Scrubs Club gives back through Habitat

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Penn State Behrend's Scrubs Club donated their time Saturday to construct a home in the Erie community by participating in Habitat for Humanity. Approximately twenty of these students volunteered their time to this project.

Dr. Jim Warren spearheaded the volunteer workforce. Warren, a professor at Penn State Behrend, has volunteered much of his time to Habitat for Humanity over many years. When he saw the opportunity to get the Scrubs Club involved in giving back to the community, he took it.

The Club separated their work into shifts: one morning and one afternoon shift.

During the 2009 spring semester, the Scrubs Club donated time to constructing a house on the east side of Erie where they placed siding and drywall. Saturday, the club assisted in the construction of two houses in Union City.

Work was divided up into several groups that included placing gutters, working on the roofs, indoor painting, and building a deck. The Scrubs Club also had the opportunity to work with members of the Pepsi-Cola Company who also volunteered their time to this project.

According to the Habitat for Humanity website, Millard Fuller and his wife Linda started Habitat for Humanity in 1976.

The organization's mission is to remove poor quality housing and homelessness from the world. People of all backgrounds, races, and religions join to build houses alongside the families in need. This program does not simply give away homes.

Homeowners supply many hours of their own labor into constructing their house and even help to construct the houses of others. They must also have to provide a down payment and monthly mortgage payments.

This presents the opportunity for volunteer companies, organizations, and clubs to meet directly with the future homeowners. Habitat for Humanity has built over 300,000 houses around the world, which has provided more than 1.5 million people in 3,000 communities with safe, decent, inexpensive shelter.

Scrubs Club specializes in bringing together students interested in the medical field. The club provides opportunities for students to expand their knowledge of possible medical professions and the ability to network with fellow prospective students with the same interests. Scrubs Club donates their time to these immense tasks twice a year. The club has now been volunteering their time to Habitat for Humanity for five years.

contributed photo

The Scrubs Club donated their time to Habitat for Humanity. Habitat has built over 300,000 homes worldwide.

Top Science News:

SPACE

For the first time, a skylight on the moon has been found. This skylight was most likely carved out by old lava flows on the moon and could lead into a vast underground tunnel. With this underground structure, humans may finally have a place to stay when they go to the moon.

The hole measures 65 meters across and extends at least 80 meters downwards. Since the skylight sits in a rille, scientists believe that the skylight leads into a lava tube at least 370 meters across. This lava tube would be a perfect spot for lunar colonization because of the shield from solar radiation, meteor impacts and large temperature fluctuations.

TECHNOLOGY

A research team has finally been able to control a beetle from a distance using electrodes and radio antennas connected to the beetle's nervous system. Using a remote-control, the team is able to make the beetle fly in any direction and stop whenever they want. This new cyborg insect is helping scientist understand how insects fly and could one day be used to search for survivors after a disaster, and even become one of the best spies in the world.

ENVIRONMENT

Recently, people have been trying to be eco-friendly by buying hybrid cars and using more solar and wind energy, but not many people think about their pets as having a large carbon footprint. A new study by Robert and Brenda Vale, authors of Time to Eat the Dog: The real guide to sustainable living, suggest that our pets have a very large carbon footprint.

In their study, they found that a medium sized dog had a footprint of 0.84 hectares, and for a big dog, such as a German shepherd, the figure is 1.1 hectares. Meanwhile, an SUV - the Vales used a 4.6-litre Toyota Land Cruiser in their comparison - driven a modest 10,000 kilometers a year have a footprint of only 0.41 hectares.

So the next time you want to help your environment, take some advice from Bob Barker and get your pets spayed or neutered.

Today in Science

In 1961, the largest atomic bomb ever detonated was set off over Novaya Zemlya. The bomb was set off by the Soviet Union and is still the largest atomic bomb detonated to this day.

Today, most nuclear devices yield less than one megaton. This bomb had an amazing 58 megaton yield.

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A chemist's approach to Halloween

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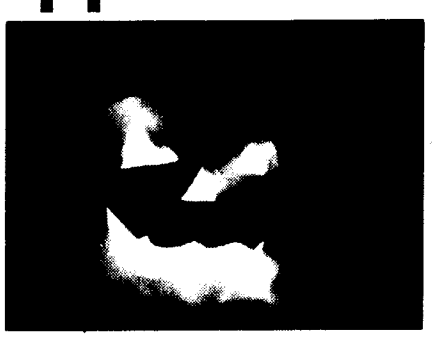
Cue the maniacal laughter and werewolf howling. Halloween is readily approaching, and it's time to bust a few ways chemistry can help make your Halloween the creepiest yet!

Now, everyone has heard of fog machines, but do you know how they work? Typically the kinds you can buy in a store contain a bottle filled with a mixture of glycerin or glycol and water which is then pumped through an exchanger heated up to 400°C. When this water mixture hits the exchanger it turns to steam, and then is forced out of the machine into a much cooler environment. This causes the steam to condense and you get a fog which rises in the air. Another way to achieve this eerie fog effect on a tighter budget is with dry ice. Dry ice, which is solid carbon dioxide, sublimates at room temperature. This means that when heated slightly, dry ice will go from its solid state directly to a gaseous state and create a fog which is denser than air. This causes the fog to fall to the ground rather than rising, as seen with the store bought fog machine. Having this effect at your party will be sure to create a frightening atmosphere, no pun intended.



Another interesting eerie effect can only be seen with the help of a black light. Several chemical compounds glow when put under a black light, such as zinc sulfide and strontium aluminate, however those would be hard to get your hands on for a Halloween party. Some more common and less illegal household chemicals contain phosphorescents, which glow under a black light, such as bleach and tooth whitener. Both contain these phosphorescents to uphold their advertisement of trying to make things whiter than white. Craft stores also sell paints containing phosphorescents which will either glow in the dark or glow with the help of a black light. Carving a pumpkin and then painting it with glow in the dark paint can be a creepy alternative to the traditional candle. Also, any dye from a highlighter will be fluorescent under a black light as well as most bodily fluids. On that note, please refrain from having a black light in the bathroom!

Now go buy some dry ice, paint a pumpkin with glow in the dark paint, put on a chilling rendition Frankenstein for that party of yours and see just how creepy chemistry can be.