



Natural  
Environmental  
Reclamation  
Concepts, Inc.

143 W. Main  
P.O. Box 70  
Hanover, MI 49241

(888) 303-NERC  
(517) 563-2898  
Fax: (517) 563-2899

[nerc@modempool.com](mailto:nerc@modempool.com)

## Grubs, Grubs Go Away

### HUNGRY BEETLE LARVAE ARE BAD NEWS FOR LAWNS

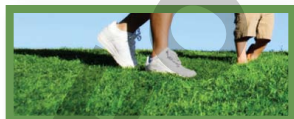
When it comes to lawn pests, it doesn't get much worse than grubs. These ghastly creatures are beetle larvae that hatch from eggs laid in the soil. Grubs have an insatiable appetite for turf roots, and they're able to go unnoticed while they feast underground. By feeding on roots, grubs compromise the ability of grass plants to take up water.

#### WHAT ARE THE SIGNS?

Lawns under attack from grubs may exhibit any of the following symptoms:



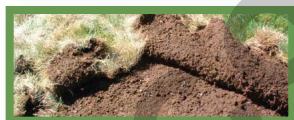
Irregular brown patches of grass



Lawn areas that feel spongy as you walk across them



Skunks, raccoons and birds foraging in your lawn (possibly looking for grubs to eat)



Dead turf that can easily be rolled up like a loose carpet

#### WHAT IS THE TREATMENT?

It's best to treat your lawn for grubs *before* damage appears. One way to do this is with a systemic insecticide application. The insecticide will be taken up by the roots, killing the grubs as they feed on them. It will be most effective if applied by mid-August (while beetles are still laying their eggs).

#### WHAT ABOUT THE BEETLES?

Grubs that make it to adulthood can cause plenty of problems too. For example, adult Japanese beetles (a common source of lawn grubs) eat the leaves and flowers of more than 300 plant species. They're known to "skeletonize" plants by feeding on the tissue between the veins. Various methods of control are available for these beetles, including hand picking, trapping and insecticide sprays.

Grubs and beetles can be very destructive, but they can also be managed with regular inspections and proper controls. As with most pests, the quicker action is taken the better.



Grubs are beetle larvae that feed on turf roots underground.

There's one way to tell for sure if grubs have set up shop in your lawn, and that is to perform a grub check. This can be done by pulling up and examining a small section of sod. If more than six grubs are visible per square foot, treatment is definitely necessary.



## Don't Give Up THE FIGHT!

Broadleaf weeds are an unfortunate fact of life.

Just when you think you've seen the last of them, up comes another one. Their seeds are everywhere, and they grow especially well in hot summer weather. It doesn't help that many broadleaf weeds have small leaves with a tough, waxy coating. This enables them to hold onto water so they don't dry out as fast as turfgrass.

Don't lose hope though! Broadleaf weeds can be kept under control with a combination of good lawn care practices and ongoing spot treatments. This includes regular fertilization and watering to encourage thicker turfgrass growth; mowing higher to keep the soil cool and shaded (broadleaf weed seeds love the sun and heat); and post-emergent herbicide applications as necessary. These applications must be made to weeds while they're actively growing.

With a winning lawn care plan and a little patience, you can be victorious in the fight against broadleaf weeds!



*Broadleaf weed control is an ongoing battle.*

# Summer Watering: Make Every Drop Count

Rising summer temperatures lead to an increase in your lawn and landscape plants' moisture needs. If rainfall is scarce this summer, your turf, trees and shrubs will really be counting on you to step in with some supplemental watering.

It's a common misconception that light, frequent watering is beneficial. Actually, this does more harm than good by encouraging shallow root systems that dry out too quickly. What you want to do is cultivate deeper, more extensive roots. The way to do that is to water less often, but more deeply.

### HOW MUCH IS ENOUGH?

Your lawn needs from 1" to 1½" of water per week from rainfall or sprinkling. If there's no rain in the forecast, a long, deep soaking once per week will do (letting moisture penetrate 6" to 8" into the soil).

Your trees and shrubs will also benefit from a deep weekly soaking in hot, dry weather. To keep them sufficiently hydrated, you should water them three times as long as you water your turf.

Watering early in the morning helps to avoid evaporation from wind and the sun's heat. You can further improve watering efficiency by keeping sprinklers from hitting sidewalks and driveways.

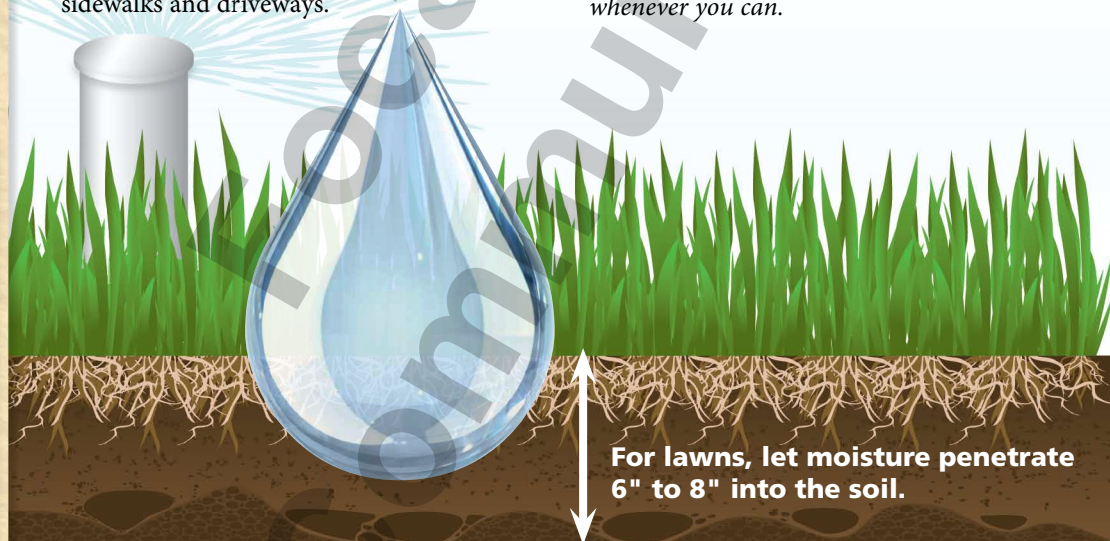
### TAKING AWAY THE GUESSWORK

To ensure that your lawn, trees and shrubs always get the right amounts of water at the right times, you may want to consider an automatic irrigation system. These systems take the work and worry out of watering with beneficial features such as:

- Timers that limit watering to the cooler parts of the day.
- Independent station programming to provide certain parts of your landscape with more water than others (depending on plants' individual moisture needs).
- Rain shut-off devices to prevent wasteful watering when it's raining.
- Soil moisture sensors to override irrigation when enough water is present in the soil.

Whether you choose the hands-on approach or let an automatic system do the watering for you, you'll be making a big difference in the health and beauty of your lawn, trees and shrubs!

*PLEASE NOTE: If watering restrictions are in place, we encourage you to follow your county's guidelines for water conservation, watering your lawn, trees and shrubs whenever you can.*



5. Statue has been added behind chair on the left.  
6. Front stepping stone is wider.  
7. There is a new plant on table between the two chairs.  
8. Weaving is missing under wicker chair arm to the right.

1. Statue to the right of bridge has been removed.  
2. Tree trunk at center back is not wrapped.  
3. Petunia plant has been added to the right of bridge.  
4. Fish is now in the pond to the left of bridge.  
Answers to photo puzzle on back page:



# Soil Preparation for Perennials

**SUCCESS IS 10% PLANTS AND 90% SOIL**

Good soil preparation is a major factor in the success of perennial plantings. Perennial plants are expected to grow in the same spot for many years, so why not make that spot as conducive as possible to healthy growth?

The first step is to improve the soil's drainage. This can be done by:

- Spading or rototilling the soil to a depth of 12" to 18" for each planting hole
- Removing any rocks or other debris
- Mixing in organic matter such as compost, peat moss, perlite or vermiculite

It's also a good idea to have the soil's pH level tested. Most perennials grow best in soil with a pH range of 6.5 to 7.0. If the soil's pH is too low, lime can be added to raise it. If the pH is too high, sulfur can be added to lower it.

Soil fertility can be improved as well with the addition of a complete fertilizer. High-nitrogen fertilizers should be avoided, since these tend to promote excessive foliage (at the expense of a strong root system and good flower production).

Once all amendments have been made, the perennials can be planted. After planting,

a layer of mulch should be added to perennial beds in order to discourage weed growth and help the soil retain moisture.



Remember...the better the soil, the better the perennials!



## Hungry, Hungry Bagworms

As you walk around your property this summer, keep an eye out for bags hanging from your trees and shrubs. They may resemble pine cones or other plant structures, but they're really the coverings that destructive bagworms spin around themselves. Bagworms are known to infest both deciduous and evergreen trees, and they're especially damaging to arborvitae, juniper, spruce, pine and cedar.

### LIFE CYCLE

Bagworms are the larval and adult female stages of moths. Females lay their eggs inside the protective bags in early fall, and the eggs over-winter inside the bags before hatching in mid to late May. Then the larvae crawl out of the bags to begin feeding and building their own protective

bags (using silk and bits of plant material). With their huge appetites, bagworms can strip trees and shrubs of all their foliage. In severe cases, tree death can occur.

### MANAGEMENT

If just a few landscape plants are infested, bags can be removed by hand and destroyed. However, larger attacks will most often require one or two treatments with insecticides for effective control (proper timing of treatments is very important). If you suspect that bagworms are feeding on your landscape plants, a professional inspection is recommended to determine the best course of action.



*Spindle-shaped bags like these protect eggs over the winter.*





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## 2010 PERENNIAL PLANT OF THE YEAR *Baptisia australis*

The Perennial Plant Association has named *Baptisia australis* the 2010 Perennial Plant of the Year! Native to North American prairies, this showy perennial has soft, blue-green foliage and requires very little maintenance. It works well as a specimen plant, a backdrop along borders, or among meadow plantings.

Perhaps the best quality about *Baptisia australis* is its ability to provide four seasons of interest in the landscape. Indigo-blue flowers on spikes up to 1' long bring striking color to the spring landscape. Once the flowers fade, 2" to 3" seed pods emerge, changing from green to charcoal black in color as they ripen in late summer and early fall. These pods remain attractive well into winter.

*Baptisia australis* grows best in full sun and well-drained soil. Drought-tolerant due to its tough, deep tap root, this long-lived perennial makes a great addition to any perennial garden.



*Baptisia australis* in bloom.

## Can You Tell the Difference?

See if you can find the eight differences between the two photos. Answers are on page 2.

