

BEST OF WHAT'S NEW '07

# TOP TECH AWARDS

# POPULAR SCIENCE

THE FUTURE NOW

**BOOM**  
OF THE MONTH

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Inside Russia's "Father of All Bombs"

## 100 BEST INNOVATIONS OF THE YEAR

The Audi R8: Lamborghini Power to the People p.63



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DECEMBER 2007 US \$4.99 CAN \$5.99

TRITON LOGGING SAWFISH UNDERWATER HARVESTER

# ROBOT SUB SALVAGES DROWNED TREES

**SUBMERGED DECADES AGO** by dams, some 300 million perfectly preserved trees sit underwater, wasted. But the chainsaw-wielding Sawfish robot can plunge down to 1,000 feet and harvest 50 trees in one dive—without disturbing the ecosystem. Tethered to a barge, the remote-controlled Sawfish clamps onto a tree with its five-foot-long pincers, attaches inflatable airbags, and chews through the trunk in seconds with a 54-inch blade. The log floats gracefully to the surface. The first commercial Sawfish proved itself late last year in a lake in British Columbia, salvaging 6,000 trees in six months. \$1.2 million; [tritonlogging.com](http://tritonlogging.com)



GLOBAL RESOURCE CORP. HAWK 10

## MICROWAVES TURN CAR PARTS TO OIL

**IT SOUNDS TOO GOOD** to be true: a machine that takes in trash and spits out oil and natural gas. But that's exactly what GRC's Hawk 10 recycler can do—and it produces zero emissions and 18 times the energy it consumes. Every year, junkyards in the U.S. bury about five million tons of hydrocarbon-based auto waste, including foam, rubber and plastics. But put that refuse into a Hawk machine instead, and precisely tuned microwaves break its molecular chains, releasing the hydrocarbons within to extract oil and gas and reduce the waste's volume by up to 65 percent. The first Hawk starts making natural gas in Long Island, New York, this February. \$5.1 million; [globalresourcecorp.com](http://globalresourcecorp.com)



**FUEL MAKER** The Hawk recycler extracts hydrocarbon gases from waste and condenses them in different chambers to create oil, diesel or natural gas.