Most of us only think about our hot water heaters when they stop working. However, water heating can make up 15-25 percent of a home's energy bill, so using the water heater wisely can save money and energy. More efficient water heating will also contribute to a cleaner environment by reducing air pollution from excessive energy usage.

There are many ways to get more for your money with an existing water heater:

- Fix drips and leaks. A leak of one drip per second can cost as much as $1 per month.

- Install low-flow faucets and fixtures. A relatively small investment ($10-$20 for a quality fixture) can yield cost savings of 25-60 percent.

- Lower your water heating temperature to 120 degrees Fahrenheit. Reducing the water heating temperature to 120 degrees Fahrenheit will not only reduce your energy costs but will also slow mineral buildup and corrosion, which keeps the water heater operating efficiently.

- Make sure your water heater and pipes are insulated. If the water heater's tank feels warm to the touch, it needs additional insulation.

- Install a timer that will turn off the water heater at night when hot water is not in demand.

- Use hot water at off-peak times, if possible.

- Use less hot water. Take shorter showers; wash and rinse clothing in warm or cold water.

If you are shopping for a new water heater, look for the Energy Star label. Energy Star is a joint program of the U.S. Environment Protection Agency and the U.S. Department of Energy; the Energy Star logo indicates that an appliance has met the program's strict energy efficiency standards.
A high-efficiency water heater uses 10-50 percent less energy than its standard counterpart. Compare the energy factor (EF) on models that you are considering; a higher EF means a more efficient heater. Remember, however, that a higher EF may not mean lower annual operating costs if the heater requires a more expensive fuel.

Conventional storage water heaters are still the most common type, but several new designs can offer energy savings. When shopping for a new water heater, consider the following:

**Conventional storage water heaters** offer a ready reservoir of 20-80 gallon of hot water. With this type of unit, watch for “stand-by losses,” (heat lost while the water is in the tank waiting to be used). Look for a heavily insulated tank with a thermal resistance (R-Value) of R-12 to R-25.

**Demand (tankless or instantaneous)** units heat water as it is needed. When a hot water tap is turned on, cold water travels through a pipe to the water heater where the water is heated over a gas burner or electric element. Gas versions of demand water heaters provide a higher flow of hot water, but can waste energy if they employ a constantly burning pilot light.

**Heat pump water heaters** use heat from the surrounding air to heat water. Just as a refrigerator moves hot air from inside a box into the room surrounding it, this type of water heater pulls heat from its surroundings and puts it (at a higher temperature) into a tank of water. These units work best in a warmer location (say, near a furnace or in a warm climate), and are not efficient in cold spaces.

**Solar water heaters** use the sun as an energy source, and are appropriate for any climate, but they generally require a back-up system to accommodate cloudy days and times of higher demand. These water heating units need a well-insulated storage tank. Because energy from the sun is free, a solar hot water heater can save a household 50-80 percent of water heating costs.

**Tankless coil and indirect water heaters** use a home's existing space-heating system to heat water. When a hot water tap is turned on, cold water flows through a heat exchanger installed in the home's main furnace or boiler. This type of water heater provides hot water on demand, just as other tankless units do, but an indirect water heater operates more efficiently during cold months when a home's space-heating system is already in heavy use. This type of water heater can be inefficient in warmer climates.

With a new or existing water heater, being mindful of hot water usage can help to conserve energy and lower utility bills. For more energy conservation tips for your home, contact Peggie Garner at the Onslow County's Center of North Carolina Cooperative Extension 910-455-5873.

**Additional resources**

CEILING FANS: COOL BREEZES AND COST SAVINGS

In the heat of the summer, we look forward to any kind of breeze, inside or out. Ceiling fans not only provide that relief from the heat, but also can help homeowners save money and energy all year long. To get the most out of your ceiling fan:

- Make sure that it is installed properly. The UL-listed metal box in the ceiling should be marked “For use with ceiling fans.”

- Ensure that the blades are properly balanced. (A balancing kit may have been included in the original packaging or may be available from the manufacturer without charge.)

- Turn off the fan when not in the room.

- Use the fan to move cool air in the summer ( blades rotate counterclockwise) and warm air in the winter (reverse the motor so that the blades rotate clockwise). In the summer, the fan creates a “wind-chill” effect, making you feel cooler. In the winter, the rotation of the blades creates a slight updraft, which moves the warmer air at the ceiling downward to warm the room.

- Adjust the household thermostat to account for the ceiling fan's cooling or heating effect.

Of the types of fans available (floor, table, etc.), ceiling fans are considered the most effective for changing room temperature because they create a draft throughout the entire room. When using a ceiling fan, a home's thermostat setting can be raised by about 4 degrees Fahrenheit with no change in comfort. In some climates, air conditioning is not necessary at all if a home has ceiling fans.

If you are purchasing a ceiling fan, look for the Energy Star label to ensure energy efficiency. Energy Star qualified ceiling fan/light combinations are about 50 percent more efficient than their traditional counterparts, and these units can save $15-20 annually on utility bills. These fans also may lower costs for heating and air conditioning if used properly. All Energy Star fans allow for the motor and blade direction to be reversed so that the fan may be used year-around.

Make sure to purchase the proper size fan for the room you are furnishing. A 36 or 44 inch diameter fan will cool rooms up to 225 square feet, while a fan with a diameter of 52 inches or greater should be used in a large room. Multiple fans work best in rooms longer than 18 feet. Small and medium-sized fans will provide efficient cooling in a 4 to 6 foot diameter area, while larger fans are effective up to 10 feet.

Ceiling fans are appropriate for rooms with 8-foot ceilings or higher. Ideally, the blades would be 7-9 feet above the floor and 10-12 inches below the ceiling. Fans should be installed so that blades are 18 inches from the walls.

For more energy conservation tips for your home, contact Peggie Garner at the Onslow County's Center of North Carolina Cooperative Extension Office 910-455-5873.
Research supports proper use of cleaning products as a valuable tool in fighting asthma triggers

Using cleaning products as directed is a powerful ally in eliminating or reducing the triggers that lead to asthma suffering, including dust and dust mites, animal dander, insect droppings, and mold and mildew.

According to a 2004 National Health Interview Survey conducted by the U.S. Centers for Disease Control and Prevention, the number of children who were ever diagnosed with asthma was 8.9 million, which is 12.2 percent of all children under age 18. Four million children, or 5.4 percent, had an asthma attack in the previous year.

A 2001 study conducted by the Children’s Hospital Medical Center of Cincinnati indicates that more than half a million children in the United States under the age of six with asthma would not have the disease if risk factors were removed from the home. A follow-up study by the same organization focused on U.S. Children between the ages of six and sixteen. It concluded that more than two million children and adolescents in this age group might not have the disease if risk factors were removed from the home. The study is also the first to estimate on a national level the number of cases of asthma linked to allergic response to specific indoor allergens, such as dust mites and cockroach droppings. About 520,000 excess cases were due to dust mites, and about 375,000 cases were due to cockroach.

The following are some ways to help remove some of the asthma risk factors in your home.

### Dust Patrol

Dust mites pop up everywhere in the home, but are a particular problem in the bedrooms of asthma and allergy sufferers.

- Wash sheets weekly; wash blankets mattress pads, bedspreads and comforters at least monthly.

- Use special dust mite-proof covers, sometimes called “allergy impermeable” covers, to keep dust from going through pillows and mattresses. Wipe covers with a damp cloth every week.

- Dust furniture weekly, using a dusting product or a special cloth that attacks dust (a dry cloth spreads dust around).

- Vacuum and wet-mop floors weekly. Use an upright vacuum or a canister style with a power nozzle. They pick up two to six times as much dust from a rug as canisters without a power nozzle.

### Mildew Watch

The right cleaning products can eliminate mold and mildew in tile grout and on shower curtains, as well as under sinks, around window frames and sills, and where the tub or shower meets the floor.

- For shower stalls, bathtubs and painted or aluminum surfaces, use a nonabrasive, all-purpose cleaner. For unpainted wood surfaces, use a wood cleaner.

- Disinfect moist or wet areas using a disinfectant or antibacterial cleaner two or three time a week to prevent mildew's return.
Supporting local growers helps reduce your ecological footprint!

- The average meal in the U.S. Travels 1,500 miles before reaching your plate.
- Frozen peas require 150 percent more energy than fresh peas due to packaging and refrigeration.
- A head of lettuce traveling from California to North Carolina uses 36 times more fossil fuel energy in transport than it provides in food energy.
- Farmers selling produce locally can grow varieties chosen for taste instead of varieties chosen for how well they travel.
- Farmers' markets enable growers to keep 80 cents to 90 cents per dollar spent by the consumer compared to 9 cents in traditional food markets.
- Produce not sold locally is often in transit or cold storage for days or weeks, and its nutritional value declines with time.
- When you purchase local produce, your money stays within our community.

The Onslow County Farmers' Market is located at 4024 Richlands Hwy in Jacksonville and is open every Tuesday and Saturday from 9am - 3pm.

Spring Is Here – Get Moving Outdoors!!

With the cold weather gone, now is the time to enjoy the beautiful weather outside. Here are some ideas to get you and your family moving outside.

Go for a bike ride
Cycling offers many health benefits.

- Fitness. Cycling regularly can build both your strength and endurance. That means strong muscles and a strong heart!
- Healthy weight maintenance. Cycling is a great way to balance physical activity with calorie intake.
- Stress reduction. Imagine cycling on a beautiful day – sun shining, a cool breeze. What an excellent way to get over the day's stress!

Take a swim
Swimming offers many health benefits.

- It requires use of all major muscle groups and is an aerobic activity, making it great for both cardiovascular health and weight control.
- Swimming can also help improve posture and flexibility while being gentle on bones and joints. It's a great way to get moving no matter your body shape, age or condition!

Walk in your community
Walking gets us moving more for health while connecting us to our local communities.
Walking is:

- Affordable. There are no fees and no equipment is necessary.
- Physical fitness. Walking benefits your heart and bone health while keeping your weight in check.
- Mental fitness. Walking has been shown to improve attention and memory, who knew that walking could be such a smart move?
- Enjoyable. Walking can be a time when you catch up with friends, find mental peace, or bond with a pet.

For more ways to get moving, visit www.myeatsmartmovemore.com

Company Says Moisture in Peanut Butter Plant Spread Salmonella Bacteria

According to a report from Con-Agra Foods moisture from a leaky roof and a faulty sprinkler helped salmonella bacteria grow and contaminate peanut butter at its Georgia plant last year, sickening more than 400 people nationwide.

The Omaha-based company conducted a nearly two-month investigation into the contamination and pledged to ensure that Peter Pan peanut butter is safe when it returns to stores in mid-July.

“Consumer safety and health is our top priority,” Con-Agra spokeswoman Stephanie Childs said. “We plan to do our best to regain consumer trust once Peter Pan returns to stores.”

Childs said the company traced the salmonella outbreak to three problems at its Sylvester, Ga., plant last August.

The plant's roof leaked during a rainstorm, and the sprinkler system went off twice because of a faulty sprinkler, which was repaired.

The moisture from those three events mixed with dormant salmonella bacteria in the plant that Childs said likely came from raw peanuts and peanut dust.

The plant was cleaned thoroughly after the roof leak and sprinkler problem, but the salmonella remained and somehow came in contact with peanut butter before it was packaged, she said.

Con-Agra recalled all its peanut butter in February after federal health officials linked it to cases of salmonella infection. At least 425 people in 44 states were sickened, and lawsuits have been filed against the company.

The recall covered all Peter Pan peanut butter and all Great Value peanut butter made at the Sylvester plant since October 2004. That plant is Con-Agra's only peanut butter plant.

Peanuts grow underground and salmonella is present in the dirt, but generally any bacteria are killed when raw peanuts are roasted.

When making peanut butter, the nuts are again heated – above the Salmonella-killing temperature of 165 degrees – as they are ground into a paste and mixed with other ingredients before being squirted into jars and quickly sealed.

Experts had speculated that salmonella would be most likely to contaminate peanut butter as it cooled and was placed in jars. At most plants, those steps take just minutes.
The company plans to redesign the plant to provide greater separation between raw peanuts and the finished product, Childs said. The plant will also get a new roof.

Con-Agra plans to reopen the plant in early August.

Before this recall, none of Con-Agra's recent routine testing had detected salmonella, so the company plans to develop a new procedure.

The Food and Drug Administration inspected the plant in February 2005 and found no problems.

While renovations are being done, Peter Pan will be made at another company's plant. Childs declined to identify that manufacturing partner and said Con-Agra had not decided whether that plant will continue making Peter Pan after its Sylvester factory reopens.

Since the recall shut down production, the Sylvester plant's roughly 100 workers have been paid to do maintenance work.

Before the recall, Con-Agra sold $150 million worth of peanut butter each year, Childs said.

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Month of “May” Spotlight

**by Tray Bridgers**

Hello, my name is Tray Bridgers. I am excited to be the New Agricultural Extension Agent for field crops in Onslow County. I started working on April 2 and have already met some great people so far.

I was born and raised in Wayne County in an Agricultural community outside of Rosewood. I lived there all my life until I moved to Raleigh to attend North Carolina State University, where I graduated in December with a B.S. Biological Sciences, B.S. Agronomy and a Minor in Agroecology. After graduation, I moved back home and worked at the Center for Environmental Farming Systems and the Cherry Research Farm in Goldsboro. The opportunity to come to Onslow County and join the great staff at the NC Cooperative Extension Service was too good to turn down.

I'm glad to be here, and look forward to meeting the people of the county and building relationships through day-to-day interactions and Cooperative Extension programs. I believe it is my job to be an accurate and dependable resources that farmers feel comfortable taking advantage of. Anytime you need my assistance, call me at (910) 455-5873.

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Robin Taylor
Extension Agent
Family & Consumer Science

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Peggie L. Garner
Onslow Extension Director