THE
PIEDMONT
YARDSTICK
WORKBOOK

Does your yard measure up?

By following the simple steps inside, you can save time and money, make your yard the best it can be, and protect North Carolina’s water resources.
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The Piedmont Triad Water Quality Partnership is comprised of multiple communities within the Triad. For further details, visit www.piedmontwaterquality.org.

Every inch makes a difference. Whether it’s mulching, mowing your lawn or calibrating your irrigation system, a simple ruler can help you do it right.
INTRODUCTION

There's no doubt about it. Successful garden and lawn care in North Carolina requires special knowledge and skills. The Piedmont Yardstick Workbook, shows you how to create attractive and healthy yards by working with North Carolina's environment, rather than against it.

This Workbook guides you through an evaluation of your yard and yard care practices. Each action you take (or have already taken) earns you “inches” or credits on the Carolina Yardstick. **A yard that measures up to at least 36 inches is a Carolina Yard!** What is the payoff? A yard that meets your needs, enhances your neighborhood and helps protect North Carolina’s beauty and natural resources.

The Horticulture staff and volunteers at your county’s extension office can provide you with more information and answer questions. They can also tell you about additional services they may provide such as diagnostic tests, workshops, and on-site resources.

Remember, Rome wasn’t built in a day and neither is a Carolina Yard. Take this adventure a step at a time and have fun!
With a Carolina Yard, you win and so does North Carolina’s environment. You don’t waste water, fertilizers or pesticides, and North Carolina’s lakes, streams, rivers and wildlife are protected for generations to come.

**River**

The Nine Principles of the CYN Program:

- Right Plant, Right Place
- Recycle
- Water Efficiently
- Mulch
- Protect the Waterfront
- Fertilize Appropriately
- Managing Yard Pests
- Reduce Stormwater Runoff
- Attracting Wildlife

**Actions to Take:**

1. Recycle by building a compost bin
2. Wildlife habitat
3. Practical lawn area
4. Natural vegetated buffers along creeks and streambanks
5. Trees to shade southern and western sides of home
6. Divert stormwater runoff to a rain garden
7. Rain barrel (recycle water)
What does a Carolina Yard Look Like?

A Carolina Yard can take any form — unique or traditional. In fact, you can create a Carolina Yard simply by changing the way you take care of your yard.

8. Mark all storm drains with a pollution prevention message such as "Don't Dump-Drains to Lakes and Streams"
9. Keep street gutters and storm drains clear of dirt, leaves, grass clippings and other debris
10. Stormwater runoff from streets, sidewalks, rooftops and yards flows, untreated, into nearest body of water
11. Mulched plant beds

Mark all storm drains with pollution prevention messages, such as: "Don't Dump-Drains to Lakes and Streams."
Good landscape design hinges on one basic concept — the right plant planted in the right place. Careful planning and site evaluation are the first steps in applying this concept. The following checklists will guide you through some important considerations and decisions you should make when designing a landscaped area.

Resist (for now) the temptation to rush out and purchase plants. That will come later! First you will need to analyze the site. If you have an in-ground sprinkler system or are planning to put one in, make sure the designs for the landscape and sprinkler system match each other. Better yet, select plants based on their ability to survive and thrive on rainfall alone.

North Carolina is a diverse state which includes different climatic zones. Soil types, temperature ranges, and rainfall patterns are dramatically different from region to region. A plant that thrives in a friend’s yard on the coast may struggle in your yard in the piedmont. Different conditions often exist in the same yard, creating microclimates. The front yard may be high and dry, while the backyard may be poorly drained and soggy.

Once you know your site conditions and have decided how you will use your yard, you are ready to begin with plant selection. Your county extension office has resources to help you with your selections. Prioritize your landscape projects, and then work on them one at a time in order to make the best possible use of resources.

1. Determine your needs for a particular area. (A few suggestions)

   __ Play area for children
   __ Vegetable/Herb/Fruit garden
   __ Screen home from road or neighbors
   __ Wildlife habitat/Butterfly garden
   __ Water garden/Aquascape
   __ Sitting garden
   __ Area for entertaining
   __ Pet area
   __ Storage area
   __ Pool, spa, hot tub
   __ Outdoor barbecue area
   __ Showcase the home
2. Determine how much maintenance you want to put into your yard
(Time needed for mowing, pruning, and weeding. Requirements for water, fertilizer and pesticides.)

___ High
___ Medium
___ Low

3. Determine the site conditions in your yard

___ Mountains
___ Piedmont
___ Coast
___ full shade
___ partly shaded
___ sunny
___ sandy soil
___ loam soil
___ clay soil
___ well-drained soil
___ poorly drained soil
___ compacted soil
___ alkaline soil
___ acidic soil

Your county’s extension office can give you information on how to collect a soil sample for pH, soluble salts, or complete analysis tests.

CAROLINA YARD ACTIONS

- Reduce the need for water, fertilizer, pesticides and pruning by using plants suited to the site conditions in your yard. Credit: 2 inches.
- Group plants according to their maintenance needs (For example, group drought-tolerant plants with low-water needs separately from lawn areas). Credit: 2 inches.
- Determine how much grass you need for children, pets and recreation. Use low-maintenance ground covers, shrubs, mulch or other porous surfaces where possible. Credit: 1 inch.
- Save energy by using trees and shrubs to shade the air conditioner compressor and southeast and western walls of your home. Credit: 1 inch.
- Use deciduous trees or shrubs in southern exposures to allow sun to passively heat your home in the winter. Credit: 1 inch.
- Help stop the spread of invasive exotic plants by removing them or not introducing them to your yard. Credit: 1 inch.
- Reduce yard waste by choosing plants that will not require frequent pruning. Credit: 1 inch.
- Preserve existing vegetation, especially trees, when building on a new site. Maintain a protective “do not disturb” barrier under the dripline of trees. Credit: 1 inch.

___ Total Inches
Right Plant, Right Place

Choose among plants with these characteristics to reduce maintenance:

___ drought tolerant  ___ shade tolerant  ___ slow growing shrubs
___ pest tolerant     ___ cold tolerant    ___ groundcovers

4. Create your design plan

Landscape design steps can be found at www.carolinayards.org. Draw your landscape design to scale. Use graph paper to help with spacing. Be sure to indicate where activities will take place, future plans for additions to the home, and space for children and pets. Don’t forget to add irrigation zones if you have an in-ground system.

First indicate existing plants, then note site conditions, including number of hours of sun in each area.

5. Utilizing NC Extension publications, choose plants to meet specific conditions in your yard

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________
The Top Five Common Mistakes in Landscape Plantings

**Mistake #1: Over-planting.**
Small trees and shrubs are often planted too close together to get a “full” look. The result several years later is a crowded landscape that stresses plants. Plants must be removed or drastically pruned to reduce competition and increase air circulation.

**Solution #1:** Resist the temptation to have an “instant landscape.” Know the mature size of plants and give them room, and time, to grow into their proper mature size.

**Mistake #2: Lawn areas are cluttered with trees and shrubs.**
Plants scattered throughout the lawn appear unorganized. They also create maintenance problems in terms of mowing, raking, and giving plants the amount of water and fertilizer they need.

**Solution #2:** Group shrubs and trees according to their water and maintenance needs in mulched plant beds bordering the lawn.

**Mistake #3: Shrubs around the home are too tall.**
When plants grow too tall they cover windows and no longer enhance the home’s appearance. We usually try to compensate for this “mis-planting” by shearing to control the plant size. This constant shearing weakens and disfigures shrubs. It also creates extra work and yard waste.

**Solution #3:** Select foundation plants with an ultimate (mature) size that fits their location. Selectively clip stray shoots to keep the plant neat and full.

**Mistake #4: Plants are planted too close to the house.**
Plants too close to the house have an unattractive “cramped” look. They also create a maintenance nightmare when it’s time to repair or paint the house.

**Solution #4:** Foundation or corner shrubs should be planted half their mature width plus one foot away from the wall. Therefore, a shrub that will grow to be five feet wide should be planted 3 1/2 (2 1/2 + 1) feet away from the house.

**Mistake #5: Bright colors are scattered throughout the yard.**
Brightly colored foliage, flowers or fruit attract attention. When brilliant color is scattered throughout the lawn it draws attention away from the focal point that the color was meant to emphasize.

**Solution #5:** Concentrate color where accent is desired. The goal is to attract attention to focal areas of the house. Do not add so many colors to the landscape palette that it takes away from the overall visual effect.

Adapted from “Landscape Design” by Greg Davis, Ph.D., in Florida Master Gardener Update, September 1994.
n a Carolina Yard, grass clippings, leaves and yard trimmings are recycled or composted rather than thrown away. By composting yard debris, we gain free mulch and return valuable nutrients to the soil. Turn plant and kitchen scraps into rich compost for your indoor and outdoor plants.

**CAROLINA YARD ACTIONS**

- Recycle grass clippings by leaving them on the lawn. Credit: 2 inches.
- Use fallen leaves and pine needles as mulch under trees and shrubs. They make an attractive, natural mulch and are free. (If you have more leaves than you can use, share them with a friend or neighbor.) Credit: 1 inch.
- Create and maintain a compost pile with kitchen scraps and yard waste (no animal products, please). Credit: 1 inch.
- Collect and store rain runoff from your roof in a rain barrel or cistern. Credit: 1 inch.

___ Total Inches

By collecting rain water in a rain barrel, you can reduce stormwater runoff and recycle water.

**Rain Barrel Tips**

- Barrels either have sealed lids or lids that can be removed. Removable lids have larger openings making cleaning out debris easier.
- Barrels made of white plastic seem to disintegrate more quickly in the sun. Dark green or black blend into the landscape and are less noticeable.
- For homemade barrels, food-grade drums are available in 42 gallon and 48 gallon sizes.
Stormwater is the number one source of pollution to surface water. Help reduce runoff by installing a rain barrel. Remember, only rain belongs in the storm drain.

Making a Rain Barrel

Rain barrels are a great way to reduce stormwater runoff and to save water for a dry spell. If you have gutters on your house, you may be able to collect 55 gallons of water during a 1/2-inch rain by connecting a downspout to a rain barrel or cistern.

**Tools:**
- Electric Drill
- 15/16" Drill Bit
- Sabre Saw
  (you can use a hand drill & hand saw)

**Supplies:**
- Plastic Drum (55 gal. best)
- 3/4" Spigot (with male threads)
- PVC Cement
- Caulk

**Directions:** Use only barrels that have carried food products, not chemicals!

1. Drill 15/16" hole at the first even part of barrel, about 6" to 8" from bottom.

2. Screw 3/4" spigot into hole (should have a snug fit).

3. When spigot is about 3/4" of the way in, apply PVC cement to threads and finish tightening.

4. If using a downspout, use a sabre saw to cut a hole in lid to fit spout. After inserting down spout, caulk around the hole.

5. Other option: Take off the lid of a drum or trash can and cover the opening with a fine fiberglass screen. Place the container where water flows off your roof.

6. Elevate barrel on 2 to 3 cement blocks to allow easy access to the spigot. (For more pressure, raise the barrel higher above the ground.)

7. You may want to add a second spigot at the top of the barrel so you can direct the overflow through a hose into a specific part of your yard.
Water Efficiently

A truly efficient way to use water in a yard is to design the yard so that it thrives predominantly on rainfall. Even if your yard has lawn and specialty gardens, it is possible to design it as a Carolina Yard in which you can water the plants “as needed.”

When planning your landscape, divide the area into low, moderate and high water use zones and locate plants accordingly. Incorporate as many of the natural elements of the site into the design as possible. Undisturbed native plants do not require the additional water that new plants need for establishment. Shade is also another great way to make the landscape more water efficient. When it comes to irrigation, it is extremely important that water be applied to meet the needs of plants in each of your zones.

For example, a lawn in full sun will demand more frequent irrigation than an established plant bed of shrubs and groundcover. One exception to the water-use zone rule is new plantings. These plants require regular irrigation during the establishment period (8 to 10 weeks after planting), regardless of their intended water-use zones. Plan to water landscapes during the evening, from dusk to dawn as less evaporation occurs during this time and the plants can make more efficient use of the water. Even an ideal landscape design can be overwatered.

Mowing Heights

Mow lawns at recommended mowing heights to encourage healthy growth of root system.
Give your lawn a break during the summer!

Avoid the temptation to keep it green and growing year-round. Cool season lawns go semi-dormant in the Piedmont of North Carolina from June through August. During this time, the lawn will only need watering during drought periods. Be aware of any water restrictions in your area.

Let your plants tell you when they need water:

- Grass has bluish-gray tint and rolled leaf blades.
- Annuals droop and don’t recover by the next morning.
- Most plants thrive on 1 inch of water per week, including rainfall.
- Most established trees and shrubs need watering only during times of drought.

The higher the grass, the more extensive the root system, and the healthier the lawn.

CAROLINA YARD ACTIONS

- Design and maintain a yard that thrives predominantly on rainfall once plants are established. Credit: 2 inches.
- Water your lawn and other plants only when they show signs of stress. (Comply with any existing watering restrictions in your community.) Credit: 1 inch.
- Calibrate your sprinkler(s) to apply 1/4 to 1/2 inch of water per application, so that water is not lost due to runoff. Credit: 1 inch.
- Mow lawns high to encourage a deeper, more drought and pest tolerant root system. A higher cut lawn also helps shade out weeds. Cut no more than 1/3 the height of grass blades with each mowing. Credit: 2 inches.
- Put a rain gauge in your yard to track rainfall to avoid unnecessary watering. Credit: 1 inch.
- Connect an automatic rain shut-off device to your sprinkler system’s timer. Set the device to 1/4 inch so it will override your system’s timer when enough rain has fallen. Credit: 1 inch.
- Design or modify your sprinkler system to water lawn areas separately from plant beds requiring less water. Credit: 1 inch.
- Use a drip or micro-spray irrigation system to more efficiently water plant and flower beds. Credit: 1 inch.

____ Total Inches
Mulch

Mulch keeps moisture in the soil and moderates soil temperature.

Mulch also reduces erosion and controls weeds. It is sold in bags, by the yard, or by the truckload.

How much mulch do you need to have the recommended depth of 3 inches?

- **By the bag:**
  1 bag containing 2 cubic feet covers 8 square feet (2 ft. x 4 ft.)

- **By the bale:**
  1 bale of pine straw covers 18 to 20 square feet

- **By the yard:**
  1 cubic yard covers 108 square feet (9 ft. x 12 ft.)

- **By the truckload:**
  1 mini pickup holds 1 1/2 yards and covers 168 square feet (9 ft. x 18 ft.) and 1 full-sized pickup holds 2 1/2 yards covering 270 square feet (9 ft. x 30 ft.)

**CAROLINA YARD ACTIONS**

- Keep a 2-3 inch layer of organic mulch over the roots of trees, shrubs, and in plant beds. Remember to leave at least 2 inches of space between the mulch and the plant’s trunk or stem. Credit: 1 inch.

- Replenish mulch once or twice a year, as needed to maintain a 2-3 inch depth. Credit: 1 inch.

- Create self-mulching areas under trees where leaves can stay where they fall. Credit: 1 inch.

- Use by-product or alternative mulches such as pine straw, pine bark, hardwood or municipal recycled mulches, when available from your community. Credit: 1 inch.

  **Total Inches**

Pull mulch away from stems and trunks to avoid stem rot.
Protecting the Waterfront (Creeks, Lakes and Ponds)

Waterfront property owners realize the special contribution water makes to their quality of life. They should also understand how fragile these natural treasures can be.

CAROLINA YARD ACTIONS

- Remove invasive exotic aquatic plants by cutting, pulling or raking. If using herbicides, remove dead plant material from the water to reduce pollution. Credit: 1 inch.

- Protect your native water edge plants. Never prune or remove vegetation without first seeking proper guidelines and permits. Credit: 1 inch.

- Establish a 10-20 foot "no fertilizer, no pesticide" zone along your shoreline. Credit: 1 inch.

- Plant a vegetated border of low-maintenance plants between your lawn and the waterfront to absorb nutrients and other pollutants, as well as provide necessary wildlife habitat. Credit: 1 inch.

___ Total Inches
Fertilize Appropriately

Most trees and landscape plants need little or no fertilizer once they are established. In fact, excess fertilizers can weaken plants and make them more vulnerable to insects and disease problems. Rainfall can also carry fertilizers from yards and paved areas, causing pollution in our streams, rivers, and lakes.

How much fertilizer should you apply?

Fertilizer labels always display three numbers in the same order, (i.e. 10-6-4). They represent the % by weight of three important nutrients:

- Nitrogen (N) — for green, leafy growth.
- Phosphorus (P) — for root and bud growth.
- Potassium (K) — promotes disease tolerance and drought tolerance.

Example: A 40 lb. bag of 10-6-4 fertilizer has: 10% nitrogen (4 lbs.), 6% phosphate (2.4 lbs. of P), and 4% potassium, also called potash (1.6 lbs. of K).

Calculating the Amount of Fertilizer You Need

A typical lawn needs 1 lb. of nitrogen per 1,000 square feet. Here are some common lawn fertilizer formulations and the amount of each needed for 1 lb. of nitrogen:

For other formulations, follow this example using a fertilizer labeled 24-6-6:

- The first number is the % of nitrogen — 24%.
- To find out how much total product it takes to apply 1 lb. of nitrogen, divide the 1 lb. by 0.24.
- \(1 \div 0.24 = 4.17\). This is equal to a little more than 4 lbs. of product.

<table>
<thead>
<tr>
<th>Fertilizer Bag Reads</th>
<th>Amount needed for 1 lb. of nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-2-0</td>
<td>17 lbs.</td>
</tr>
<tr>
<td>10-10-10</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>14-3-6</td>
<td>7 lbs.</td>
</tr>
<tr>
<td>20-5-5</td>
<td>5 lbs.</td>
</tr>
<tr>
<td>26-3-4</td>
<td>4 lbs.</td>
</tr>
<tr>
<td>35-3-5</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>24-6-6</td>
<td>4 lbs.</td>
</tr>
</tbody>
</table>

If your lawn is 5,000 sq. ft., multiply 4 lbs. by 5, since fertilizer rates are always calculated as 1,000 sq. ft. The result is 20. You would need a 20 lb. bag of 24-6-6 to cover your lawn.
How many nutrients should you apply?

- First step, test your soil. To receive a free soil test kit contact your local County Cooperative Extension Service.

- Use your soil test results to determine how much phosphorus, potassium, and lime you need to apply.

- Nitrogen amounts should be based on grass type. Almost all lawns in the piedmont are tall fescue. Fescue needs no more than about 2 1/2 lbs. of nitrogen per year. Apply 1/2 lb. in February, 1 lb. in September, and the final 1 lb. in October. Or, if you leave your grass clippings on the lawn, you can reduce the amount of fertilizer to 1/2 lb. in September and 1/2 lb. in October.

- Try to match fertilizer to all the nutrients needed- nitrogen, phosphorus, and potassium. If your soil test indicates that your lawn does not need phosphorus or potassium, seek fertilizers with less of these nutrients.

- If using organic fertilizers, the nutrient content should be matched to the lawn need. Organic nutrients are released more slowly and cause as much pollution as synthetic fertilizers. Do not overapply!

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**CAROLINA YARD ACTIONS**

- Test your soil. Credit: 1 inch.

- Fertilize only as needed to maintain the health of lawns and landscape plants. Do not exceed the rate of 1 pound of nitrogen per 1,000 square feet per application. Credit: 2 inches.

- Keep fertilizer off pavement, or sweep fertilizer back onto grass. Credit: 1 inch.

- Fertilize during the correct season using soil test results and grass type. Credit: 1 inch. ___ Total Inches

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**Keep fertilizers out of our streams!**

- Keep fertilizer off paved surfaces! If fertilizer lands on hard surfaces, be sure to sweep it off immediately.

- Fill or empty spreaders on your grass, garden, or natural areas. This keeps the fertilizer off hard surfaces.

- Do not apply fertilizer to frozen ground or dormant turf.

- Do not use fertilizer as a de-icer.

- Do not blow or sweep soil and other materials into storm drains.
It is unrealistic, and even unwise, to strive for an insect-, disease- and weed-free yard. Many insects are beneficial, helping to keep pests under natural control. Many other insects simply coexist with humans causing us no harm. In fact, only about 1% of all insects are harmful.

Meet some of the “Good Guys.” Help protect these beneficial insects — so they can naturally keep pests under control.

Lady Beetle (larva)  Lady Beetle  Assassin Bug

Green Lacewing (larva)  Green Lacewing  Big-eyed Bug

Praying Mantis  Syrphid Fly  Syrphid Fly (larva)
IPM-Integrated Pest Management

Communities and individuals are successfully managing pests by protecting beneficial insects and reducing the use of pesticides. By definition, pests include insects, diseases and weeds. With a little bit of knowledge and the right tools, it is easy to practice IPM in your yard.

- Check your lawn and plant beds regularly for pest problems.
- Identify the problem. Know the good from the bad. It makes a difference. Good bugs eat bad bugs.
- When appropriate, first try non-chemical approaches (like cultural methods) and safest pesticides possible, such as insecticidal soaps, horticultural oils and biological products.
- Spot treat. If insects or weeds are a problem, don’t treat the entire lawn – only the affected area. If one out of ten shrubs have scale, treat only the infested plant.
- Be tolerant! Low levels of pests will do minimal damage to plants and many are a source of food for beneficial insects.
- The label is the law! Read pesticide labels carefully for information on using pesticides and disposing of leftover chemicals and containers.

**CAROLINA YARD ACTIONS**

- Check plants regularly. Walk around your yard every week and observe your plants and lawn for signs of problems. Credit: 1 inch.
- Avoid routine applications of pesticides. Treat only affected areas rather than spraying your entire lawn or yard. (Require that your maintenance company follow these strategies.) Credit: 2 inches.
- Know at least five beneficial insects that provide natural control of harmful pests. Credit: 1 inch.
- Wherever possible use non-chemical approaches to pest control, such as pruning off affected areas, hand-removing insects, etc. Credit: 1 inch.
- Use environmentally-friendly pesticides such as horticultural oils, Bacillus thuringiensis (Bt) and insecticidal soaps. These effective and safe materials can control most plant pests. Credit: 1 inch.

___ Total Inches

**Friendly Fungus? Milky Spore is a fungus that attacks Japanese beetle larva. The term beneficial applies to bacteria, birds, insects or any other organism that keeps pest populations under control.**
As you drive around, you’ll notice more hard or impervious surfaces like roads, buildings and parking lots with less vegetated areas. As we remove vegetation such as trees, grass, and shrubs, and replace them with concrete and asphalt, the rainwater is unable to soak into the ground.

Why is this important? Because in natural landscapes, plants slow and spread the flow of rainwater so it can either evaporate or slowly soak into the ground. The soil removes most pollutants from the water before they reach our surface water.

For example, with one inch of rain, 27,500 gallons fall on one acre of land. In the Piedmont of North Carolina, we receive over 40 inches of rainfall annually! So imagine what happens when much of this rain falls on roadways, rooftops and other impervious surfaces? Well, if it cannot soak into the ground, rainwater flows over land in large quantities. This large quantity of water can cause damage to the landscape, such as erosion, and localized flooding, on its way to the nearest stream or lake.

The rainwater also picks up pollutants such as yard waste, pesticides, fertilizers, oil and pet waste as it flows across driveways, parking lots and yards. This stormwater filled with pollutants and sediment usually travels along curbs and ditches to storm drains or gutters. Storm drains empty directly into local streams, rivers, lakes, and ponds.

It is important to reduce the amount of pollutants on our property, because water washes off our yards. There are great benefits to having swales, or low areas, in your yard and using pervious surfaces for patios and walkways.
Rain Gardens

Rain gardens are gardens built into a bowl-like or pocket-like depression in the ground to capture rainfall runoff from your rooftop and driveway and allow the water to soak slowly into the ground within one day.

They can be designed using a variety of shapes and color schemes to attract wildlife and butterflies, while blending into the surrounding landscape. The options are abundant with lots of plant varieties that can be incorporated.

Benefits of rain gardens:
- Can add beauty and value to your property.
- Provide wildlife and butterfly habitat.
- Minimize rainwater runoff to storm drains while naturally treating the water at the same time.
- Protect our valuable water resources.

CAROLINA YARD ACTIONS

- Where possible, direct downspouts and gutters to drain onto the lawn, plant beds or containment areas where rain will soak into the soil rather than run off the yard. Or collect in rain barrels for further use. Credit: 1 inch.

- Decrease soil erosion by planting groundcovers where lawn grass doesn’t thrive, such as under trees or on steep slopes. Credit: 2 inches.

- Use mulch or other porous surfaces for walkways. Credit: 1 inch.

- Create rain gardens or terracing to catch, hold and filter stormwater. Credit: 2 inches.

- Pick up after pets. This will help reduce bacterial and nutrient pollution entering storm drain systems. Credit: 1 inch.

- Clean up oil spills and leaks on the driveway. Instead of using soap and water, spread cat litter over oil, sweep it up and then throw away in the trash. Credit: 1 inch.

- Sweep grass clippings, fertilizer and soil from driveways and streets back onto the lawn. Remove trash from street gutters before it gets washed into storm drains. Credit: 1 inch.

___ Total Inches
Attracting Wildlife

With 1,700 species of animals, North Carolina has tremendous wildlife diversity.

Providing adequate food, water and shelter can increase the number and variety of species that live in your yard.

Butterflies add beauty to our yards and pollinate plants.

Adult dragonflies are beneficial because they capture mosquitoes.

Frogs help keep mosquitoes and other unwanted insects under control. They also serenade us at night, especially after a good rain.

CAROLINA YARD ACTIONS

- Plant vines, shrubs, and trees that provide cover, nesting areas, or food for birds, butterflies and other wildlife. Credit: 1 inch.
- Provide a water source, such as a bird bath or a small pond, for wildlife. Credit: 1 inch.
- Provide wildlife shelters such as a bat house, bird house, brush pile or a snag. Credit: 1 inch.
- Identify five kinds of wildlife critters (insects, reptiles, animals, birds, etc.) that live in your yard. Credit: 1 inch.

___ Total Inches

Total Inches for All Carolina Yard Actions: _____

Aquascaping for You and Wildlife

Even small backyard ponds can be very beneficial to wildlife. A balanced system including fish and plants won't need a pump or filter (as long as you don't feed the fish).

- Flexible PVC or rubber liners allow you to create the pond shape you want. Create a 9-inch wide shelf, about 9 to 12 inches below the water line, for potted aquatic plants. Walls should have a 20 degree slope.
- Preformed ponds are usually rugged, made of fiberglass or PVC. They can be placed above or below the ground.
- Aquatic plants from artificial backyard ponds can be invasive and should not be put into natural streams, rivers or lakes.
Does your yard measure up?

Everyone needs to be aware of the impacts they make to North Carolina's environment. The Piedmont Yardstick Workbook provides valuable information to help residents make wise decisions in their landscapes. By following the nine simple principles described in this workbook, you can keep your yard healthy and prevent pollution in our water resources.

**Right Plant, Right Place**
Plant trees on the southeast and western sides of your home to conserve energy. Group plants according to their water needs.

**Recycle**
Leave grass clippings on the lawn to provide nutrients and to reduce solid waste disposal costs.

**Water Efficiently**
Water your lawn and other plants only when they show signs of stress (only 1” of water per week, including rainfall).

**Mulch**
Keep 2-3 inch layers of organic mulch over the roots of trees, shrubs, and in plant beds.

**Protecting the Waterfront**
Plant a vegetated border of low-maintenance plants between your lawn and the waterfront.

**Fertilize Appropriately**
Reduce chemical use on the landscape. Identify the problem and then apply natural nutrients or slow-release fertilizers.

**Managing Yard Pests**
Adopt least-toxic pest control around your homes or businesses.

**Reduce Stormwater Runoff**
Direct downspouts onto the landscape or into cisterns, rain barrels or rain gardens.

**Attracting Wildlife**
Create wildlife habitats that add beauty and interest to your landscape.
Carolina Yards & Neighborhoods

is a program of the N.C. Cooperative Extension Service and the Piedmont Triad Water Quality Partnership

For other lawn & gardening information, visit the following website:

www.carolinayards.org

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