

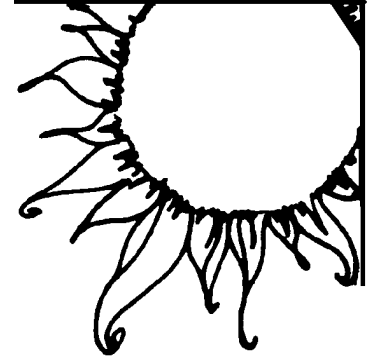


Water Quality UPDATE

Newsletter of Extension Water Quality Programs

January 2004

It's hard to believe that a few short months ago the weather forecast included words like "heat index" and "record high". To help ward off that winter chill, this Water Quality Update provides tips on activities that can be accomplished now to help reduce water quality threats next summer.



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- Winter Lawn care Tips
- SWFAL Information
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The Green (Environmentally Sound), Green Grass of Home

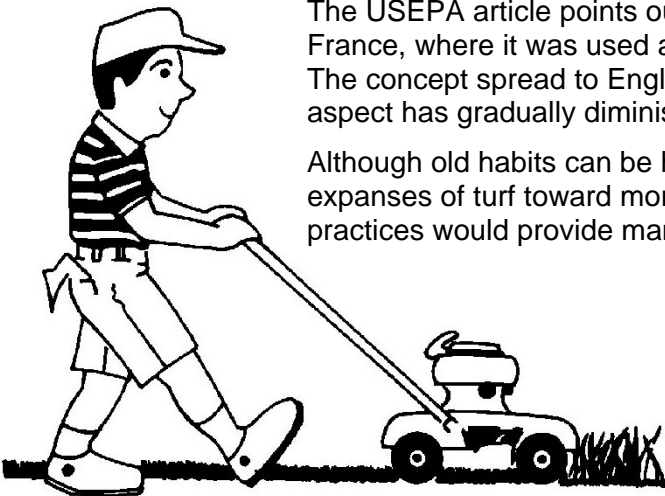
Although the heat of summer seems far away, now is the time to prevent some of the water quality problems that will grow right along with the temperature and the grass in the yard. In fact, the middle of winter is a great time for yard "work". Much can be done during this "off-season" that will actually pay big dividends when the mercury tops 100 in August. Proper planning now can help reduce costs and improve both water quality and availability.

For instance, some Oklahoma metropolitan areas are forced to ration water during all-too-frequent dry spells. A recent USEPA Region 6 article (http://www.epa.gov/region6/6xa/green_landscape.htm) noted that lawn watering accounts for up to 50 percent of urban clean water use in American cities. In addition, 67 million pounds of pesticides and \$5 billion worth of fertilizers are spread on 20 million acres of US residential lawns each year. Unfortunately, over-watering and rainfall wash much of this into streets and storm sewers, sending it on to its final destination; our streams and lakes. With a little foresight, many of the wasteful practices of "traditional" lawn care can be avoided.

The USEPA article points out that the sculptured lawn dates back to the 1700s in France, where it was used as a feature in the gardens at the Palace of Versailles. The concept spread to England and then to the US. Over time, the "garden" aspect has gradually diminished until it is now all but gone.

Although old habits can be hard to break, reversing the trend from large expanses of turf toward more "green" (i.e., environmentally sound) landscaping practices would provide many benefits, including improved water quality.

For example, the addition of a section for native wild flowers adds color and variety to a home's appearance, while requiring fewer inputs. Granted, there is work on the front end to create the new "greenscape", but once established, these areas require less of everything: less fertilizer, less chemicals, less water and less work.



Most greenscapes derive from the following principles:

- **A plan** is possibly the most important step. Consider local climate and soil conditions, existing vegetation, and intended use for the yard. Group plants according to water needs.
- **The soil** may vary even within a single yard. Identify the acid/alkaline conditions of the soil and what nutrients are lacking. A soil test from the OSU Soil, Water, & Forage Analytical Laboratory can provide guidance here. (See related article below.)

- **The plants** should be either native species or varieties that adapt well to the area. Otherwise, the plants will require more help, more maintenance, and more water. Consider using “Oklahoma Proven” cultivars.
- **The lawn** is the biggest water consumer. Cut back on turf areas by increasing decks, porous paving paths, and mulched flower beds. In sunny lawn areas, select drought-tolerant grasses such as Buffalo or Bermuda grass.
- **Water deeply**, but not often. Plants and grasses develop deeper, drought-tolerant roots when forced to find deeper moisture. Frequent, light watering means shallow roots and stressed lawns during dry periods. *Weeds love frequent watering!*
- **Mulch** (wood chips, straw or leaves) retains moisture, controls soil temperature, discourages weeds and prevents soil erosion. Cover all exposed soil areas with mulch.

Adapted from “Landscapers Look Back to the Future”, USEPA

Soil, Water, & Forage Analytical Laboratory (SWFAL)

February 15 is often recommended as the target date for Bermuda grass herbicide treatment and/or fertilizer application. One way to protect water quality is to make sure these treatments are only done in response to a definite need, not just as an annual ritual. The Soil, Water, & Forage Analytical Laboratory on campus provides instruction on how to obtain a good soil sample, laboratory analysis, and soil test interpretation. Contact the local county OSU Extension office or view the SWAFL website (<http://www.soiltesting.okstate.edu/>) for pricing information and answers to any other questions.

4-H Service Project Opportunity



www.theh2oproject.org

“Bringing water to the world by moving from consumption to contribution,” is the motto of The H2O Project, a group featured in the January 2004 issue of *U.S. Water News*. They have a unique approach to help fund clean water for people worldwide. It is a two-step challenge:

- 1) Make water your only beverage for two weeks.
- 2) Give the money you save by that sacrifice to a non-governmental organization that drills clean water wells. (Several are listed on the project’s website (www.theh2oproject.com) or at the *U.S. Water News* website, www.uswaternews.com/waterorgs/.)

The article includes World Health Organization estimates that 10,000 children die each day due to lack of clean, safe water. That’s one child every eight seconds. According to the project, the average cost of a well is about \$10 per person served. The project provides free promotional materials to service groups that accept the challenge. This simple project would be a great way for 4-H kids to be made more aware of what a blessing clean water is, as well as enabling them to take part in a global effort. For more information contact the project directly or Tim Propst (405.744.6519, propst@okstate.edu).

Oklahoma Cooperative Extension Service Water Quality Programs
 Biosystems & Agricultural Engineering ♦ 218 Agriculture Hall ♦ Oklahoma State University ♦ Stillwater, Oklahoma ♦ 74078-6021
 Tel: 405/744-5653 ♦ FAX: 405/744-6059 ♦ Email: smolen@okstate.edu

Michael D. Smolen, Coordinator
 OCES Water Quality Programs

Timothy L. Propst, Editor
Water Quality Update

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