A quarterly newsletter of the Virginia Household Water Quality Program and Virginia Master Well Owner Network

Well Informed

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The Scoop on the Virginia Master Well Owner Volunteer Network

As we welcome the first warm days of spring, we are gearing up for the first of our Virginia Master Well Owner Network (VAMWON) volunteer training workshops. This first training will be held on Saturday May 30th in Christiansburg.

Why is creating the VAMWON important? Federal drinking water standards that are administered through the Environmental Protection Agency only apply to public systems. Although Virginia does have regulations regarding the location and construction of private water wells, these regulations do not address use or care of the well once construction is complete. Private water system owners are completely responsible for maintenance, routine testing and dealing with problems. Many homeowners are unsure where to turn when they have questions or encounter problems.

Who can be a VAMWON volunteer? Anyone can be a volunteer, except those folks that work directly with the private water industry, for example, water treatment salespersons or well drillers. While we do welcome the involvement of these professionals in our training workshops, we are not able to offer them a volunteer position due to conflicts of interest. Ideally volunteers are interested in learning more about the proper location, construction, and maintenance of private water wells, springs, and cisterns (volunteers who have their own private water supply system are preferred, but others are welcome). All VAMWON volunteers must have a desire to educate .

Photo credit: Penn State University

Learn how to maintain and care for your own water system, and share this information with others by joining the Virginia Master Well Owner Network!

How can you become a VAMOWN volunteer? First, visit our website (http://www.wellwater.bse.vt.edu/become_a_mwo.php) and complete a short application. Be sure to read the volunteer policy carefully. As a volunteer, you'll agree to work toward educating 100 people each year. This may seem like a lot, but you only have to agree to *try* to educate to this many people. In similar programs, some volunteers exceed this number easily, and any number of contacts you make is great! Next, you will attend a volunteer training workshop. We have two scheduled for 2009 – one on May 30 in Christiansburg (Montgomery County), and one on August 29 (location TBD). These workshops run from 9 am to 4 pm on a Saturday and are a combination of presentations and hands-on

Get Involved! Want to learn more about your own water supply and help others? Volunteer with VAMWON! Visit www.wellwater.bse.vt.edu or call 540-231-9058 for more information today!

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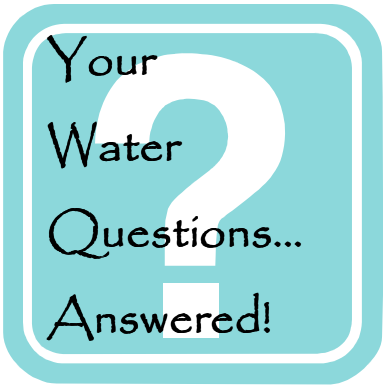
activities. Volunteers receive lunch and a binder of resource materials, in addition to useful home and garden water conservation devices.

Topics covered during the training include: Groundwater Hydrology, Source Water Protection, Well Location and Construction, Contaminants of Concern, Water Testing, Solving Water Problems, and Tips for Education and Outreach.

As a volunteer, you can educate other private water supply users in a variety of ways, including talking to friends and neighbors, manning a booth at a home or agriculture fair, speaking to a civic or church group, or writing an article for a local newspaper. Your role is to provide sound, general private water supply management tips to others, and you will be able to refer technical questions to a qualified professional working with the VAMWON program.

If you have any questions or would like to have a volunteer application mailed or faxed to you, please contact Erin James at ejames@vt.edu or 540-231-9058. Please visit our website today for more information. We look forward to receiving your application soon!

Locations for future VAMWON volunteer workshops will be based on where we receive the most interest and applications, so complete your application today!!



Coliform Bacteria in Drinking Water

What is coliform bacteria and where does it come from? Coliform bacteria are found nearly everywhere in our environment. They are present in the intestines of warm-blooded animals and can be found anywhere the waste of humans and animals may be present. Coliform bacteria are used as an indicator organism, because they indicate the potential that other disease-causing organisms may be present in a water supply.

Are coliform bacteria dangerous? The presence of coliform bacteria in your water does not necessarily mean that you will get sick. While many types of coliform are harmless, fecal coliforms, such as *E. Coli*, may cause serious illness. Consuming water with these dangerous bacteria or other disease causing organisms can result in fever, gastrointestinal illness, or flu-like symptoms.

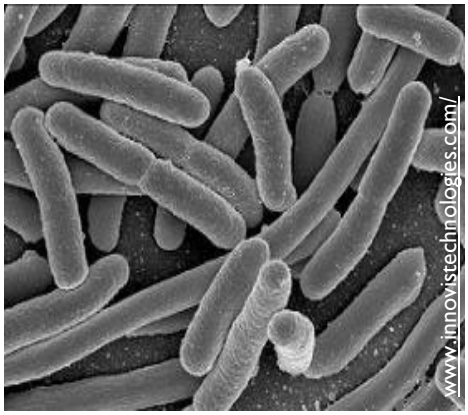
How do I know if coliform bacteria are in my water? A certified laboratory can provide this test, or you can contact your local extension office to find out if a Virginia Cooperative Extension drinking water clinic is planned for your county. We recommend that you test your water for coliform bacteria at least annually, and anytime you have your well pump or plumbing serviced, your well floods, or if you notice a change in the taste, appearance, or odor of the water. The federal standards for public water systems, which are good guidelines for private water supplies, state that drinking water should have zero coliform bacteria present. Some test reports will use the terms "present" or "absent" and others will report the number of colony-forming units per 100 milliliters of water.

What should I do if coliform bacteria are present in my water? If your water tests positive for coliform bacteria, you should take the results seriously. Talk to a professional about getting additional tests. Check your well or spring carefully for possible pathways for surface water, insects or varmints to get into your well, such as cracks or a loose well cap.

What are possible treatment options? As mentioned, check your well carefully for cracks, a loose well cap, etc. Consider having a professional inspect your water supply system. Once potential sources of contamination have been eliminated, possible treatment options include shock chlorination (followed by a retest) or the installation of some type of continuous disinfection system, such as an ultraviolent light. If you are concerned about the safety of your water in the meantime, boil water for one full minute or drink and cook with bottled water until the problem has been remedied. For more information: www.wellwater.bse.vt. edu/resources.php

Have a question? Email ejames@vt.edu

Adapted with permission from the PA Master Well Owner Network Newsletter Summer '04.



Coliform bacteria in your water could indicate the presence of more dangerous bacteria.

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Ten Tips for Maintaining Your Private Water Well

Want a few helpful take-home tips for maintaining your private water well? We have a new brochure! "Ten Tips for Maintaining Your Private Water Well." You can download the brochure at www.wellwater.bse.vt.edu. Here are our Ten Tips...

1) Inspect your well annually for any cracks, holes, or corrosion. Ensure the well cap is secure.

2) Have your well **tested once a year** for total coliform bacteria, which will give an indication of whether there is a likelihood of more dangerous bacteria present. Every three years test for pH, total dissolved solids (TDS), nitrate, and other contaminants of local concern.

3) All water tests should be **performed by a certified lab.** Compare your test results to EPA's public system drinking water standards (http://www.epa.gov/safewater/contaminants/index.html). These serve as good guidelines for private systems.

4) Keep the area around **your well clean and accessible.** Make sure it is free of debris, paint, motor oil, pesticides, and fertilizers. **Do not dump waste near your well or near sink-holes**, as this may contaminate your water supply.

5) Your well should be **100 feet away from potential contamination** sources such as chemical storage facilities, oil tanks or septic tanks. If you have a septic tank, have it pumped regularly (at least every 5 years).

6) The ground should **slope away from your well** to prevent surface water from pooling around the casing, which can cause contamination and damage to your system.

7) Make sure your well is **properly constructed**. Well casing should be high enough (12") so that surface water can never enter your well. You should also have a **sealed sanitary cap or sturdy concrete cover (on a bored well)** to prevent contamination from insects, small mammals, and other surface contamination.

8) Have your well inspected every 10 years by a professional with a WWP (water well and pump) classification. Follow service or repairs to a well or pump with a water test for coliform bacteria to ensure contamination did not occur.

9) Keep careful records of your well installation, any maintenance or inspections, repairs, and all water tests.

10) When abandoning a well, have it properly decommissioned by a local water well professional to avoid contaminating nearby wells. The Virginia Private Well Regulations outline the process for abandonment of a well.

Virginia Household Water Quality Program Coordinator, Erin James (left) and Extension Specialist Dr. Brian Benham (right) speak with Virginia Cooperative Extension drinking water clinic participants in King George county in February. See page 4 for a list of upcoming drinking water clinics. Don't see your county listed? Contact your local extension office and let them know you are interested! A list of local offices and agents is available at www.ext.vt.edu/offices/.

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Upcoming Workshops and Drinking Water Clinics

2009 Virginia Master Well Owner Workshops

Volunteer Workshop	Sat, May 30	Christiansburg	Application available at www.wellwater.bse.vt.edu
Volunteer Workshop	Sat, Aug 29	TBD	Application available at www.wellwater.bse.vt.edu
Agent Workshop	Tue-Wed Oct 20-21	Abingdon	Contact Erin James to register (ejames@vt.edu)

2009 Virginia Household Water Quality Program Drinking Water Clinics (please pre-register with agent)

County	Date		Contact Agent
Albemarle	Mar—Apr	Peter Warren	(434-872-4580; plwarren@vt.edu)
Fluvanna	Mar—Apr	John Thompson	(434-591-1950; jthomp75@vt.edu)
Greene	Apr—May	Cathryn Kloetzli	(434-985-5236; cathrynk@vt.edu)
Appomattox	May—June	Bruce Jones	(434-352-8244; brjones4@vt.edu)
Campbell	May—June	Todd Scott	(434-332-9538; todds08@vt.edu)
Amherst	June—July	Bill Seay	(434-946-9365; wseay@vt.edu)
Bedford	June—July	Scott Baker	(540-586-7675; scbaker@vt.edu)
Rockbridge	Aug—Sept	Cristin Sprenger	(540-245-5750; cristinc@vt.edu)
Rockingham	Aug—Oct	Amber Vallotton	(540-564-3080; avallott@vt.edu)
Augusta	Sept—Oct	Cristin Sprenger	(540-245-5750; cristinc@vt.edu)
Bath/Highland	Oct—Nov	Stephanie Diehl	(540-564-3080; sdiehl@vt.edu)

Wow! Virginia Cooperative Extension Drinking Water Clinics held in Culpeper, Fauquier, King George, Caroline, Prince George and Dinwiddie counties reached 331 homeowners! Thanks to the cooperating agents and support staff in these counties! Keep up the great work!

VIRGINIA HOUSEHOLD WATER QUALITY PROGRAM
Virginia Cooperative Extension

Virginia Master Well Owner Network
Education for Protection of Virginia Private Home Water Supplies

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Our objective is to improve the water quality and health of Virginia families reliant on private water supplies.

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