EARTH

WARMER WINTERS BRING TERMITES | WHY ICEHOTEL’S ICE IS CRYSTAL CLEAR

THIRSTY CITIES:
ATLANTA • DENVER • TUCSON

Water management in a changing environment

Plus:
• Hydrates: getting the natural gas out
• Excavating a tale of Irish refugees
• Santorini tsunami crossed the Mediterranean
• Diseases, stomping grounds and late bloomers: new dinosaur discoveries
• Chinese business makes deal for Guinea’s minerals

TOPPLED COLUMNS REVEAL EARTHQUAKE SECRETS?

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RETHINKING WATER MANAGEMENT

As the climate changes and water becomes more scarce locally, cities across the United States — whether they are typically lush like Atlanta, Ga., or more arid like Denver, Colo., and Tucson, Ariz. — will experience more droughts. Therefore, cities are reconsidering their water management practices, looking for ways to conserve, store and more efficiently use water.

Lisa Song

TERMITES: HERE, THERE AND EVERYWHERE?

Termites are prevalent across much of the southern United States and into California, but in the northern United States and most of Canada, they are virtually unheard of. That may change, however, as increasing winter temperatures allow termites to expand their territories.

Chris J. Peterson

TEXAS, MARYLAND:
A HISTORIC TALE OF IRISH REFUGEES STARTING IN A NEW LAND AND QUARRYING MARBLE

In the 1840s, many Irish immigrated to the United States. Some settled in a little Maryland town they called Texas, just outside of Baltimore, where they quarried marble that was used to build some of the United States’ most iconic structures. New archaeological excavations are beginning to reveal the history of this Irish-American society.

Brian Fisher Johnson

TESTING METHANE’S POTENTIAL ON THE NORTH SLOPE

Buried beneath the frozen North Slope of Alaska are some of the nation’s largest hydrocarbon resources. But no one has figured out the best way to harvest the area’s methane, which remains locked in icy cages beneath the ground. This year, scientists will be testing what they say is their best plan yet to extract the natural gas.

Nicole Branan

ON THE COVER: Drought can strike anywhere, anytime. Read what Atlanta, Ga., Denver, Colo., and Tucson, Ariz., are doing to combat water shortages starting on p. 36. Photo ©iStockphoto.com/Ben Heys. Inset photo: Toppled columns in Athens, Greece. Photo by Tracey Ford.
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PEAK SOIL: DOES CIVILIZATION HAVE A FUTURE?
We’re all familiar with the idea of Peak Oil, but what if there’s a Peak Soil too? If there is, can we figure out a way to farm more sustainably and save civilization?
Ward Chesworth

88 GEOLOGIC COLUMN
ALL ABOARD FOR GEOENGINEERING?
There has been lots of talk recently about engineering our planet to manipulate Earth’s climate. But from a geologist’s perspective, do these engineering schemes hold merit? And if so, what kind of side effects might we expect?
Fred Schwab

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