the market. Trimming out the diseased portion of the plant will help prevent the spread of the disease.

Preventing the disease may be easier than curing it. Make sure your soil is fertile, by using lots of compost. Be sure you have good soil drainage. Clean up plant debris and trimmings. Remove infested plants. Plant disease free plants, purchased from a reputable, nursery. Disinfect your garden tools, implements, gloves and shoes. Vinegar is a good disinfectant.

Here are some suggested solutions for common diseases. Remember to test these concoctions on one plant, before you spray other plants.

Powdery Mildew: Spray both sides of leaves with water, several times a week.
OR try 1tsp baking soda, 1 TBSP vegetable oil, 1 gallon water, 1 drop dish detergent, spray on plant

Rust: Avoid overhead watering

Blackspot: 1 TBSP baking soda, 1 TBSP vegetable oil, 1 gallon water, 1 drop dish detergent, spray on plant.

Blackspot and fungal disease on roses: 3 TBSP apple cider vinegar, 1 gallon water, spray on roses.

Critter Control

Here are some suggestions for controlling our furry friends. Be careful around pets and children when you are using traps, nets, toys and concoctions.

1. Humane Traps: traps come in various sizes. Once you catch the critter, get permission from the land owner, before you let them go on someone's property. Call Fish and Wildlife for suggested locations.
2. Garden Nets: to protect your fruit and vegetables from birds and bunnies. Check the nets, daily, to make sure a critter isn't caught in the net.
3. When planting, make a larger hole and line it with mesh wire, to prevent having your roots eaten by ground squirrels or moles.
4. Plant garlic, chives, or onions around other plants. Critters don't like these plants.
5. Sprinkle ½ black pepper and ½ garlic powder, mixed together around plants to deter ground squirrels.
6. Put strong deoderent soap (ex. Irish Spring) broken into pieces around your garden.
7. Dried blood or blood meal spread around. (Use ONLY on ornamental plans)
8. Spray Vegetable Oil on plants. (Critters don't like oil on their fur)
9. Make up Pepper Spray: Blend 6 habanero peppers & 1 cup water, strain mixture. Add 3 gallons water and 1 tsp dish detergent. Spray around plants. Wear gloves and eye protection.
10. Try placing toy snakes, dog poop, moth balls, a plastic owl, urine of predators, metal pans, and even a scarecrow in your garden. Alternate these props. Critters will get used to them and eventually ignore them.
11. To deter deer, try a nasty smelling brew: 2 eggs, 2 tsp beef broth, and 1 gallon water, Mix and let stand 2 days or until it smells really bad. Spray on trees, flower beds, and around edges of flowerbeds. Wear Gloves.
12. Human hair or dog hair, in nylon bags. Hang them in trees.
13. To keep CATS out of flower beds, try chopping up pine cones and spread them around. Cats don't like the walk on stickers.
14. For DOGS, a fence around your garden may be the best solution.
OR try this concoction: 2 cloves garlic, 2 small onions, 1 jalapeno pepper, all finely chopped. Add 1 TBSP Tabasco sauce, 1 TBSP Chili powder, 1 TBSP dish detergent, and 1 quart warm water. Mix together and let stand, 24 hours. Strain. Sprinkle on any dog problem areas. Repeat after each rain.

Damage from DOG urine: If it is an old stain, dig out damaged grass, flush with water, then reseed. Avoid lawn food. Try "Lawn Saver Tonic": ½ can beer, ½ can cola (not diet), ½ cup ammonia, mixed together. Put in a 20 gallon hose end sprayer and saturate your grass. PLEASE, Try this on a small patch of grass first, before spraying your whole lawn.

Mice problems? Try placing dryer sheets or mothballs in their favorite hangouts.

Watering

Ideas for conserving that most precious resource, WATER.

1. Recycle rain water, use rain barrels or buckets to catch rain water pouring off of the roof. Store in closed containers, to reduce mosquito problems. Collect rinse water from your washing machine. Save the water from your shower. Use this water for your garden.
2. Divert water from your driveway to your flower beds with trenches.
3. Create moats around your trees
4. Use Mulch
5. Install a drip system for more efficient watering.
6. Water grass thoroughly once or twice a week instead of watering a little each day, You will get deeper roots and a more draught resistant grass.
7. Terrace your landscaping.
8. Make shallow ditches from one flower bed to the next.

Cleaning Concrete Patios and Walkways

For stained concrete try: 1 cup ammonia and 1 gallon water. Scrub patio, then hose down with water.

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