

# WHAT'S IN STORE

A LOOK AT THE SHIMMERING SWAG OF TOMORROW

**THINK WE'VE ALREADY BIKED**, skied, climbed, and trekked past the golden age of gear? Hardly. New materials, technologies, and imaginative leaps will make the next ten years of equipment development even more thrilling than the last 25. During our reconnaissance tour of 21st-century swag labs, we glimpsed the future through the eyes of enterprising engineers, industrial designers, and chemists. Some of these ideas are about to hit the shelves, others are being tested, and some ...well, let's just say they're out there. Here's a peek. —BOB PARKS

## 2002

### » FASHION THAT SAYS "BUG OFF"

**MOSQUITOES**, blackflies...bring 'em on. You'll be a human windshield in Ex Officio's new BugAway duds, a line of insect-repelling outdoor garb. In November, the Seattle company will start selling long-sleeved crewneck shirts (\$59), pants (\$69), and other items treated with Healthguard System3, a textile coating developed by Australian chemist Chris Harvey. In tests, BugAway garments lower the frequency of bites through cloth from ten per minute to almost none.



## 2006

### » GET SQUIRRELLY

**"TREE TENTS TAKE** the portaledge into the forest," says Kelty president Casey Sheahan, 47. Tree camping means more available sites and better ventilation. Burlington, Vermont-based inventor Tim Steiner, 53, recently caught Sheahan's eye with a two-person, four-season prototype tree tent called the Woodland Comfort. To pitch it, you'll wrap nylon lines around three sturdy trunks 13 to 35 feet apart—using bark-friendly web collars—then ratchet the whole rig up tight, securing the platform at about waist height.

### » MAKE MINE TELEPINE

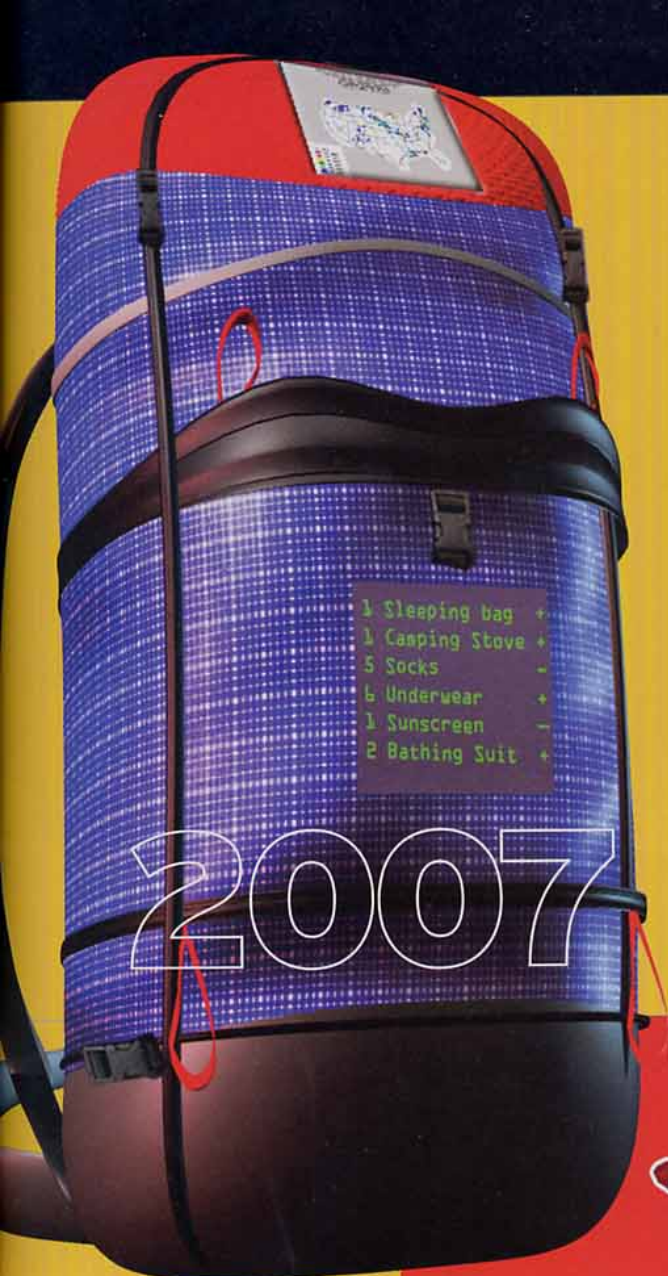
**OR SHOULD THAT** be randomark? Alpinée? Whatever, the grand convergence of alpine, telemark, and randonnée ski gear is at hand. Black Diamond Equipment in Salt Lake City is beta testing prototypes of releasable bindings that will convert from free-heel telemark to locked-heel alpine mode. Boots will be similar to current high-end plastic telly models like Scarpa's T1. Skis will be light and wide for powder, but stiff enough to hold on hardpack. Cost for the forthcoming go-anywhere ski package? Around \$1,000.



### » A HIDE THAT HIDES

**NOW ENTERING** Jetsons territory. Exhibit A: a digital suit that makes divers, safarigoers, and birders virtually invisible to animals and fish. In a study published last May in *Nature*, a team from Philips Electronics described a video display that could be "painted" onto clothing—from jackets to wetsuits—by spreading a mixture of liquid crystal and plastic-building molecules over an electrode-studded Lycra surface. The suit's surface could match anything from the sea fans on a Micronesian reef to the grassland of an African veldt. Here, kitty, kitty.





# 2007



# 2008

## JACKET, HEAL THYSELF

**LEAVE DUCT TAPE** to the dirtbags. Researchers at the University of Illinois at Urbana-Champaign are working on material that, once torn or cut, fixes itself. The secret is a plastic compound embedded with a chemical catalyst and tiny capsules of a resealing agent. Snag your expedition jackets or tent fly on a broken branch and the capsules break open to react with the catalyst, creating a plastic goo. Just press the torn pieces together, wait half an hour, and voilà!—a repair that's almost 90 percent as strong as virgin material.

## SMART PACKS

**YOUR EXPEDITION**—and its 35 duffel bags and packs—has arrived at base camp. But who has the stove? Paul Saffo, 47, a technology expert and backpacker based in Menlo Park, California, predicts that within five years, built-in computer chips will help you find essential items. Data-transmitting gear tags, in development from Alien Technology in Morgan Hill, California, will beam inventory lists (sleeping bag...check; camp cooker...check) to a weatherproof screen on top of your pack. The postage-stamp-size tags will cost just pennies each.

# 2012

## ONE RIDE FITS ALL

**MOUNTAIN BIKE** pioneer Gary Fisher believes the rig of the future will be programmable like your PC. Button- or voice-activated motorized valves will automatically set bike geometry and your suspension to best handle the day's terrain. (Don't scoff: Specialized will introduce an auto-adjusting rear shock next year.) On long climbs, your bike will shift to a steeper frame angle and stiffer shock. "On the downhill, the bike would become a 69-degree sled with a lot of plush travel," gushes the 51-year-old Fisher, "so you'd just fly."



# 2010

