
Acreage Living

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Water Heaters are Big Energy Users

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Your water heater is one of the top contributors to your energy bill, costing at least \$10 a month all year long. Since electricity is a more expensive way to create heat, an electric water heater costs even more.

According to the Wisconsin Energy Bureau, the hot water heater is the second largest energy user in the typical home. Only your furnace or boiler adds more to your gas and electric bill. This means that if you are looking for ways to reduce your overall utility bills, your water heater could be worth considering.

The place to start is by conserving hot water. There are a variety of almost invisible changes one can make to reduce hot water use. Low-flow showerheads save hot water and give great showers. In the laundry, warm water wash is very effective with modern detergents, and keeps colors from running and fading.

Really hot water coming out of the tap is not only wasteful, but can create scalding hazards, especially on a child's delicate skin. Changing the water heater control so that tap water temperature is 125 degrees is safer. It also reduces the "standby loss," the amount of heat lost from the water heater tank as the hot water sits there waiting to be used.

This standby loss is the single biggest loss of energy in water heaters. However, if you want to have a bigger impact, consider whether it is time to replace the old heater. The average life of a water heater is about 13 years. If your water heater is much older than that, you can avoid potential problems and save substantially on hot water costs by replacing the heater. New models can save up to 30 per cent over earlier models.

According to the U.S. Department of Energy, water heaters older than average are more likely to break down unexpectedly. Older models not only use energy less efficiently, but their thinner insulation also allows more standby loss. You will probably pay more for an efficient model than for a lower-efficiency model.



If you check the energy guides on the various heaters you will see that you may make up for the additional cost in just a few years of energy use. Electric water heaters always cost more to operate than gas heaters. If your area is served by natural gas or LP gas, switching to that fuel for water heating will reduce long-term costs dramatically.

Some remodelers try to reduce standby losses by replacing their conventional tank-type water heater with a tankless water heater, also called a "demand" water heater. Tankless water heaters aren't all that different from conventional water heaters. Instead of having a large tank and a small heater, they have a very small tank and a very large heater. They heat the water as needed so the unit doesn't lose heat while the hot water is waiting around to be used.

An energy-efficient conventional hot water heater has an energy factor of around 0.7. Manufacturers of tankless hot water heaters report efficiencies of 0.93.

Tankless hot water heaters have been common for years in Europe and other parts of the world where folks have been concerned about energy costs. Interest is now growing in the United States, particularly with last winter's natural gas prices. While product test data is not widely available, reports suggest that these heaters certainly can reduce the cost of heating water, and are reliable and durable.

According to staff at the Wisconsin Energy Bureau, tankless water heaters can be a money saver for some households, but not for all. They are an exceptional idea for summer homes, or homes with just one or two adults. Tankless units provide hot water to the tap as rapidly as a conventional water heater.

On the other hand, tankless heaters can only put out so much water per minute. A household with heavy demand may find a tankless heater less satisfactory. Running the dishwasher and taking a shower at the same time can be a problem if the heater is not large enough to meet the demand of both uses at once. Output also depends on the temperature of the water coming into the heater. The colder the input water, the less output of hot water.

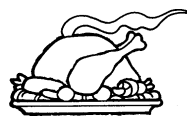
There are a couple other issues to consider with tankless hot water heaters. The first is that these heaters are more sensitive to hard water than

conventional heaters. Hard water can cause corrosion of the coils and shorten life expectancy. This means that in areas with hard water, it is essential to run the water through a water softener first. The second consideration is that plumbers aren't always familiar with them. It is important to find an installer who is comfortable with tankless heaters and is ready to service the unit if anything does go wrong.

Tankless water heaters are substantially more expensive than conventional hot water heaters, and installing a gas tankless heater can be a tricky remodeling job. Electric tankless heaters are simple to install, but much more costly to operate than a gas tankless heater. They also need very heavy wiring to accommodate their large electrical load.

However, in households where hot water demand is generally lower, or especially where the water heater sits for days without any hot water use, a tankless heater can be a very smart decision. You can get more information on tankless hot water heaters by visiting the following web site: <http://www.buildinggreen.com/products/heaters.html>.

Celebrate Thanksgiving with New Batteries



Thanksgiving weekend can be a good time to be thankful that you have lived another year without a house fire. As a show of thankful celebration, take the opportunity to replace all the batteries in your smoke detectors. Studies show that smoke detectors on every level of your home and near bedrooms are your best defense against home fire fatalities. Using the Thanksgiving holiday as a reminder to replace batteries on a yearly basis reduces the risk of having batteries go dead at inconvenient times. A detector with a dead battery or missing battery is no help at all.

Poll Finds Farm Communities Headed in the Right Direction

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A small majority of Iowa farmers (54 percent) think the communities where they live are headed in the right direction despite some of the difficulties experienced in rural Iowa in recent years, according to the 2001 Iowa Farm and Rural Life Poll.

Another 24 percent say their hometowns are headed off on the wrong track, while 21 percent are not sure whether community life is improving or declining. Strengths of farm communities include their role as a place to raise children, viewed as good or excellent by 93 percent of the poll respondents, and as a good place to attend public schools, rated good or excellent by 83 percent.

Poll respondents also gave high marks to the friendliness of people in their communities and to the overall quality of life. Health care services were rated good or excellent by 75 percent of those surveyed, and protection against crime was rated good or excellent by 77 percent.

Also receiving good or excellent ratings from large majorities of farmers were the availability of credit for home or business loans (67 percent), the quality of housing (73 percent), and community or civic spirit, 65 percent.

Attitudes toward their communities may depend in part on how farmers define where they live. "What do you call your community?" a Monona County farmer asked. "Your old hometown five miles away with a population of 800 or the 2,500 population town 18 miles away?"

At the low end of the satisfaction scale, only 14 percent said shopping facilities in their communities were excellent, while 18 percent said they were

poor. Ten percent said their communities offered good job opportunities, while 17 percent said job opportunities were poor.

One poll respondent commented, "gas prices take a big bite out of a family budget when you have to drive 20 miles to the nearest town to get items you may need that aren't found locally." And a farmer from Jones County commented, "there are lots of jobs available, but at low wages with poor benefits. Many rural Iowans live in a high-tech wilderness."

The Iowa Farm and Rural Life Poll is funded by ISU Extension and the Agriculture and Home Economics Experiment Station. The purpose of the poll, conducted since 1982, is to ask farmers' views on a variety of rural and agricultural issues. A statewide random sample of 3,376 Iowa farm operators were sent mail questionnaires in February, with a 61 percent response rate.

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Lingo Lexicon:

Hybrid cars - not a cross-breeding program for your auto, as the name might suggest. Hybrid cars, or hybrid fuel cars use a combination of an internal combustion engine and an electric motor to gain the environmental benefits of electric cars without giving up the power and cruising range benefits of gasoline cars. Some hybrid cars are already on the market, others are soon to be released. For more information, try these two web sites:
<http://www.ott.doe.gov/hev/>
<http://www.hybridcars.com/>

Mulching Strawberries

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While it may seem a little odd to be dreaming of fresh strawberries on a cloudy, cool November day in Iowa, those delicious thoughts are an excellent incentive. To insure a bountiful crop next year, home gardeners need to mulch their strawberry plantings in the fall.

Cold winter temperatures and repeated freezing and thawing of the soil through the winter months are the main threats to the strawberry plants. Temperatures below 20 degrees F may kill flower buds and damage the roots and crowns of unmulched plants. Plants also can be destroyed by repeated freezing and thawing which can heave unmulched plants out of the soil.

Strawberries should be mulched in the fall before temperatures drop below 20 degrees F. However, allow the strawberry plants to harden or acclimate to cool fall temperatures before mulching the planting. Plants mulched before they have properly hardened are actually more subject to winter injury. In northern Iowa, strawberries are normally mulched in late October to early November. Gardeners in central and southern Iowa should mulch their strawberry plantings in mid-November and mid- to late November respectively.

Excellent mulching materials include clean, weed-free oat, wheat, or soybean straw. Chopped corn stalks are another possibility. The depth of the mulch should be three to five inches at application. The material should eventually settle to two to four inches.

In windy, exposed areas, straw mulches can be kept in place by placing boards or wire fencing over the area. The fencing can be held in place with bricks or other heavy objects.

Leaves are not a good winter mulch for strawberries. Leaves can mat together in layers, trapping air and creating space for ice to form. The leaf, air, and ice layers do not provide adequate protection. A leaf mulch may damage plants due to excess moisture trapped under the material.

The winter mulch on strawberries should remain in place until plants show signs of growth in the spring. Do not remove the mulch in March. Early removal of the mulch may encourage plants to bloom before the danger of frost or freezing temperatures is past. A late frost or freeze could damage or destroy open flowers and substantially reduce yields. The first flowers are especially important as they produce the largest berries.

To determine when to remove the mulch, periodically examine the plants under the mulch during periods of warm weather in spring. Remove the mulch from the strawberry planting when about 25 percent of the plants are producing new growth. New growth will be white or yellow in color. If possible, the winter mulch on strawberries should remain until mid-April in central Iowa. When removing the mulch, rake the straw to the aisles between rows. If there is a threat of a frost late in the season during bloom, the mulch can be lightly raked back over the strawberry plants.

Although mulching strawberries isn't much fun, consider the tasty rewards. Strawberries and ice cream, strawberry shortcake, and strawberry cheesecake are a few of the rewards that await the dedicated gardener.

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