



Rain Water Harvesting Eases Pain of Drought

Plumbing and mechanical contracts in drought stricken states such as Texas and California are scrambling to fulfill the need for rainwater harvesting systems.

Droughts will be more frequent and severe during the 21st century. You need only look at sections of the mid west and west coast states to see the problem. Few facilities and institutions have such harvesting systems, but that is quickly changing. Water is becoming more and more precious as the years go by. We all agree that potable water is at a premium and getting more scarce.

When one thinks of rainwater harvesting, the typical image that comes to mind is rain barrels and cisterns. However,

there is so much more in the world of water reduction strategies — today rainwater harvesting and other conservation strategies can be looked at as a business niche for plumbing contractors.

Water has never been a concern for building owners and operators. It has always been readily available and low in cost. As water becomes scarce and prices skyrocket opinions will change. Most owners and operators pay lip service to water conservation and underwrite the obvious tried and true conservation measures. Few see value in rain harvesting as a viable precaution. Tenants are usually shielded from the cost of water supplies because they are buried within their leases and difficult to see.

We have long overlooked the capturing and storage of rainwater. We all recall the rain barrel of bygone days that was used to collect rainwater in residential settings. Today we are actively designing large bulk rainwater collection and storage systems utilizing underground storage tanks, filter and pumping systems. Wide spread drought has brought attractive tax credit incentives as well. Companies and building owners can now capture the abundance of rainwater being shed from roof structures. Collected water can then be directly used to offset the consumption of expensive potable water for cooling, irrigation and many other gray water applications.

Ductwork.. Do It Right Or Don't Do It At All

Heating and cooling accounts for roughly 50 percent of your annual energy use, and the age and capacity of your HVAC system has a huge impact on your yearly operating costs. The efficiency of your HVAC equipment is only part of the equation, though. The ducting system that distributes your conditioned air plays an equally vital role in controlling energy waste, ensuring your comfort and maintaining indoor air quality. This makes good ductwork design critically important, whether new construction or replacing older HVAC equipment in your existing building.



A properly designed and sized duct system works in tandem with your HVAC fan to maintain minimum air pressure. Having balanced air pressure in your home or business is essential for your HVAC system to work effectively and efficiently. When balance is maintained, you'll avoid a host of problems from air pressure that's too high or too low. You'll see the benefit in a number of ways:

- Energy savings – High pressure in your ductwork forces air out through any leaks and gaps. This can result in the loss of up to 40 percent of your conditioned air, which even the most efficient, up-to-date HVAC equipment can't overcome.
- Longer equipment life – You'll prevent the over-pressurization that forces conditioned air out through any available crack or crevice in your building's structure, causing your equipment to work longer to compensate.
- Greater comfort – Proper balancing of air systems helps create a draft free space with little or no outside air infiltration .
- Better indoor air quality – The unbalanced system that results from a poor ductwork design can also pull air in from unfinished areas. This can introduce excess dust, pathogens and mold and mildew spores into the air that's circulating throughout your building.
- Lower operating costs – If you're replacing existing HVAC equipment, retrofitting the ductwork to improve its efficiency could save you money. Lower consumption of energy also benefits the environment by lowering carbon dioxide discharges.

Community Service Honor



Recently the Association of Religious Communities (ARC) honored George Mulvaney for his charitable activities within the community. As much as George is a workhorse when it comes to his business interests, he brings as much energy to his volunteer endeavors. George has served in a variety of roles with several nonprofit organizations in the Danbury community. He is vice-chairman for Ability Beyond and is a past chairman and current vice chairman for the Regional Hospice and Home Care of Western Connecticut. Mulvaney is also on the Board of Directors of the

Ridgefield Visiting Nurses Association and is a member of the advisory committee for the Community Health Charities of New England. When pressed for comment, George said of all the people working in these organizations; "I couldn't do what they do. I'd like to accept this honor on behalf of all the unsung heroes who have given so much of their time and talent to do extraordinary things every day."

Those wishing to contribute to these and other worthy causes may contact them directly at their local or regional offices.

Fill'er Up with... SALTWATER!

United States Navy scientists are on the verge of developing a "game changing" radically new jet fuel that is made from sea water. The "liquid Hydrocarbon" fuel has already been used to fuel small radio controlled aircraft. It was reported that the test flights went better than expected.



The process begins by using electricity to split water into hydrogen and oxygen. Then the hydrogen is combined with carbon dioxide that had been dissolved in the water to produce a hydrocarbon, aka jet fuel. But anyone looking to the oceans as a solution to all our energy problems will be disappointed. The process is energy-intensive and really only an option if you've got a nuclear-powered ship on hand and need jets in the air more than electricity on deck.

The discovery of new sources of energy is an ongoing process. There are and have been many new energy discoveries most of which have fallen prey to the old "Cost vs. benefit" determination. One should not cast hope aside, time has a way of making older discoveries more palatable. Two older energy source discoveries that have returned to favor are ethanol and oil sands. Once thought too expensive to be practical, these energy sources have become more affordable.

Most Unusual Facts and Trivia

- The most frequently injured employees in the airline industry: cabin cleaners and cargo handlers. The least frequently injured group: the cockpit crew.
- Approximately 100 shark attacks on humans occur worldwide each year.
- The first American ambulance service was established in Cincinnati in 1865.
- The average lifespan after retirement in 1900: 1.2 years. In 2000: 19.2 years.
- The instinctive action of holding the hand to the ear when trying to hear increases sound levels at the ear by about six decibels.
- Woman ingest about 50% of the lipstick they apply.
- Alcohol consumption is a contributing factor in about 30% of snake-bite incidents.
- Poll results suggest at least 7% of adults have nightmares once per month or more.
- The largest cyclone on record: Typhoon Tip (1979). Its diameter was 1,380 miles.
- A 747's wing tips can flex up to 26 feet before they snap off.
- Eating spicy foods is a common cause of stinky feet.
- An icy road becomes less slippery the more below freezing the temperature drops.
- Men are more likely than women to change lanes without signaling. They are also more apt to run red lights than women.

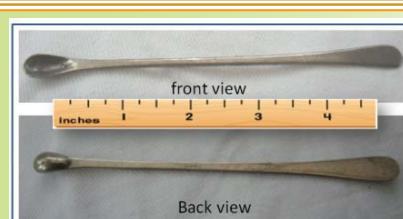
WHAT THE HECK IS IT?

If you can name the item pictured, you may WIN A MULVANEY MECHANICAL LEATHER JACKET



If you e-mail your entry, you must write "NEWSLETTER CONTEST" in the subject line to avoid our SPAM filter. Please mail to janette@mulvaneyinc.com

If multiple correct answers are received, a winner will be selected at random.



This item is an 19th century ear wax spoon. These tiny spoons were made from all types of material. The more expensive spoons were made from gold and silver, cheaper versions were made of wood or ivory. The ear wax spoon not only predated the popular Q-Tip, but a current model is still sold in most drugstores.

Unfortunately we did not receive any correct answers, however we did get a host of interesting guesses. Everything from an apothecary measuring spoon, and candle snuffer to a cocaine dispensing tool.

WE HOPE THAT OUR READERS DO BETTER THIS QUARTER, GOOD LUCK!

WHAT'S GOIN' ON?

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| Oct 9 th | Architectural Innovation Expo | New York, NY |
| Oct 15 th | Multiunit Housing Symposium | Boston, MA |
| Oct 15 th -17 th | ACG Safety Mgt. Training | Arlington, VA |
| Nov 4 th -5 th | NAPA Asphalt Sustainability Conf. | New Orleans LA |
| Nov 9 th -11 th | IHMRS Hotel & Restaurant const. show | New York, NY |
| Nov 18 th | 2014 Energy Construction Summit | Houston, TX |
| Dec 1 st -3 rd | 2014 Construction Super Conference | Las Vegas, NV |



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Connecticut Ranking

- | | |
|------------------|---------------------|
| 2 nd | in education |
| 3 rd | richest |
| 3 rd | most taxed |
| 10 th | most healthiest |
| 14 th | best place to live |
| 22 nd | in unemployment |
| 30 th | in population |
| 45 th | in charitable gifts |
| 48 th | in land area |

Quotations to Note

- The Second Amendment says we have the right to bear arms, not to bear artillery. *Robin Williams*
- The difference between stupidity and genius is that genius has its limits. *Albert Einstein*
- America will never be destroyed from the outside. If we lose our freedoms, it will be because we destroyed ourselves. *Abraham Lincoln*
- Health is the greatest gift, contentment the greatest wealth, faithfulness the best relationship. *Buddha*
- It's fine to celebrate success but it is more important to heed the lessons of failure. *Bill Gates*