

The Watering Can



By Beverly O'Keefe, URI Master Gardener

The Dangers of Rainwater Harvesting

People are so interested in learning more about water, rainwater harvesting, and rain barrels...it is exciting to know people are interested in conserving water. People are also very interested in telling their stories about how they "harvest" rainwater. For example, a gardener sent me a picture of his "rain barrel" which he put together at garden's edge to store his compost tea mixture. Using a garbage tote on wheels, he created a hole in the tote for the water spigot, cementing the spigot with silicone. At the time I didn't have the courage to explain that a garbage tote is not constructed to withstand the pressure of confined water. I did recommend he use "Gorilla Glue" which is highly waterproof and would ensure a tight seal for his spigot. Late last week he sent a follow-up email to me explaining his "rain barrel" had "exploded" from water pressure. This does point out, once again, the truth of the old folk saying "the right tool for the right job."

When working with water – harvesting, storing, or using – we need to pay attention to the possible consequences. Water has been described as "insidious"... the meaning of which is "characterized as treachery or slyness; crafty; or more dangerous than seems evident." This can be true of water. For example, an empty 60-gallon rain barrel weighs 20 pounds. When full of water, this same rain barrel weighs approximately 520 pounds (8.3 lbs per gallon). An exploding homemade rain barrel will generate a force sufficient to destroy surrounding plants.

Rain barrels should not be placed directly onto decks as the overflow water will increase the rate of "rot" from standing water, and the weight of the barrel may weaken the deck itself. Typically, rain barrels should be placed on level soil so overflow can be absorbed into the ground for increased groundwater recharge (this is good as we want the water absorbed back into the ground so our water wells will continue to flourish). Finally, overflow water from rain barrels should be directed away from the foundation of the house.

We are now entering the fall season, a period of increased precipitation (this is when our groundwater wells and reservoirs begin seriously to capture as much precipitation as possible...for use during the next growing season). If you have a rain barrel, make sure you are protecting your home by connecting a hose to the overflow connector on the rain barrel, and direct the water away from your foundation. Send the water to your lawn or a flower garden and do not let it collect around the foundation – because water is "insidious" and will find a way to sneak into your basement.