



## Three Common Drinking Water Problems on Dairy Farms

### 1. Watering Space & Management

The most common “waterer” problems on dairy farms are:

- 1) inadequate watering space
- 2) poorly designed watering spaces and
- 3) dirty waterers

**Solution:**

- 1) Provide ~2.0 linear feet of watering space per cow in return alleys from milking parlor (e.g., 40ft of watering space for a D-20). Warm plate cooler water is a good source for this water since cows prefer to drink warm water. Remember, milk is ~87% water and cows may drink as much as 50-60% of their total daily water intake immediately after milking if given the opportunity
- 2) Provide a minimum of 4” of waterer space per cow in cow housing
- 3) Provide a minimum of two water sources per group in cow housing
- 4) Cows should never have to walk more than 50’ to get a drink of water
- 5) Water sources should be close to feed bunks
- 6) Water sources should be protected from direct sunlight
- 7) Cross-overs containing water troughs should be at least 13.5 ft wide to allow adequate watering and walking space
- 8) Don’t locate waterers where boss cows can prevent other cows from getting adequate water.

### 2. Excess Iron

Test your water and if it contains over 0.3 ppm (milligrams/liter) of iron (Fe) your cows may suffer from iron toxicity causing increased health problems and reduced milk production.

**Solution:** A good solution is hydrogen peroxide injection/filtration system that converts ferrous iron (very soluble and reactive) to ferric iron and then filters out the ferric iron. Chlorination and filtration also will remove reactive iron.

### 3. Excess Sulfate & Chlorine

Test your water and if it contains over 500ppm of total dissolved solids (TDS) you may have a sulfate and chloride problem with your water.

If the sum of the concentrations of sulfate and chloride in your cow’s drinking water is greater than 500 ppm it may be adversely affecting water consumption, cow health, and milk production (best to have sulfate + chlorine of less than 250 ppm).

**Solution:** Best solution is to find an alternate water source without the sulfate + chlorine problem. There are other more costly solutions like reverse osmosis (RO) and ion exchange systems (e.g., water softeners) that might work depending on the size of the problem, the treatment application, and the cost.

### Get Your Water Tested!

County Health Departments usually supply free water sample bottles and can advise you on testing your water. Huron County, 989-269-9721 (ext 148). Sanilac County, 810-648-4098 and Tuscola County, 989-673-8114 (ext 129) You can also go the the Michigan Department of Environmental Quality web site ([www.michigan.gov/deq/](http://www.michigan.gov/deq/)) to get a directory of water testing labs. Go to the MDEQ site and search for “water testing laboratories.”

Midwest Laboratories (13611 ‘B’ Street, Omaha, Nebraska 68144-3693; Tel: 402-334-7770; [www.medwestlabs.com](http://www.medwestlabs.com) offers a “Livestock Suitability” (WI) water test. You can get a kit containing sampling supplies and UPS prepaid shipping container for under \$50 (as of 9/09).



We are please to announce the engagement of  
Sheena Simpson to Casey Dickinson  
Sheena has worked at our practice since 2003. She obtained her  
Licensed Veterinary Technician degree in 2008.  
Sheena & Casey are planning a 2010 fall wedding.