

AMAZING PLANT: The total weight of the tomatoes it yielded was 1,152 pounds.



Steve Conley

SUPERPLANT PRODUCES 32,000 TOMATOES!

IS IT A WORLD RECORD? *GUINNESS BOOK OF WORLD RECORDS* IS LOOKING INTO GROWER'S CLAIM.

Growers at an Orlando, Florida greenhouse say that they harvested more than 32,000 tomatoes from just one plant. The total weight of the tomatoes was 1,152 pounds — about the same as four hefty NFL linebackers!

The greenhouse is hoping to get the plant into the *Guinness Book of World Records*. No single plant has ever produced anything close to 1,152 pounds of tomatoes before.

The high yield isn't the only amazing thing about this plant. Most tomato plants are grown in soil. That's not the case at this greenhouse. Growers there use a soil-less method to grow their tomatoes and other vegetables.

Many people think plants need soil in order to photosynthesize. But that's not true. The plant scientists at this greenhouse say that their tomato plants thrive on nothing but nutrient-rich water, CO₂, and sunlight!

Growing plants without soil may sound strange. But it isn't the only weird thing these growers do. They've also found a way to grow pumpkins that look like Mickey Mouse, big ears and all! They create the look-alikes by growing the pumpkins in a Mickey-shaped mold.

The greenhouse says that the *Guinness Book of World Records* is looking into its claim that his tomato plant is the most productive one ever. Guinness will announce its findings soon.

NO DIRT: Plant scientist Les Frey explains the greenhouse's soil-less growing techniques to a reporter.



Steve Conley

A SHATTERING PERFORMANCE

Musician breaks a glass - with her voice!

You've never heard the Harry Potter theme sound like this. Last week, "glass musician" Rosie Shiraz finished her concert at Lincoln High by playing that haunting melody on a glass harp.

A glass harp is made of wine glasses. Each is filled with some water. You play it by rubbing the rims with wet fingers. Anyone can make a sound that way, but making music with wine glasses takes real talent. Shiraz played beautifully, and got a standing ovation.

For her encore, Shiraz did something truly amazing. She took an empty wine glass and began to sing a single high note - very loudly. After about 15 seconds, the glass shattered!

The audience went wild. But many people weren't convinced she actually broke the glass with her voice. Parent Brad Boyd was one of the doubters.

"That was a trick, right?" he said during a Q&A with Shiraz. "I mean, sound is a form of energy. How can energy - something you can't see or touch - break a real object? It's impossible."

"Is it?" said Shiraz. "Think of what microwave energy does to popcorn. It pops or breaks open hard corn kernels and turns them into fluffy puffballs. You can't see or touch microwave energy, but it changes the temperature, size, and shape of the corn!"

"So you send out microwave energy when you sing?" Boyd asked, laughing.

"No, I send out vibrations. All sound begins with vibration. Touch your throat when you sing, and you can feel your vocal cords vibrating," said Shiraz.



Can the human voice do this?

"Those vibrations make the air particles near your throat move," she continued. "That air pushes against other bits of air and makes them move. That's how vibrations from your vocal cords are carried through the air and get the glass vibrating."

"And it vibrates enough to break?" asked Boyd.

"Yes, if you've hit exactly the right note," Shiraz answered. "And sing it very loudly."

"Well, I just don't buy it," said Boyd. "I still think you tricked us."

Shiraz performs again on Saturday, at the Community Theater. It's definitely worth catching her show. Then you can decide for yourself whether her glass-breaking act is for real - or just a clever trick.

A glass harp is made of about 50 wine glasses.



Barynya, Russian Dance and Music Ensemble

MAN GROWS GIANT MUSHROOMS!

Fungi fan is growing biggest mushrooms ever.

Mike Montez, a café owner in Vilna, Canada, says he has discovered a way to grow giant mushrooms.

Vilna is known as “the Mushroom Capital of Canada.” The area’s damp, dark woods provide excellent conditions for mushrooms to grow in. Vilna’s nutrient-rich soil is also great for mushrooms.

“Lots of people used to come here to pick our delicious wild mushrooms and enjoy the scenery,” says Montez. “But then the tourists stopped coming. So I came up with an idea for how to draw people back. What if Vilna became famous for growing the world’s biggest mushrooms?”

“I was inspired by giant pumpkins,” he says. “Every year, farmers grow bigger pumpkins. Thirty years ago, the biggest one weighed 459 pounds. Today the world record pumpkin is 1,810 pounds!”

It didn’t take Montez long to find a way to grow gigantic mushrooms. The secret is to speed up their photosynthesis. In order to

grow, mushrooms need sunlight, water and CO₂ gas, says Montez. And he figured out that the more of those you give mushrooms, the bigger they get.

Montez began by putting mushrooms in a place where they would get hours of direct sunlight — his greenhouse. He even installed large reflectors in order to provide extra sunlight. He also watered the mushrooms heavily, and pumped in lots of extra CO₂. The results were dramatic. The mushrooms just kept growing,

and soon his greenhouse was filled with gigantic mushrooms.

Montez says he expects them to reach ten to twelve feet in height! So far he’s only shown them to a few friends, but he promises he will open his greenhouse to the public soon.

His project has put Vilna in the news, and people have been flocking back to the area. Business in town is booming, and these days Montez’s café is packed.



Al Hunt / EDC

HUMONGUS FUNGUS

Montez poses next to a giant statue of mushrooms in Vilna.

A Huge Discovery

How do redwoods get so big? The secret is finally revealed.

"Nature's skyscrapers," says Lily Fox, pointing to the redwoods towering above her. Some of them are 350 feet tall. That's taller than the Statue of Liberty!

How redwoods can grow to such heights has long been a mystery. But now Fox says she's solved it.

Fox is a guide who leads tours of California's redwood forests. She's also a "tree-hugger" committed to saving the giant trees. "It takes six people to hug one of these beauties," she jokes.

Redwoods are the biggest living things on earth. They're also among the oldest living things. Some live for 2,000 years! Many things contribute to their incredible growth and long lives.

For one thing, they are very resistant to bugs, disease, and fire — things that often kill other trees.

Still, none of that explains why redwoods get to be so much bigger than other trees. But after years of study, Fox thinks she's figured it out.

"Redwoods thrive in areas that flood a lot, where many other trees would die. And floods leave behind sediment, which is basically new soil," says Fox. "So the soil level around the redwoods keeps rising."



Ken Householder

BIG HUG: It would take six people to embrace this ancient giant.

All that soil has a dramatic effect on the growth of redwoods, says Fox. "Like all trees, redwoods grow by taking in soil particles through the roots and feeding them into the tree. The tree turns that soil into the woody mass that makes up the trunk and branches. And since redwoods have much more soil to 'feed' on than other

trees, they make more new wood and grow taller than other trees."

Fox was on the team that climbed the world's tallest tree — a 379-foot redwood. "As long as floods keep dumping all that extra soil at its base," she says, "that tree will keep growing. It could top 400 feet!"

PET PIGS INSPIRE INVENTOR

Two porkers could be soon rolling in it.

"We'll soon have a pair of pigs to thank for the next big thing in cell phones. Their owner, an inventor called Gizmo Guy, says they inspired his superfast new phone-charging device. And he promises to give the pigs a share of the profits. "Fred and Ginger will be living high on the hog," he says with a smile.

"I come up with simple, cheap solutions for annoying problems," he says. "Like, for instance, the time it takes to charge a phone. I wanted to find a way to speed up the process. But I was stuck—until Fred and Ginger gave me a great idea."

It was a hot day, and Gizmo Guy was hosing down his pet pigs. After a while, the pigs moved out of range of the hose. To make the water reach them, he covered part of the hose's end with his finger. The smaller opening made the water blast out faster—and go a lot farther.

"It's like when you put a finger over the nozzle of a drinking

fountain and the water shoots out really fast," Gizmo Guy explains.

"As I was blasting water at the pigs, I realized that I could speed up the flow of electricity the same way," he continues.

"After all, electricity is a substance like water. Turning on a lamp is like opening a tap. The stuff pours out of the outlet and fills the wire, flowing all the way to the lamp."

Gizmo Guy figured that if he could speed up the flow of electricity to a charger, it would work faster. So he invented a gadget that would do that. He calls it SpeedE-Charge.

"It's a clamp that fits around an electric cord," he explains. "When you tighten it, it squeezes the cord. That forces the electricity to flow through a narrower space. And just as the water sped up when I made the hose opening smaller, the electricity in the wire now flows faster."

"That means power gets to your charger faster and your phone



Michael

HOG HEAVEN: Fred and Ginger could soon have lots of money in their piggy bank.

will charge in much less time," he says. "It's pretty cool."

Can you get a shock from SpeedE-Charge? "No," says Gizmo Guy. "The clamp grips the outside of the electric cord, which is plastic. That's a really good insulator. Electricity only flows through the copper wire inside. They use copper because it's a great conductor. But the SpeedE-Charge clamp won't touch the wire inside. So there's no danger of shocks."

Many people think charging a phone battery means filling it up with electricity. Not so, says GG. "Batteries don't store electricity. They store chemical energy. That gets converted to the electric energy the phone needs to work. When the battery's chemical energy runs out, you have to restore it. And the electricity from a charger can do that."

For now, SpeedE-Charge only exists on paper. But Gizmo Guy says he'll soon have enough money to build and test the real thing. "Charging a phone takes too long, and my product will change that," he says. "People who invest in it will get rich. And so will my pigs!"

Orangefan



EUREKA! Gizmo Guy was inspired while hosing down his pet pigs.