

Country Cooking

A wood-burning stove that uses sound to generate electricity and refrigeration could one day make waves in developing countries. That's the hope of an international team headed by engineer Paul Riley of the University of Nottingham in the United Kingdom. This month, the U.K. government and the U.S.'s Los Alamos National Laboratory in New Mexico awarded the team almost \$4 million to develop a Stove for Cooking, Refrigeration, and Electricity (SCORE). The appliance would rely on external combustion, such as a wood fire, to heat one end of a tube of compressed gas, inducing sound waves that can be harnessed to generate enough electricity to power a light bulb and a small refrigeration unit.

The principle isn't new, but the technology has been too expensive for general use, says thermoacoustician Steven Garrett of Pennsylvania State University in State College.



The SCORE team hopes to make it cost-effective with cheaper materials: Compressed air could replace high-pressure helium, for example. "If anybody can pull this off, it's got to be these guys," says Garrett. The device may

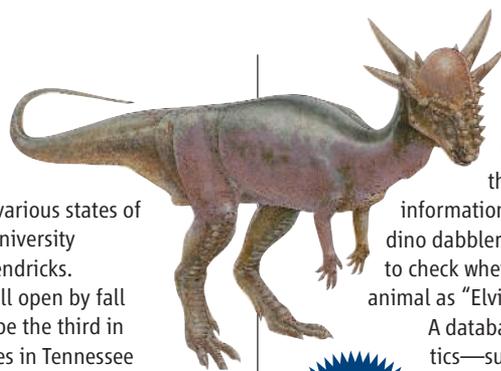
not cut down on wood consumption, but tests suggest that it will make use of up to 30% of a wood fire's energy, much more than a typical stove's 7% efficiency.

Bring Out Your Dead ... Elsewhere

Kenny Johns respects the dead. He just doesn't want them lying about near his airport.

Last month, Provost Perry Moore of Texas State University in San Marcos was finishing plans to build a 7-hectare forensic anthropology research field lab—a "body farm" that would use decomposing human remains to aid in the investigation of outdoor crime scenes—less than a mile from the San Marcos Municipal Airport. But now the university is scouting a new location in response to concerns that circling buzzards would threaten aircraft there. Airport manager Johns notes that one buzzard alone can easily destroy a small plane's engine or shatter a larger one's windshield.

The body farm is to be the cornerstone for a new doctoral program in forensic anthropology, with up to a dozen corpses in various states of decomposition, says university spokesperson Mark Hendricks. Texas State hopes it will open by fall semester. If so, it will be the third in the nation, joining sites in Tennessee (*Science*, 11 August 2000, p. 855) and North Carolina. Forensic anthropologist Jerry Melbye foresees no difficulty in obtaining research material. "Many people are interested" in the university's new donation program, he says.



kept their scaly grip our imaginations. The new DinoBase from the University of Bristol in the U.K. offers plenty of information for everyone from dino dabblers to devotees who want to check whether there's such an animal as "Elvisaurus." (There isn't.)

A database holds vital statistics—such as length, weight, and time span—for several hundred dinosaur species, including *Stygimoloch spinifer* (above), a 3-meter-long herbivore from what is now

Montana. Its elaborate headgear might have served as a weapon or as a lure for mates. Visitors can tour a gallery of dino art or dig into the site's forum for announcements of fresh finds and the latest on current debates, such as whether commercial fossil hunters hurt or help paleontology. >> dinobase.gly.bris.ac.uk

A New Destination For Dinomaniacs

Those plucky penguins—already passé. Whales and polar bears—just fads. But dinosaurs have

Better to Give Than to Receive

Many primates spend up to a fifth of their time going through one another's fur. This grooming behavior helps keep them healthy both physically and mentally—relaxing the animals and helping cement social relationships. Now a study of the so-called Barbary apes finds that the stress reduction benefits the groomers even more than the groomed.

A team led by primatologists Ann MacLarnon and Stuart Semple of Roehampton University in London followed 11 female macaques on the Rock of Gibraltar over 2 months, recording grooming behavior and collecting feces to analyze the stress hormone cortisol. The animals who tended others the most—both in terms of time spent and number of animals groomed—had the lowest cortisol levels, they report in the 7 June issue of *Biology Letters*. The busiest groomer, who averaged almost 16 minutes per hour, had half the cortisol levels of one that only spent a few minutes at it.

For those on the receiving end, there was no correlation between cortisol levels and grooming. The team suggests that more active groomers are less stressed because they have stronger social support networks. Psychologist Robin Dunbar of the University of Liverpool in the U.K. says, "This is a very timely study because we really don't understand what makes grooming so worthwhile for groomers."

