

**Editor's
Notebook**



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**Secret Formula Discovered
For 2,000-Year-Old Concrete**

One of mankind's most durable creations was concrete poured 2,000 years ago by the ancient Romans. Many bridge pilings and harbor breakwaters made by the Romans out of concrete are still in perfectly good shape all over Europe and the Mediterranean, despite centuries of constant pounding by seawater.

The most common blend of modern concrete - 200-year-old Portland cement - has a service life of less than 50 years in seawater. So an international team of researchers recently set out to analyze the mineral components of a Roman concrete breakwater sample dating back to 38 B.C. They discovered that the secret to the concrete's long life was its mixture of lime and volcanic rock. When packed into underwater wooden forms, seawater instantly triggered a hot chemical reaction, hydrating the lime and binding water molecules into its structure, creating an exceptionally stable building material. This "secret" may be the key to creating longer lasting structures today. *Bloomberg News*

Black Flies To Feed Livestock

Instead of irritating cattle in feedlots or on pasture, it looks like black flies might someday provide high quality protein feed.

A few issues ago we told you about a South African company called AgriProtein Technologies that has set up a pilot fly-breeding farm that produces 2 tons per week of protein from flies feeding on waste from meat processing plants (Vol. 36, No. 6). Now a large-scale research project in England is going to test the viability of using black flies to convert ag wastes, including manure, to protein.

Flies lay eggs in the waste products which hatch into larva. "We are looking at harvesting larva after they've eaten, just before pupation, when they have optimal protein and fat," says Elaine Fitches at the UK-funded Food & Environment Research Agency (FERA) near York, England. The goal of the \$5 million project is to work out how to mechanize large scale production and developing micro-scale systems for small farmers (elane.fitches@fera.gsi.gov.uk).

There's already a lot of information floating around about setting up your own small-scale fly-breeding system for feeding larva to chickens. Check out the BioPod from Robert Olivier in Texas (www.thebiopod.com; ph 214 509-6000). There are also plenty of do-it-yourself simple designs for building your own "maggot generators" online. Just do a search at Google, or check out the "black fly" video at www.farmshow.com.

New Kind Of Farm Equipment

German farmers have started compacting silage in big bunk silos with road compactors, such as the Hamm 50-ton self-propelled roller. According to FARM SHOW "scout" Andrew Sewell, reporting from England, bunk silos have gotten much bigger as farm-based biogas electric generating plants have caught on. There are more than 7,200 such plants in Germany, most using corn and hay silage as "fuel". The result is bunk silos up to 30 ft. deep. To pack those deep pits, farmers are starting to use 50-ton vibratory rollers that pack up to 20 percent more silage into the silos.



German farmers are starting to use Hamm 50-ton self-propelled compactors to compress silage in bunk silos.

Vegas Playground For Big Kids

The most popular non-casino attraction in Las Vegas is "Dig This", America's first heavy equipment playground. Owner Ed Munn set up a 5-acre site with plenty of space for a 10-ton bulldozer and a 15-ton excavator. "No operating experience necessary. Anyone can play!" he says.



Vegas visitors pay nearly \$249 to "play with" big excavating equipment for 90 min.

A 90-minute session with either machine costs \$249. It includes a short safety class and an introduction to the machine by an instructor. Operators are in constant communication with instructors via headsets. A 3 1/2-hour Mega Dig includes both machines and is priced at \$449.

Activities include digging, trenching, making dirt piles to drive over, and throwing 1,000-lb. tires around.

Operators must be 14 years old or older and more than 48 in. tall. Only one person is allowed per machine (www.digthisvegas.com).

A similar idea has caught on in Vancouver, Wash., to raise money for charity. On the annual "Dozer Day", kids of all ages get turned loose with dozers, dump trucks and other heavy equipment. The event takes place in a 300-acre quarry and draws about 20,000 people each year. It's organized by the Nutter Foundation (www.nutterfoundation.org).

Maybe a similar idea would work with farm equipment?

Abe Lincoln's Patent

I noticed a mention in a magazine article recently about a patent taken out by Abraham Lincoln. That was news to me so I decided to go online to check it out.

At Google Patents (www.google.com/patents) I was quickly able to bring up Old Abe's patent for a "Method To Buoy Vessels Over Shoals". The patent drawings show a system of floats along the sides of a river barge that were designed to lift it off sandbars or other debris if it got stuck.

I did a little research and discovered that Lincoln got the idea while on a riverboat trip home to Illinois in 1848. His boat got stranded on a sandbar. The crew and passengers used loose planks and empty barrels to float the boat back into deep water. Soon after, Lincoln created a scale model of his idea for a system that could be built onto the sides of existing boats and lowered down into the water when needed.

Apparently, Lincoln displayed a lifelong fascination with mechanical things. When he was a traveling lawyer in younger days, he would frequently stop at farm houses for dinner. Often, he would head out to the barn with the farmer and go over every piece of farming equipment, asking detailed questions and speculating about whether it could be improved.

Liberty Quotes

"Those who deny freedom to others deserve it not for themselves." *Abraham Lincoln*

"Tax reform is taking the taxes off things that have been taxed in the past and putting taxes on things that haven't been taxed before." *Art Buchwald*

"The state represents violence in a concentrated and organized form. The individual has a soul, but as the state is a soulless machine, it can never be weaned from violence to which it owes its very existence." *Mohatma Gandhi*

"Beware the greedy hand of government, thrusting itself into every corner and crevice of industry." *Thomas Paine*

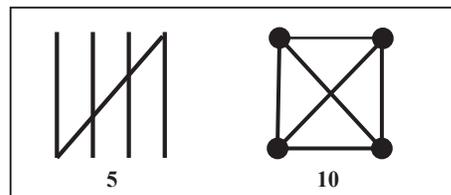
"A general state education is a mere contrivance for moulding people to be exactly like one another; and as the mould in which it casts them is that which pleases the dominant power in the government, whether this be a monarch, an aristocracy, or a majority of the existing generation; in proportion as it is efficient and successful, it establishes a despotism over the mind, leading by a natural tendency to one over the body." *John Stuart Mill*

"When you run in debt, you give to another power over your liberty." *Benjamin Franklin*

"Avoid occasions of expense - and avoid likewise the accumulation of debt not only by shunning occasions of expense but by vigorous exertions to discharge the debts, not throwing upon posterity the burden which we ourselves ought to bear." *George Washington*

"Three groups spend other people's money: children, thieves, politicians. All three need supervision." *Dick Arney*

"Talk low, talk slow, and don't say too much." *John Wayne*



A New Way To Count

"It's a simple system that takes up less space," says Dick Steckler, Houston, Mo., about his simple counting system for keeping track of repetitive processes or other jobs.

"Most people make 4 vertical hash marks and then a 5th struck through the 4. So at a glance you know it represents the number 5.

"A better method lets you count to 10 in the same amount of space. Make a square that consists of 4 corners, 4 sides and 2 diagonal slashes for a total of 10 marks.

"Do the corners first, making a dot for each corner. Then do each side, connecting the dots. And finally, draw the diagonals, making an X through the box.

"This square takes up the same amount of space as the hash mark method. One way I use the idea is to mark rechargeable batteries, where there's not much room to write, to see how many recharges I get out of them.

"I learned this trick from a statistics professor when getting my masters degree in engineering. It saves a lot of space, especially if you're counting up into the hundreds."

Editor's Note: If you find errors in this issue of FARM SHOW, please know that they were printed on purpose for those who look for them. We try to print something for everybody.

The Fence

There once was a little boy who had a bad temper. His father gave him a bag of nails and told him that every time he lost his temper, he must hammer a nail into the fence. The first day the boy drove 37 nails into the fence. Over the next few weeks, as he learned to control his temper, the number of nails hammered daily gradually dwindled down.

Finally the day came when the boy didn't lose his temper at all. He told his father about it and the father suggested that the boy now pull out one nail for each day that he was able to hold his temper. The days passed and the young boy was finally able to tell his father that all the nails were gone.

The father told his son by the hand and led him to the fence. He said, "You have done well, my son, but look at the holes in the fence. The fence will never be the same. When you say things in anger, they leave a scar just like this one. You can put a knife in a man and draw it out. It won't matter how many times you say I'm sorry, the wound is still there. Make sure you control your temper the next time you are tempted to say something you will regret later." *Author Unknown*

Ole shouted frantically into the phone, "My wife is pregnant and da contractions are only few minutes apart!"

"Is this her first child?" asks the doctor.

"No!" Ole shouts. "Dis is her husband!"

Ole saw a sign in the window of a local restaurant that read "Unique Breakfast" so he walked in and sat down.

The waitress brought him his coffee and asked him what he wanted, "What's your Unique Breakfast?" Ole asked. "Baked tongue of chicken!" she proudly replied.

"Baked tongue ov chicken? Dew yew know how disgusting dat is? I would never even consider eating anything dat came out ov a chicken's mouth!" he fumed.

Undaunted, the waitress asked, "Well, what would you like then?"

"Yust bring me a hard-boiled egg," Ole said.

Three Boy Scouts told their Scoutmaster that they had done their good deed for the day.

"What did you do, boys?" he asked little Ole.

"Ve helped an old lady cross da street," Ole replied.

The Scoutmaster was mystified. "It took all three of you to do that?"

"Yep," Ole said. "She didn't vant tew go."

A traveler entering a small country store noticed a sign on the door warning, "Danger! Beware of dog!" Inside, he saw a harmless old hound dog asleep on the floor.

"Is that the dog folks are supposed to beware of?" the traveler asked of Ole, the store owner.

"Yep, dat's him," came the reply.

The traveler couldn't help but be amused. "He doesn't look dangerous. Why the sign?"

"Vell," Ole answered, "before I posted dat, people kept tripping over him."