

New Arsenic Standards Won't Affect Lancaster Public Water Supplies

The EPA has established an enforceable Maximum Contaminant Level (MCL) for arsenic for public water systems to be 10 parts per billion. The standard had been 50 parts per billion, since 1942. This new arsenic standard may affect up to 78 public water systems in Nebraska, but none of them are in Lancaster County.

Under the Bush administration, EPA delayed the effective date of the January 2001 arsenic rule to allow additional reviews of the arsenic rule to be conducted. Reports on the science, cost of compliance and benefits analyses were released in October 2001.

The arsenic in most Nebraska water supplies comes from the aquifer from which the water is pumped, although arsenic can be found in some pesticide residues and is a by-product of smelting, glass making and coal mining. Health risks include cancer and vascular disorders. Reducing arsenic from 50 parts per billion to 10 parts per billion will prevent:

- 19 to 31 cases of bladder cancer per year; preventing 5 to 8 deaths from this cancer.
- 19 to 25 cases of lung cancer, preventing 16 to 22 deaths from this cancer.
- Numerous cases of other non-

cancerous diseases such as diabetes and heart disease.

There are thousands of private wells in Lancaster County that service rural citizens. Extension recommends domestic well users test their wells for arsenic if they live close to a community that has a high arsenic concentration. Even if your well isn't close to high arsenic areas and you are concerned, it is still relatively inexpensive to have your water tested. Nebraska Health and Human Services System Laboratory (3701 S. 14th St., Lincoln) charges \$14. Call them at 471-2122 and they will mail you a collection kit.

To collect a water sample to test for arsenic, the water sample should be collected after flushing the water lines to make sure the water is being pulled directly from the well and has not sat in the water distribution system for several hours. One could run the faucet for 10 minutes before collecting the water sample, or collect the sample after running a dishwasher or washing machine or any other large use of water in the home.

It is possible arsenic concentrations may vary over time, especially for wells where the groundwater level varies during the year or where the local

aquifer is pumped heavily. If well users suspect the groundwater levels may vary, then they may want to test their water several times over the course of the year. If the arsenic concentration shows little variation, then there is no need to test the well frequently afterwards.

Source: Sharon Skipton, UNL extension educator.

Arsenic Levels in Lancaster County Community Water Systems

	ug/L = ppb
Bennet	0
Davey	5
Denton	3
Firth	0
Hallam	8
Lincoln	7.6
Malcolm	8
Panama	7.88
Raymond	8
Roca	5
Waverly	4

ug/L = micrograms per liter
ppb = parts per billion

Keeping Backyard Birds Safe

Use these guidelines to prevent the occurrence and spread of diseases, including finch eye disease, at your feeders.

• **Give birds plenty of space.** Provide a number of feeders and place the feeders at different heights and distances so birds don't crowd themselves. Large platform feeders are probably best for spreading birds out, but barn-shaped hopper feeders, which protect the seeds from the weather, also work well.

• **Make feeders safe.** If you suspect a bird at your feeder may have eye disease, avoid using a tubular or other feeders that make birds reach their head or bill through the hole to get the seed. The infectious secretions from the eyes and nostrils are left on the feeders and can be easily picked up by the next bird. Tubular feeders that hold thistle seed are not as likely to spread disease because the holes are small enough only the tip of the bird's bill can be inserted.

Check to be sure feeders and bird baths have no sharp points or edges. Cuts may allow infectious organisms to enter. Avoid galvanized containers because they may leach harmful amounts of metals, especially zinc, into the water.

• **Clean up wastes.** Keep the feeder area clean of droppings



and wasted seeds and hulls. Excess seeds and hulls on the ground may become moldy, and some sunflower hulls may interfere with grass or flower growth. A convenient way to clean up is to use a shop or garage-type vacuum cleaner, but you can also use a broom or rake.

• **Keep feeders and bird baths clean.** Clean and disinfect feeders regularly, about once a month. If you suspect sick birds, clean and disinfect more often, about once a week. Bird baths should be cleaned often enough to keep the water fresh, which might be daily or weekly depending on use and weather conditions. After equipment is cleaned, disinfect with a solution of one part liquid chlorine household bleach to nine parts warm water. One option is to immerse feeders completely in the solution for two to three minutes, then allow to air dry. Rinse bird baths thoroughly before refilling.

• **Use fresh food.** Moldy or

spoiled food should be discarded and the containers disinfected. Store food in a cool, dry place in containers that are insect and rodent proof.

• **When sick birds are observed.** If obviously sick birds are observed at your feeders, take the feeders down for a week to 10 days.

Some judgement is needed on whether temporarily removing feeders will actually help stop the disease. This approach probably will be most effective during cold weather and when other feeding stations are not close by. Because birds use a variety of food sources, removing the feeders will not affect other birds except during severe winter extremes such as several days below zero.

• **Finally, spread the word.** Talk to your neighbors who feed birds so they can be aware and take precautions. Birds move among feeders in the neighborhood so if you and your neighbors work together, you will have the most effective prevention program concerning bird bath and feeder management.

Source: House Finch "Eye" Disease, NF97-355. This publication and many others on bird feeding and backyard wildlife are available at no charge from the extension office. Stop by the Lancaster County Extension office to pick up a copy.

Environmental Focus



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Beginning Beekeeping Workshop

March 18 and 19, 6:30–9:30 p.m.

Cost: \$20

Call Barb Ogg at 441-7180 for more information.

Considering Ultrasonic Pest Control Devices? Save Your Money

Barb Ogg
Extension Educator

A number of gadgets are being marketed to folks who want an easier and safer way to manage pests around the home. These ultrasonic devices are marketed through mail order companies, home shopping cable channels, in gardening magazines and are readily being sold on the internet.

Ultrasonic devices claim to use ultra-high frequency sound waves to chase away birds, bats, rodents and arthropod pests like fleas, cockroaches, silverfish and even spiders. Most of them are designed to plug into an electrical outlet, but there are battery-operated models that have been designed as a flea-repellent collar and pocket-sized cards for outdoor lovers to carry around with them to repel mosquitoes. They range from cheap (\$6.99) to very expensive (\$699.00).

The consensus of researchers who have actually investigated ultrasonic devices is these products do not effectively repel or eliminate pests from homes. In fact, in the 1980's, the Federal Trade Commission (FTC) charged several companies with false advertising and required them to make refunds to customers. My guess is it is just a matter of time and the FTC will go after the makers of these other devices also.

The advice, "If it seems too good to be true, it probably isn't true" fits here. There are plenty of non-toxic or low toxic methods to keep pests outside,

but they take a bit more time and effort than plugging an ineffective device into an electrical outlet. These include:

- Mouse control:
 - Seal cracks and crevices larger than 1/4-inch.
 - Eliminate weedy growth or vegetation near the house. Mice live in these locations.
 - Use traps and/or glueboards inside the house at the earliest signs of mice.

Invading insects: (box elder bugs, lady bugs, crickets)

- Again, seal small cracks and crevices
- Place glueboards in the corners of rooms to catch critters that inadvertently wander inside

Glue boards are one of the easiest trapping methods for invading insects and they are cheap, too. The cheapest are often sold for rodent control, but they readily catch insects that crawl on the floor. There are two types of glue boards. The first is the "tray" type that has a shallow depression filled with a very sticky substance. The second type is a "board" trap—basically a thin piece of cardboard with a sticky layer on it. The board traps are more effective for both rodents and insects—and they are often cheaper than the tray types.

In addition to being inexpensive, sticky traps are completely non-toxic. The biggest problem is when pets or kids get into it. The sticky substance can be removed with vegetable oil, but it will be messy.

For more information about rodent or insect control, contact the extension office at 441-7180.

For more information about rodent or insect control; water quality resources; wildlife resources (including birds); and more, check out our Web site:

www.lancaster.unl.edu

Included on this Web site are numerous in-house fact sheets; extension Head Lice resources (including the Telly award-winning video "Removing Head Lice Safely" FREE for viewing online); links to related sites; and more.