

Ultralight: Not Just for Hang Gliders Anymore

A veteran backpacker discovers ultralight backpacking and rediscovers his love of backcountry hiking.

By **Michael Behar** Illustration by **Amanda Duffy**



GROWING UP IN SEATTLE, I spent countless weekends hiking through Washington's rugged Cascade Range. I trekked parts of the Pacific Crest Trail, climbed ice-capped Mount Rainier and Mount Baker, and made annual pilgrimages to many of the state's breathtaking backcountry parks. A few days on the trail, however, invariably meant lugging a knee-busting pack crammed with

heavy gear and bulky clothing.

Soon I was eschewing the multi-day slogs and opting instead for the packless five-mile jaunts that would have me home in time for happy hour. Then, a few months ago, while doing web research for a hiking trip to West Virginia, I happened across a site dedicated to "ultralight backpacking."

Its author, 53-year-old Michael Connick, compiled a detailed checklist describing every item and its weight — from tent to toilet paper — that he carried on a typical overnight trek. All together his gear weighed barely nine pounds. Impossible, I thought. My tent by itself weighs 12 pounds.

It turns out that while I've been lugging around a 40-pound pack on recent hikes, major advances in ultralight and superstrong materials have been driving the biggest revolution in outdoor equipment since Gore-Tex was introduced 25 years ago. During the last five years, a small cadre of upstart designers have started using high-tech materials to radically cut the weight of tents, backpacks, sleeping bags, and clothing—in some cases by more than half. Their enterprises have evolved into a \$36 million industry, estimates Ryan Jordan, editor and publisher of Backpackinglight.com.

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Connick, who says he got into ultralight backpacking because of chronic knee problems, features a half-dozen links on his homepage to related websites. There are online discussion groups dedicated to “fastpacking” — a spin-off sport that relies on ultralight gear to let hikers cover huge distances in just days. On other sites, users post personal gear lists and do-it-yourself tips for shaving even more pounds from your pack. At ultra-light-backpacking.com you can download a PDF ebook, *Ultralight Backpacking Techniques*, which for \$16.95 comes with a guarantee to “save 13.5 pounds or more.”

THE SCIENCE BEHIND THE SLIM

Demetrios Coupounas is co-founder and president of Boulder-based GoLite, a five-year-old start-up that designs featherweight outdoor equipment and clothing. He points to three key innovations that enabled the development of ultralight gear: a fabric called Dyneema Gridstop, silicone-impregnated nylon or “silnylon,” and ultralight shell materials such as PacLite from the makers of Gore-Tex.

“Dyneema is exactly the same substance used in the best bulletproof clothing by elite police and military forces,” says Coupounas, who decided to start GoLite after an agonizing 10-day, 100-mile trek through Maine

with a monster 75-pound pack.

Silicone-impregnated fabrics are used in parachutes and hot air balloons, where low weight is at a premium. But gear designers discovered that nylon—the primary material in packs and tents—soaked up silicone like a sponge. The breakthrough resulted in silnylon, a flexible and ultralight fabric that offers three times the strength of ordinary nylon.

For clothing, especially breathable raingear, PacLite and other laminates such as GoLite’s GoDri, which combines a waterproof polyurethane membrane with a microthin layer of nylon, keep hikers bone dry at less than 15 percent the weight of three-ply Gore-Tex, the reigning standard for hardcore backpackers.

To find out if all these newfangled materials actually make a difference, I emailed an inventory of my overnight pack to Ryan Jordan and asked him for an ultralight makeover. He swapped out my old, clunky equipment for ultralight gear and managed to slash a whopping 28 pounds from my total pack weight.

So how much lighter can it get? A whole lot, according to Coupounas. “My ultimate hiking utopia fantasy,” he says, “involves continuing to whittle away at gear weight so an entire load for a two-week trip can be put on a dog.”