

Extension's Statewide Rainwater Harvesting Efforts Flow Toward Future

COLLEGE STATION As surface and ground water resources become more limited, rainwater harvesting will keep springing up as part of a long-term solution to water woes, said Texas Cooperative Extension experts. "Rainwater harvesting reduces demand on the available fresh water supply," said Dr. Bruce Lesikar, an Extension agricultural engineer. "It also reduces the quantity of contaminants that enter our streams and rivers, providing high-quality water for landscaping and other needs."

Lesikar, who along with other Extension personnel throughout Texas educates people on the benefits of rainwater harvesting, said taking steps now to help meet the nation's future fresh water needs is vital.

"Though Texas had a wet year on 2007, the recent drought, as well as other droughts in the past, have increased the concern over how to conserve and extend water resources," he said. "As with many other states, the surface and groundwater supply in Texas won't be sufficient to meet future demand. And states with fewer existing water resources have an even more urgent need to develop alternative water supplies." Rainwater harvesting is a tried-and-true method of capturing, diverting and storing rainwater that has been around for centuries, Lesikar said.

Rainwater is being harvested all over the world, added Billy Kniffen, Extension agent for agriculture and natural resources for Menard County and one of the state's top experts.

"There are water-harvesting systems all over Australia and Hawaii, and many Caribbean countries collect rainwater (and treat it) for drinking,"

he said. "Australia is a (world) leader in technology for capturing rainwater, but Texas is a leader in the U.S."

Residential systems have been the focus of much recent interest, Lesikar added. But rainwater harvesting systems also can be used in commercial or government buildings, schools, libraries and community centers, as well as for improving wildlife habitat and other aspects of rangeland management.

For more information, go to

<http://rainwaterharvesting.tamu.edu/index.html> (
<http://rainwaterharvesting.tamu.edu/index.hhtml>).

Other Extension rainwater harvesting efforts include:

AUSTIN: Travis County Master Gardeners helped build a 7,000-gallon rainwater harvesting demonstration system at Zilker Botanical Garden with funding from the Austin Water Utility Water Conservation Programs. The botanical garden is visited by about a half-million people annually.

FORT WORTH: Extension helped design and build a three-part system at a government office complex. One system collects rain from a warehouse roof and stores it in two 1,500-gallon tanks. The second system captures air-conditioner condensation and channels it into a 65-gallon tank. A third, simpler system collects water from a shed roof and

funnels it into two 50-gallon barrels. All the water is used to irrigate a nearby public garden.

HOUSTON: Extension is developing demonstration landscapes in the Houston area as part of its WaterSmart Program. One of these will be an educational system with a rain garden scheduled to be installed the University of Houston at Clear Lake next year.

"We're also looking at rainwater harvesting techniques to create more habitat space for wildlife and for ecosystem-specific landscapes," said Christina LaChance, program coordinator.

MENARD: Rainwater is collected from two downspouts, each on separate sides of the library building and stored in a 2,500-gallon galvanized storage tank. The collected water is used to water native grass plots. The library also has a rain garden.

EDINBURG: Rainwater is collected from the roof of the Hidalgo County Extension office and channeled into different storage tanks, including a 1,000-gallon galvanized tank, 585-gallon polyethylene tank, and 1,000- and 2,000-gallon fiberglass tanks. Collected water is used to irrigate surrounding gardens.