Each summer I spend in Transylvania County seems to offer new challenges. In my first few years, it rained nonstop (after all, we are considered a temperate rain forest!) and I was ready to build an ark. The floods were followed by a couple of years of serious drought. Now this summer we are suffering from a sweltering heat wave and experiencing intermittent big rains.

The one thing that happens consistently in our Transylvania County summers is that when it does rain, it usually falls fast and furious, creating lots of runoff problems.

Did you know that one inch of rain hitting just 100 square feet of hard surface (say, a 10 foot x 10 foot section of roof,) produces almost fifty gallons of water? The volume of water running off impervious surfaces (that is, hard surfaces that don’t absorb water, such as rooftops, roads and parking areas,) on a typical property is enormous.

In the past, we were taught to get the water off of our property by using downspouts to route water to the street, the storm drain, and the creek. But all this water, piped at high velocity, does damage downstream by creating erosion, and adding sediment and pollutants to our streams and rivers. Moreover, this water is lost to the plants growing in our yards, to the groundwater beneath our property that recharges wells, and to the groundwater that supplies base flow to our streams and rivers.

New landscape design techniques emphasize what is called “Low Impact Development” or LID practices. The LID philosophy with regard to water is to keep the water on your property!

First, minimize the land that is cleared of vegetation –trees, shrubs and herbaceous materials help hold the soil and allow rain to infiltrate the ground. If you are trying to create a mountain view, cut “windows” in the trees by removing branches in your view sight, instead of cutting down or topping the trees.

Avoid steep slopes around your house or along the driveway. A 33% slope (1 foot rise over 3 feet) is considered the maximum mowable slope; a 50% slope (1 foot rise over 2 feet) is considered the maximum plantable slope. Any steeper will really need a retaining wall to make the slope usable and to avoid erosion.

Use permeable materials for your driveway, walkways and patios. For example crushed gravel or permeable pavers can be used for driveways. Pavers or flagstone laid on crushed stone makes a good patio surface without using concrete.
Let some of the rainfall off your roof into dry streams that carry
the water away from your house. Pipe water from gutters and
downspouts to existing vegetated areas or create shallow depressions,
called rain gardens, which can absorb and filter the water.

Catch the water coming off the roof from a downspout into a rain
barrel – or better yet – a larger cistern. Recovering rainwater this way
is a great way to capture water for irrigating parched plants.

To promote infiltration of rainwater, look for ways to slow it
down. Introduce boulders and plant material to break up the water
flow. Mulch slopes heavily, add swales and berms running cross-wise
on the slope or terrace steep slopes with retaining walls.

Swales can be planted with grass, or with rain garden plants
(plants that can handle wet feet as well as drought periods.) In fact,
rain gardens and street-side gardens (in ditches!) provide wonderful
landscaping opportunities.

To learn more about LID and storm water management, check
these useful websites:
http://transylvania.ces.ncsu.edu/content/WaterQualityandNaturalReso-
urcesLinksandInformation , http://www.ncstormwater.org and
http://www.bae.ncsu.edu/topic/raingarden/.

Garden tasks for mid to late August:

- Amaryllis bulbs: stop watering so bulbs can go in dormant
  period. Store bulbs in cool dry place. Repot in October or
  November.
- Check for white grubs under turf.
- Apply pre-emergent herbicide for lawn chickweed.
- May seed or fertilize lawn last week in August.
- Plant fall vegetables: cabbage, lettuce, broccoli, squash and
  greens.

Do you have a question for the Transylvania Extension Master
Gardeners or a subject you'd like to see addressed in this column? E-
mail us at manymoons@citcom.net or have your garden questions
answered at our telephone clinic from 10 a.m. to 1 p.m. Wednesdays,
March through October. Call 884-3239 or walk-in during those hours
at the Community Services Building, 98 E. Morgan St. The
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