dallasnews.com
The Dallas Morning News

LIFE/TRAVEL Home/Gardening: North Texas Gardening

Collecting rainwater for better plants

Gardeners insist plants relish collected rainwater over tap

01:50 PM CDT on Friday, July 20, 2007

By ERIN COVERT / Special Contributor to The Dallas Morning News

Local homeowners are increasingly turning to an ancient and simple technique for keeping their landscapes healthy: rainwater harvesting and storage.

From 30-gallon barrels placed underneath a gutter downspout to 1,000-gallon tanks set up in the back yard, the systems provide an alternative source of landscape water, which is becoming a long-term issue in North Texas, despite the recent rains."Rain barrels have been around forever, from the ancient Greeks to the Old West," says Clean Air Gardening owner Lars Hundley, whose Dallas-based mail-order business offers several models online. "They are making a comeback because it's an easy way to get free water."

Photos by NATALIE CAUDILL/DMN

In front of her vintage house of native stone, Irene Klaver, who teaches environmental philosophy at UNT, collects runoff in oak barrels, vessels that she believes suit the architecture.

In the simplest set-up, a rain barrel with an open top is placed underneath a gutter downspout, catching rainwater runoff from the roof. Commercial containers typically hold 50 to 80 gallons of water, have screening devices for keeping out debris and insects, and come in different shapes, such as flat-backed models that sit flush against the house. Some are made from recycled materials such as old wine casks and previously used PVC food containers. Prices start around $100 and go up based on features. Resourceful do-it-yourselfers can purchase valve fittings and build barrel systems themselves. Multiple barrels can be connected to increase storage capacity.

Tanks operate similarly but have a larger storage capacity, ranging in size from a few hundred to thousands of gallons. The storage devices can go above or below ground, with some using a pump to distribute the stored water.

Given the recent above-average rainfall, most area barrels and tanks are full. What's interesting, say several rain harvesters, including Dallas homeowner Cindy Davis, is how little of that rain it takes to fill up whatever storage contraption they hook up.

"The overflow of a roof when it's raining is tremendous," says Ms. Davis, who's had five barrels hooked to her downspouts since March. "It doesn't sink in until you get it all set up how much water you can collect very quickly."

The potential runoff during a storm depends on several factors, such as roof size and composition. According to Texas Cooperative Extension agent Billy Kniffen, a rough estimate is that for every 1,000 square feet of roof, 1 inch of rain can result in 600 gallons of water. More information (including a calculator for estimating rain supply and landscape demand) is on a Web site called Rainwater Harvesting run by the extension service (rainwaterharvesting .tamu.edu) .

To deliver the saved water, most rain barrels have a spigot at the bottom that can either attach to a hose or be used to fill a watering can. And while a barrel isn't large enough to keep an entire lawn green on its own, it is useful for small jobs and for watering during times when restrictions do not allow use of municipal water for landscape irrigation.

Plants seem happier

In the northern Dallas suburb of Murphy, where until recently restrictions limited watering to one day a week, Greg Street uses a rain barrel for hand watering, keeping the compost pile moist and for rinsing tools. He bought his barrel a couple years ago after noticing the weather pattern of heavy rains in spring followed by long dry periods.

"The plants really do seem to like the rainwater better than the hose. You don't get the white mineral deposits that you sometimes see from city water," says Mr. Street.

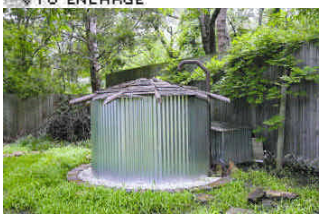
Susan Gregory and her husband live near White Rock Lake and agree that rainwater is beneficial for their plants. They expanded their collection system in February by installing two 750-gallon tanks in their back yard; this summer they're trying to figure how how to camouflage them with vines and blackberry canes.

"The rain just goes so much further. I feel like for every five or so gallons of city water, one or two gallons of rainwater will do the same thing. My plants are so happy now," says Ms. Gregory.

Greener plants were not, however, the original motivator that prompted Ms. Gregory to investigate rain harvesting. "Rain is free, and what pushed me at first was the cost of water," she says. "We keep track of what we use, factored out what we needed, and have found this is a practical solution."

Most tanks are made from polyethylene and are dark colors to prevent algae growth. They also can be made from galvanized steel, an aesthetic that's more appealing to some homeowners.

CLICK IMAGE TO ENLARGE



Irene Klaver required her rain collection barrels to meet an aesthetic standard. The largest container on her Denton property is a custom, weathered-wood-and-metal tank.

Irene Klaver, a professor of environmental philosophy at the University of North Texas in Denton, teaches topics such as environmental ethics; she has installed five converted wooden whiskey barrels as well as two tanks to capture rain. One of the tanks is metal with a wooden roof designed by Rodney Love of Tierra Designs in Denton. She paid close attention to how they fit into her landscape.

"The first reaction of visitors is they tell me they're gorgeous," Ms. Klaver says. "I had one tank set up so that you can actually see the water going into the tank when it's raining. It's connecting the landscape to the idea of conservation."

Conservation

The conservation factor is what led Coppell homeowner Thomas Cook to start collecting rain eight years ago for growing vegetables. "I like to think that the water I keep from using I save for someone else," says Mr. Cook. His rain collection setup has expanded over the years to include 11 barrels.

Greg Whitfield, owner of the Rain Well in Arlington, builds and installs large rainwater collection and distribution systems that can hold up to 50,000 gallons. He's seen an uptick in interest that he suggests goes along with the green building movement. The average price of installing a 1,600-gallon system is just under $1,000, he says.

CLICK IMAGE TO ENLARGE

Caroline and Paul Riddell of Dallas collect rainwater to

While it's sometimes difficult to justify tanks on cost savings alone, Mr. Whitfield says those who own them see other benefits. "Look around at how green everything is now with the recent rains. You could water every day with the city water and never get your plants that green," he says. "My plants just like the rainwater better, and that's why I do it."

Erin Covert is a Dallas freelance writer. home@dallasnews.com

RESOURCES

www.cleanairgardening.com

www.therainwell.com

Grand Prairie's Worm Farm: 972-642-0979

www.tierradesign.org

Rainwater harvesting Solutions Inc.: 972-723-3463

nourish his finicky carnivorous plants.