

THE 2016 SKI REPORT

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Outside

Our Greatest
Gift Guide Ever

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Perfect
Things**

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Bear Grylls Goes Big

GUIDING
OBAMA UP A
GLACIER
IS JUST
THE START

"All of us yearn to
break a few rules."

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NEED
BETTER
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Foolproof
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ULTRA, ULTRA
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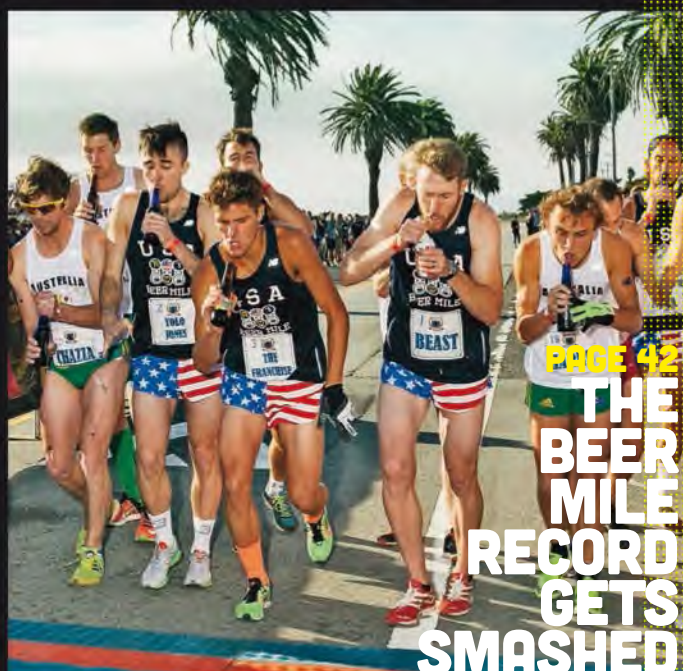


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12.15



Ski-mountaineering racers at the Aspen Power of Four

94 *LIFE COACH*

With a bevy of new shows extending his reach from the U.S. to Europe to China, Bear Grylls has established himself as a global voice for the rewards of wild places and risk. No wonder A-list celebrities, including President Obama, are lining up to share the thrill. **BY MICHAEL ROBERTS**

96 *STAND UP AND RIDE*

A paddleboard can be the ticket to adventure freedom, a vehicle for quietly reaching life-list dream spots. Our team tests that proposition with a glorious SUP expedition to Islas de Todos Santos, where they find no-crowds, surfing bliss that seems like a throwback to a different time. **BY JOE CARBERRY**

102 *HELLO, I MUST BE GOING*

To capture the record for the greatest distance covered in one year on a bike, Kurt Searvogel must ride more than 200 miles a day, every day, weather and morale be damned. How? Will-power is essential, along with performance boosts from Little Debbie. **BY TOM VANDERBILT**

112 *OVERROO'D!*

Australia's most iconic critter has a PR problem: there are roughly 60 million of them, which means environmental damage, roadkill pileups, and a national appetite for violent culling and kangaroo steaks. Some Aussies are horrified, prompting the world's strangest war over a problem species. **BY PAUL KVINTA**

122 *UP IS THE NEW DOWN*

If you think you're in great condition, your first skimo race may change your mind. **NICK HEIL** turned early failures into a full-on crusade to get in the shape of his life, climb faster, and ski better. What he experienced could redefine your notion of winter fun.



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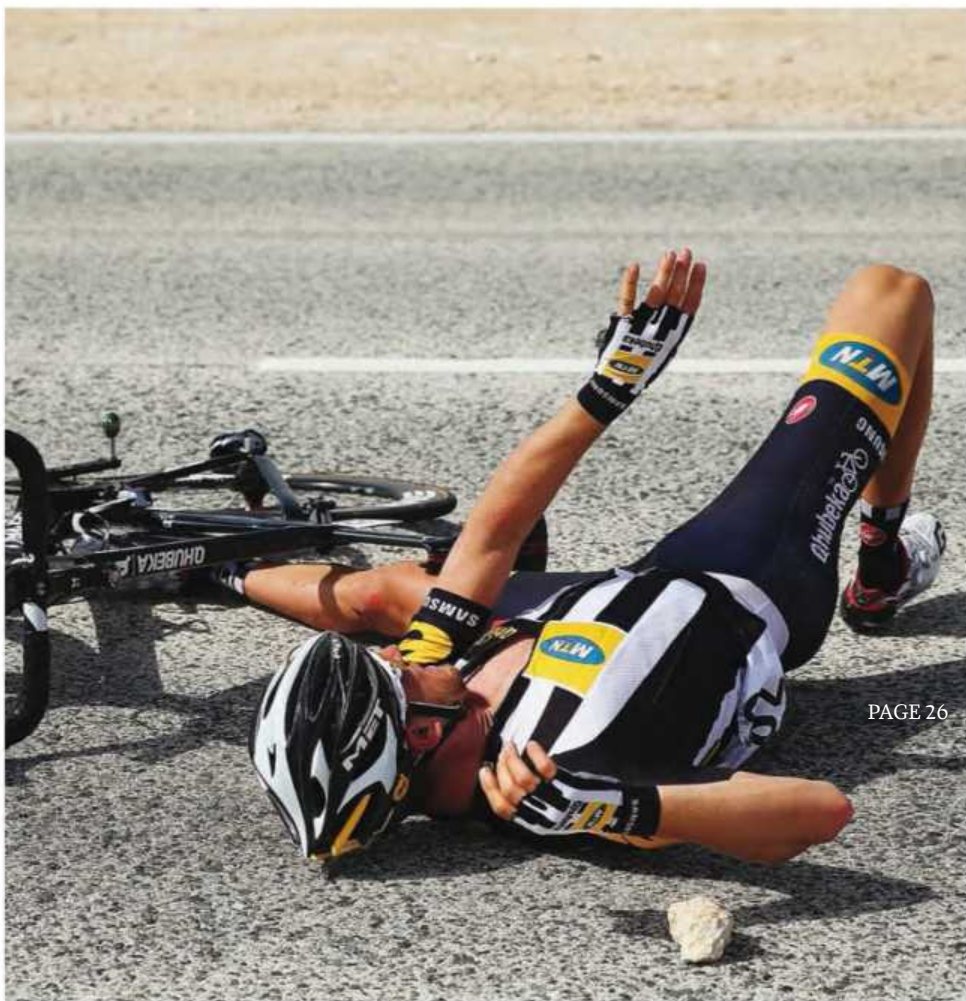
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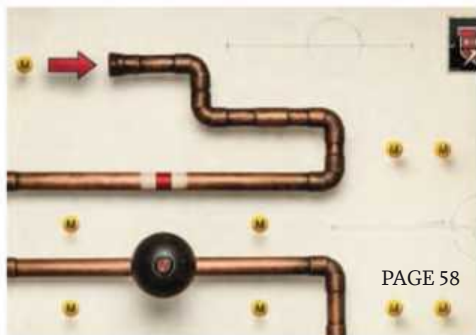


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← STOP THE MADNESS!
ULTRASENSITIVE DISC BRAKES
ARE FINALLY COMING TO THE
PRO PELOTON.

12.15

26 DISPATCHES SPECIAL

What's Next: From new sports (bikepacking!) to epic expeditions (high school twins will make first descents in Antarctica!), we're laying down 22 bold predictions about the people, trends, and gear that will shape our world in 2016.

44 DESTINATIONS

Ski Resorts: Forecasters are calling for big snow in the American West—gracias, El Niño—which means deep days at classic spots like Vail, Taos, and Park City. Whether you're looking for a backcountry bro-down or the perfect plan for mellow family fun, we've got your trip mapped out. **PLUS:** Avalanche school and the best season passes.

58 BODYWORK

In the Lead: Trillions of bacteria living in and on your body could make you a better athlete. **Do It Better:** The quest for a perfect night's sleep. **Moves:** Want to prevent injuries? Strengthen your feet. **Fuel:** Caffeine—our favorite PED.

66 ESSENTIALS SPECIAL

Gift Guide: We did the shopping for you, putting together a prize list of everything from bikes to skis to backcountry bartending tools. Let the joyous unwrapping begin.

plus

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THE WORLD'S FINEST ALPINE EQUIPMENT
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PHOTO BY TIM KEMPLE, LANGTANG, NEPAL

YAW OTHER EHT





ALEX MANELIS

To capture his friend Michael Shen climbing the Red Dragon route on Moon Hill, outside Yangshuo, China, Manelis traveled 7,000 miles, braved freezing December winds, and charmed a few guards who didn't want to let them onto the 164-foot limestone arch. "We told them how far we'd come, and they said, 'OK, but the minute you see other tourists, you have to come down,'" says the Palo Alto, California, photographer. "Getting there was like meeting a celebrity you've been obsessed with for years. I was above the clouds."

THE TOOLS: Canon 5D Mark II, 16–35mm f/2.8 lens, ISO 200, f/5, 1/125 second





**GRANT
GUNDERSON**

Last year, February storms dumped about six feet of snow over the Coast Mountains in western British Columbia just days before world-champion freeskier Josh Daiek arrived to heli-ski for the first time, with plans to descend a 3,500-foot line on a local glacier. "For some people, dropping off a glacier is crazy, but Josh has the experience, and only a small section of it wasn't covered in snow," says Gunderson, who lives in Bellingham, Washington. "Once he dropped back into the powder, he was definitely amped up."

THE TOOLS: Canon 1D X, 70–200mm f/2.8 lens, ISO 100, f/6.3, 1/1,000 second

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ANDREW PEACOCK

High concentrations of calcium carbonate turn the water a vibrant blue-green in Havasu Creek, a tributary of the Colorado River, near Grand Canyon National Park. Peacock captured his wife, Sabina Allemann, and expedition guide Jon Imhoof on inflatable SUPs last June during an 18-day, 278-mile journey from Lees Ferry to Lake Mead. "That section is one of the world's iconic river journeys," says Peacock, who lives in Santa Barbara, California, and Queensland, Australia. "The color was screaming out to be photographed."

THE TOOLS: Canon 5D Mark III, 16–35mm f/2.8 lens, ISO 640, f/6.3, 1/800 second



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"THE POINTS OF LAND FACE THE PACIFIC'S SWELLS UNENCUMBERED YEAR-ROUND. BUT FIRST WE HAVE TO GET TO THEM." —JOE CARBERRY, PAGE 96

Snowball Effect

I showed up to my first ski-mountaineering race, Colorado's Grand Traverse, with a set of ancient telemark skis and leather boots purchased at a bargain consignment shop. The heavy setup would need to take me 40 miles across two mountain passes in the alpine wilderness between Crested Butte and Aspen. My race partner, contributing editor Nick Heil, who had roped me into the event, was sporting similar equipment. So were all but the most elite competitors. This was 2001. Ski mountaineering, or "skimo," had just started to take hold in the U.S., and there was still a large gap between enthusiastic racers and quality sport-specific gear.

We set off at midnight with 99 other teams of two, and the suffering commenced almost immediately. Heil was patching blisters at mile six. I was fighting frostbite in my fingers until the sun arrived. During our 14-hour slog, we each had slightly humiliating meltdowns. Nick took a harrowing slide down an icy face in the dark. A few hours later my ski fell off on a descent, and when I couldn't engage the binding, I began to throw a frustrated tantrum. Heil, as the only remaining sane adult, had to intervene.

As soon as we crossed the finish line, battered but elated, Heil and I were talking about signing up for the next one. Indeed, sold-out entries for the Grand Traverse and other such races seem proof that humans have a built-in mechanism that wipes suffering from our internal hard drives. We competed two more times, enduring no less agony, never representing even the slightest threat to the podium, and yet eagerly discussing training for the next one as soon as we finished.

This month, Heil writes about skimo's sudden growth—and his own continued addiction ("Up Is the New Down," page 122). In the past five years, events have proliferated, piggybacking on uphill skiing's rise in popularity. Last winter, Heil recruited me for the Power of Four: more than 10,000 feet of climbing up and over Aspen's four ski areas. This time, thanks to our media credentials, La Sportiva loaned us lightweight carbon skis and skintight, bumble-bee-colored racing suits. Before the event, I was panicked about the suits, certain we'd look like posers. Instead, we arrived at the 6 A.M. start line to find a sea of spandex. The sport has been fully embraced by the endurance masses—suffering, bad fashion, and all.

—CHRISTOPHER KEYES (@KEYESER)



Keyes (right) with Nick Heil at the Power of Four



ARTIST'S DIGEST

To illustrate the crucial role of microbes in athletic performance ("Active Ingredients," page 58), Austin, Texas, artist **Dan Winters** built and photographed models portraying the GI tract and bacteria. "People often perceive anatomical representation of things as untidy," says Winters, who studied biology in college and whose portfolio includes affable constructions of genitalia and urine. "I try to make them more mechanical."

SHUTTER SPEED

It's been a while since we heard from **Anton Corbijn**, who returned to *Outside* to take this month's cover photo of TV adventurer Bear Grylls. Corbijn, who lives in the Netherlands, made time for the session between a career retrospective and the opening of his film *Life*, starring Robert Pattinson as a photographer on a shoot with James Dean. "Bear is not a man to waste time," he says. "We're both that way. The shoot was very short but very focused."

GOING THE DISTANCE

If all proceeds as planned, in January, Kurt Searvogel, the subject of this month's "Hello, I Must Be Going" (page 102), will have biked roughly 75,780 miles in a single year—more than anyone in history. How does that stack up against other ultra-achievements?



Distance traveled in a nonstop flight
26,389 miles
Steve Fossett
2006



Distance traveled by wave-powered boat
3,780 nautical miles
Kenichi Horie
2008



Distance traveled on foot in 24 hours
188.59 miles
Yiannis Kouros
1997



Distance traveled by a goat on a skateboard
118 feet
Happie
2012



Distance covered in a single unicycle jump
9 feet 8 inches
David Weichenberger
2006

WHO WE ARE IS WHAT WE LEAVE BEHIND.

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FEEDBACK

WALKING ON WATER

After reconnecting with a lifelong friend, a Navy SEAL who returned from Afghanistan with PTSD symptoms, associate editor Matt Skenazy wrote about how surfing can save lives in "Trim Toward the Light" (October.) Surfing as therapy after combat might be a niche field, but some readers wonder if it can help others.

Skenazy's article showed that sometimes the best remedies are simply removing yourself from the everyday maddening rush and listening to your soul and to nature. It should be required reading for all medical professionals and was a great reminder of the dangers of overmedicating—a common problem in our quick-fix society.

RANDY HENRY
SAN FRANCISCO, CALIFORNIA

Surfing is in the same class as dog therapy, horse therapy, smoking pot, and bubble baths. All of those can be effective

responses to symptoms, but they're interventions, not validated treatments like PE (prolonged exposure) or EMDR (eye-movement desensitization and reprocessing). For PTSD there are good treatments—excellent ones, in fact. People need to know this and demand better service.

TOM CLOYD
SPOKANE, WASHINGTON

TECH ISSUES

In "The Metric System," you reviewed tech gadgets that help athletes improve their training. While it may motivate novices to get off the couch and elite competitors to tweak their form, an external device can also be a distraction. Better motivators are signing up for a race, training with buddies, and inner drive.

J. LAPIERRE
GRANBY, CONNECTICUT

I don't buy that fitness wearables keep people "in the moment," as the author describes. What got me running in the



WHAT WE'RE WATCHING

In late November on *Outlook*, Outside Television will air an exclusive profile of Kai Lenny, the 23-year-old king of SUP racing. Lenny started surfing at age four and has been mentored by giants like Robby Naish and Dave Kalama—partly why he's claimed six world titles over the past five years.

Between the Lines



NEPAL IN A BOX

If you're one of 75,000 lucky subscribers, the issue you're holding came with a little project: a Google cardboard viewer for watching a virtual-reality video shot by the North Face in Nepal. Assemble it, download the free North Face: Nepal app from the iTunes or Android store, insert your phone into your viewer, and press play. Go to outsideonline.com/experiencenepal for a sneak peak on how it was filmed.

SCORING OUR PROGNOSTICATOR

Each December, *Outside* takes a look at the coming year, forecasting the trends, people, and technologies that will shape our world. (Our 2016 predictions start on page 26.) As we put together this year's package, we wondered: How'd we do last year?

PREDICTION	VERDICT
Ted Ligety would win gold in the giant slalom.	✓
<i>Solar Impulse 2</i> would complete the first solar-powered flight around the world.	X
Chris Froome would win the Tour de France.	✓
Endurance athletes would run electricity through their brains.	X
Meb Keflezighi would win the Boston Marathon.	X

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NEWS FROM THE FIELD

DISPATCHES

Space-tourism
company World
View's capsule.
See page 40.



2016

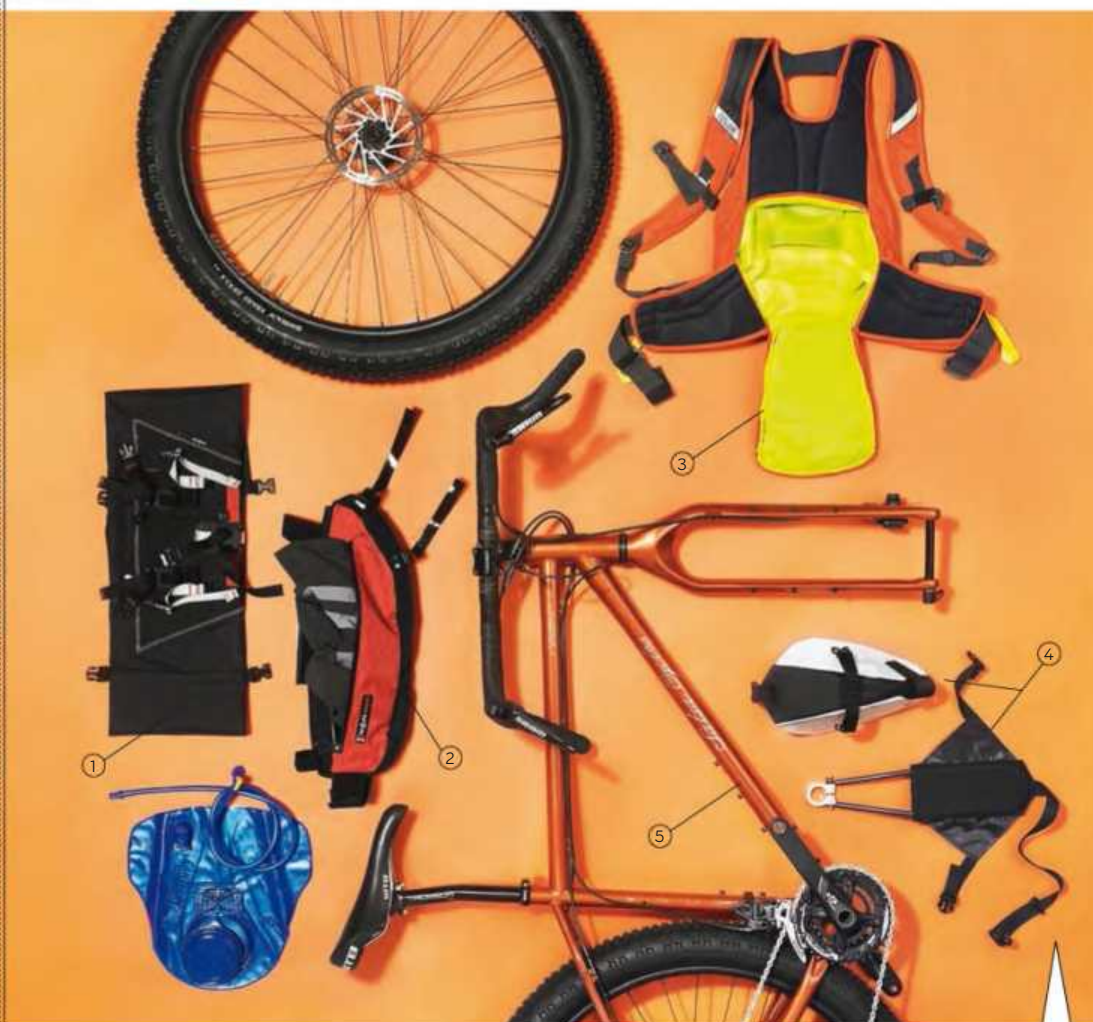
WHAT'S

NEXT

FANTASTIC VOYAGE

»» The year ahead will be filled with goggles that guide us down the ski hill, stoves that could save humanity, and Kubrickian pods that will carry us to the edge of space

by Christopher Solomon



BIKEPACKING WILL DISPLACE BACKPACKING

» Bikepacking—long-distance backpacking trips by bike instead of foot—has exploded of late, inspiring websites, e-zines, specialized gear, and even films. Try it and it's easy to understand the passion. "If somebody loves mountain biking and camping, it's the perfect storm," says Logan Watts, editor of Bikepacking.com, which features more than 70 routes complete with GPS coordinates. "The great thing about it is that you can tweak a bike you already have, use a soft bag that straps to your frame, and just take off." Newbies can use their own bike and a backpack, but Watts suggests a few essential pieces of gear to help distribute the load.

1. REVELATE SWEETROLL HANDLEBAR BAG \$100

» With roll-down closures, this waterproof system from bikepacking market leader Revelate enables easy packing and fast deployment of an ultralight tent and sleeping bag. An accessory pocket stashes tools, and webbing loops let you strap on extras.

*revelatedesigns.com

2. REVELATE TANGLE FRAME BAG \$90

» The sleek Tangle wedges in neatly between your frame

tubes and can fit a camp stove, a jacket, a sleeping pad, and plenty of grub.

*revelatedesigns.com

3. CAMELBAK SKYLINE 10 LR HYDRATION PACK \$130

» The LR stands for Low Rider, and it rests in the lumbar position, easing the load on your back during long rides.

*camelbak.com

4. PORCELAIN ROCKET MR. FUSION SEAT SYSTEM \$185

» The Mr. Fusion is a little pricier than other under-

saddle bags, but it's fully waterproof and comes with a clever stabilizing rack that secures to your seatpost.

*porcelainrocket.com

5. SALSA DEADWOOD BIKE \$2,599

» This bikepacking-specific ride matches drop bars with 29-inch-plus wheels and three-inch tires (wide but not quite fat) so you can roll efficiently over rugged terrain. The sturdy steel frame has numerous braze-ons, enabling all kinds of bag-attachment configurations.

*salsacycles.com

ENVIRONMENTAL POWER RANKINGS

The issues that will be most important in 2016

1. Solar

The technology keeps improving, more areas are becoming viable, the cost is going down—and utility companies are freaking out.

POSITION CHANGE SINCE 2015: +1

2. Drought

Wildfires continue to set records, but the Godzilla El Niño winter will bring much-needed moisture to the western United States.

POSITION CHANGE SINCE 2015: -1

3. Overall Hope for the Human Race

If private businesses can drive the renewable-power industries and pan-political coalitions can protect the sage grouse, we might just have a chance.

POSITION CHANGE SINCE 2015: PREVIOUSLY UNRANKED

4. Carbon Emissions

Countries gathering in December at the United Nations Conference on Climate Change, in Paris, will commit to a 40 percent reduction in greenhouse gases; the entire GOP presidential field will immediately denounce the whole thing as "a bunch of malarky."

POSITION CHANGE SINCE 2015: -1

No longer ranked: Jonathan Franzen's climate essays



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Jorgensen



Isles



Gray

THESE OLYMPIANS WILL BECOME AMERICAN HEROES

GWEN JORGENSEN TRIATHLON

» For the past decade, the U.S. women have been middling performers in triathlon; their last medal came in 2004. This summer

in Rio, they will dominate. And they'll be led by Jorgensen, currently number one in the world and easily the field favorite. Earlier this year, she went undefeated in 12 World

Triathlon Series races. With teammates Sarah True (current world number three) and surging Katie Zaferes, Team USA has a good chance to sweep the podium.

CARLIN ISLES RUGBY

» The world's ballsiest sport is returning to the Olympics for

the first time since 1924, when it was large-squad. (In Rio, the teams will be smaller and the matches shorter.) Isles is the hardest-charging player in the game—he clocks a nearly Olympic-caliber 100 meters and hits hard enough to have made the Detroit Lions practice squad.

ADELINE GRAY WRESTLING

» An American woman has never won Olympic gold in wrestling. That will change next year. Gray, the reigning world champion and current world number one, grew up tangling with the boys and should make short work of the field.

CUBA WILL LIVE UP TO THE HYPE

» Currently, the island is in a sweet spot between unexplored and overexposed. The tourism sector is developed enough to be accommodating, and the U.S. will soon lift the travel restrictions that have deterred law-abiding Yanks. Here are some itineraries, suggested by Cuba-crazy contributing editor Patrick Symmes.

» **Go Deep:** Cuban seas are some of the best preserved in the Caribbean. David Guggenheim, known as the Ocean Doctor, runs scuba tours to Gardens of the Queen, an island-filled shelf off Cuba's southern coast (from \$7,500; oceandoc.org). Surfers should head to Cuba's east coast, which faces the Atlantic's big rollers.



» **Get High:** The western valley of Viñales is famous for steep, crenelated 1,000-foot karst towers called *mogotes*. The Cuban government banned guides from leading clients up them, but a plan to change that is expected to go into effect soon. Check out cubaclimbing.com for updates.

» **Head for the Hills:** The lush Sierra Maestra is the country's longest mountain range. Some of the peaks are off-limits, but there are hiking trails in Turquino National Park, named after the 6,476-foot mountain, Cuba's tallest. Hikers must hire a guide; find one at the park entrance.

POP QUIZ:

CAN'T TRACK THIS!



Fitness gadgets will continue to proliferate in the year ahead. How wired an athlete are you? See if you can distinguish the newest trackers from the tracks off Drake's 2015 mix tape *If You're Reading This It's Too Late*.

1. SPARK
2. WATCH 2
3. LEGEND
4. STAR67
5. VIVOSMART
6. ENERGY

Answers:

1. Tracker (Tom-Tom); 2. Tracker/smartwatch (Apple); 3. Drake track; 4. Drake track; 5. Tracker (Garmin); 6. Drake track



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Leonardo DiCaprio in *The Revenant*



COMING ATTRACTIONS

Books and movies to watch for in 2016

The Revenant

JANUARY 8

» Oscar-winning director Alejandro González Iñárritu's new film stars Leonardo DiCaprio as mountain man Hugh Glass, who was ripped to shreds by a grizzly, left for dead by John Fitzgerald (Tom Hardy), and crawled 200 miles back to civilization.

The Bad-Ass Librarians of Timbuktu

APRIL 19 (\$26, SIMON AND SCHUSTER)

» *Outside* contributing editor Hammer's book tells the inside story of the historians who smuggled 350,000 volumes of ancient Islamic texts out of Timbuktu to protect them from destruction at the hands of Al Qaeda.

The Dragon Behind the Glass

MAY 24 (\$26, SCRIBNER)

» Voigt tracks the world's most expensive aquarium denizen—the Asian arowana, or “dragon fish”—from the last tropical wildernesses to the black markets of New York City.

The Hour of Land: A Personal Topography of America's National Parks

JUNE 7 (\$27, SARAH CRICHTON BOOKS)

» Williams celebrates the centennial of the national parks by profiling a dozen of them and arguing for the cultural importance of wild places in the United States.

Deepwater Horizon

SEPTEMBER 30

» One of the most devastating oil spills in history—and those who lived through it—gets the Hollywood treatment from director Peter Berg (TV's *Friday Night Lights*) and stars Mark Wahlberg as an electrician trying to save the crew from the burning rig.

THE NATIONAL PARK SERVICE WILL WATCH YOUR EVERY STEP



» Yes, millions will invade the national parks next summer for the Park Service's 100th anniversary, but the crowds may not be so bad. An innovative effort to alleviate congestion, which uses GPS devices to determine how people move through the parks, is already improving shuttle services and informing where new parking lots and trails are installed. “We can see where they go and don't go, where

they stop, and the speed at which they travel,” says Peter Newman, a professor of recreation, park, and tourism management at Penn State. During a 2014–15 pilot program in Grand Teton National Park, researchers handed trackers to willing visitors. In 2016, Utah State professor Chris Montz, a colleague of Newman's, will expand the project to Rocky Mountain National Park.



THE CHAIRLIFT WILL BE YOUR EDITING SUITE

It's a powder day at Mammoth Mountain, and you and a friend are filming in the terrain park—you doing cork 720s while wearing a GoPro, your buddy following behind you with his Canon. Footage in hand, you face a dilemma: go back to the hotel to edit and post (gotta get that sponsorship, bro!) or keep ripping. The Gnarbox (\$249; gnarbox.com) lets you have it both ways. Simply transfer your footage to the device via the built-in card reader, do a quick edit using the Gnarbox smartphone app (you access the video files wirelessly, by connecting your phone to the Gnarbox's Wi-Fi hotspot), then upload it to your favorite social-media network. “We are about minimal time in front of a screen,” says Gnarbox cofounder and CEO Tim Feess.



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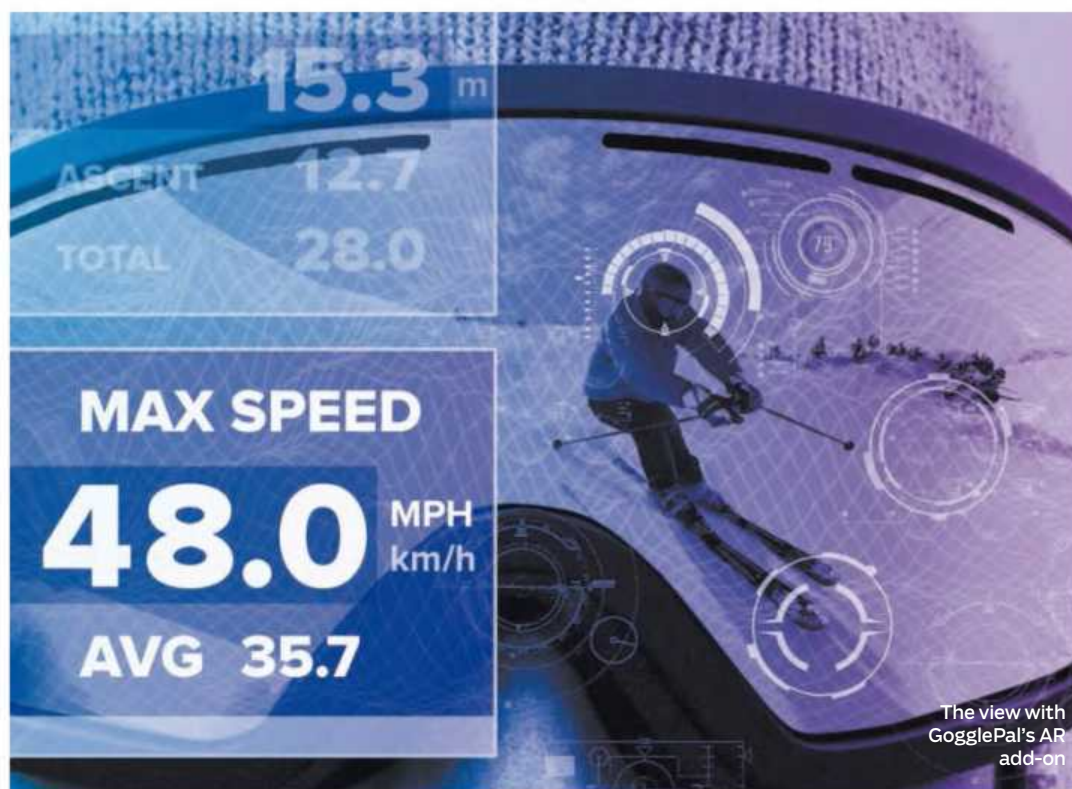
SLEEP TRACKING



SYNC WIRELESSLY



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The view with GogglePal's AR add-on

AUGMENTED REALITY WILL REACH THE MASSES

» Augmented-reality glasses display computer-generated imagery and data onto a lens, allowing you to see the real world and the virtual stuff simultaneously. While the technology has been around for years, it's been so expensive that only elite athletes had any reason to splurge on it. That will change in 2016 with two lower-cost devices that allow amateur skiers and cyclists to get in on the game.

Following a successful Kickstarter campaign earlier this year, GogglePal will ship in January and cost \$225 (gogglepal.com), far less than the more feature-heavy

RideOn AR ski goggles (\$899; rideonvision.com). A beeper-size GPS unit with a six-axis gyroscope attaches to the strap and tracks stats like speed and vertical drop. That information is then displayed via a projector, about the size of a nickel, that attaches to the inside of the lens. You can also view a map that shows the location of your friends on the mountain—as long as they're wearing GogglePals, too.

In the cycling world, 2016 will bring the Senth IN1 (\$300; insenth.com). The glasses display directions and point out hazards in the road such as cars

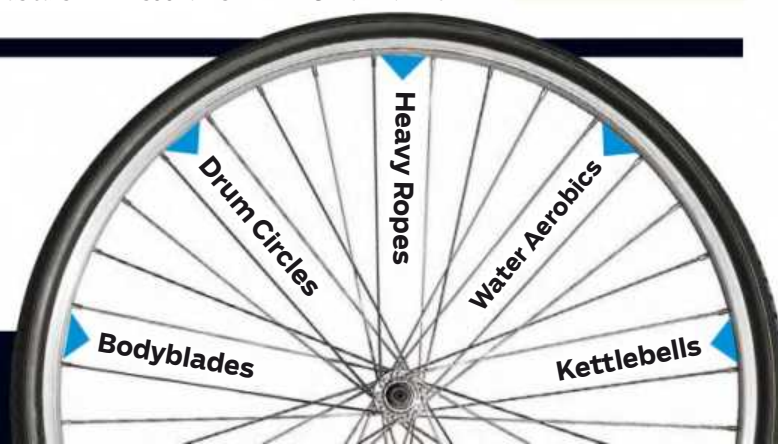
and other cyclists. This type of AR—which recognizes and interprets real-world information—is more complicated, however, and some say that low-cost companies struggle to do it well. “There is so much image processing that needs to happen. Good AR is difficult to achieve cheaply,” says Cody Karutz, hardware manager at Stanford University’s Virtual Human Interaction Lab. But while the Senth IN1 may not prove to be a serious competitor to the Recon Jet (\$499; reconinstruments.com), the leading cycling smart glasses on the market, expect a contender soon. —SHELBY CARPENTER


YOUR NEXT DIET WILL BE CUSTOMIZED

Forget Atkins, paleo, and South Beach. Personalization will dictate the food you'll eat in 2016. At WellPath (gowellpath.com), consumers answer questions about themselves, upload data from their Fitbits, and get a custom shake mix and daily vitamins designed for their needs. At Infnit Nutrition (infnitnutrition.us), you schedule a consultation with nutrition professionals or elite athletes to discuss goals and the physical demands of your activity, and the company creates a just-for-you sports drink with the optimal calories, carbs, electrolytes, and taste profile. You can even add protein and caffeine. The formula is saved on the site and can be tweaked before you reorder. “People think customization is cumbersome or difficult,” says Michael Folan, a ten-time Ironman finisher who is president and CEO of Infnit. “But it enables you to be very specific and simplify your day.” Plus, he insists, “We end up being about half the cost” of the off-the-shelf stuff.

ROUND AND ROUND WE GO...

» Spin classes are a great workout. But in the age of always better, turning the cranks is no longer enough. Studios have added barre, resistance bands, and even free weights to the routine. What absurdities might we see in the year ahead?





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THE MONIZ TWINS WILL MAKE ANTARCTICA THEIR PERSONAL SKI HILL

► This January, 17-year-old Matt and Kaylee Moniz will spend their winter break in the central mountains of Antarctica in search of first ascents and descents. The two grew up in Boulder, Colorado, kayaking, hiking, and skiing with their parents, Michael Moniz, a venture capitalist and network-infrastructure executive, and Dee, a nurse. “We had them on skis in the driveway as soon as they could stand,” says Michael.

In 2007, when the twins were nine, Matt and Michael trekked to Everest Base Camp, and Matt decided he wanted to start climbing big peaks. While Kaylee focused on skiing (she competed in the United States Ski and Snowboard Association’s Rocky Mountain Division), Matt turned his attention to the mountains and quickly found success. In 2010, at age 12, he and his dad set a new speed record for

ascending the highest peak in every U.S. state in 43 days, 3 hours, 51 minutes, and 9 seconds. It was while descending Denali that Matt discovered ski mountaineering. “What would have been a five-day descent took us two hours on skis,” Matt says. “I realized that this is the way to get off these peaks.”

He began training in Utah with Argentine guide Willie Benegas—who has 11 Everest summits under his belt. Soon sponsors like Leki, Mountain Hardwear, and Zamberlan were lining up to help support the trips.

“Matt has the mechanical abilities to deal with these big expeditions and the emotional abilities, too,” says Benegas. In 2014, they reached the top of both Cho Oyu and Makalu. (Matt is the youngest person to summit 27,766-foot Makalu.) They planned to climb and ski Lhotse in 2015 but abandoned the attempt after the

devastating Nepal earthquake. Instead, they did relief work.

When Matt returned home, he switched his focus to the next target on his Seven Summits quest: Antarctica. His grandparents used to build scientific bases there and often told stories about their time on the empty continent. “I look at Antarctica constantly on Google

Earth,” Moniz says. “All those unskied lines.”

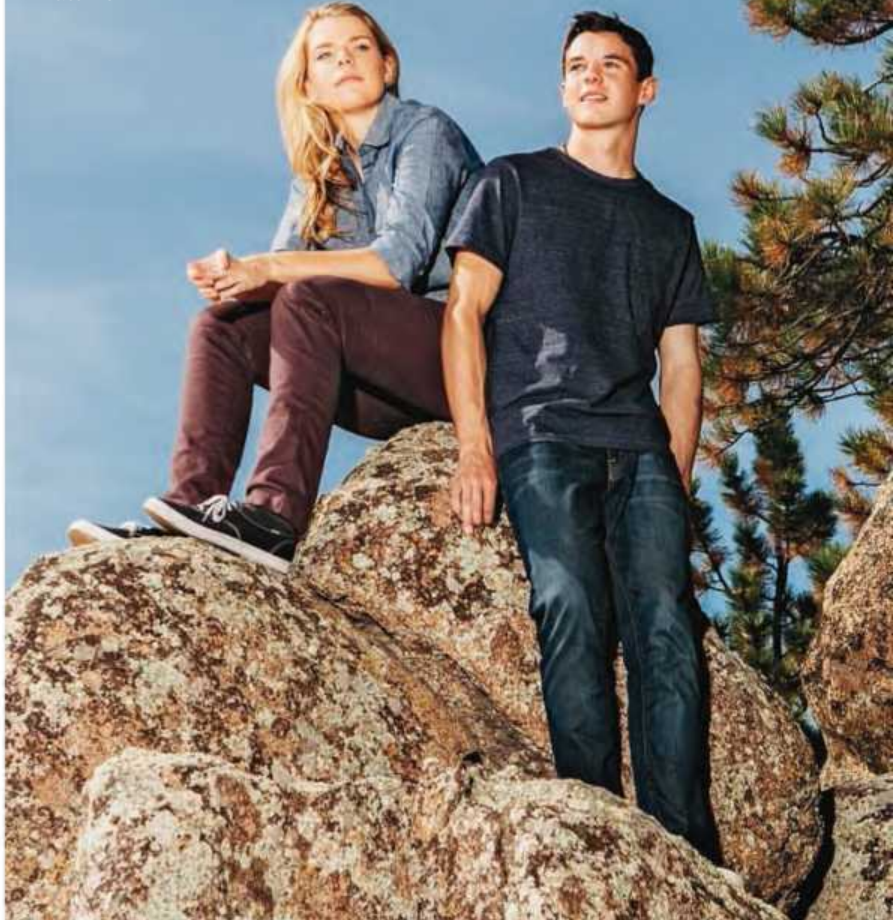
Now seniors at Boulder High School, Matt and Kaylee will leave for Antarctica in January—by which time they hope to be done with their college applications. Benegas and their father plan to join them in what will be Kaylee’s first mountaineering experience. “I’ve wanted to go there for years,”

says Kaylee. “I just hope I can keep up with my brother on the climb.”

The group will travel to Patriot Hills base camp, near the Ellsworth Mountains, and then attempt to summit and ski the 16,067-foot Vinson Massif. Afterward, they’ll take a crack at several unnamed peaks in the Sentinel Range, using kites to travel between mountains for up to a month.

“It’s a matter of what looks good and spending a lot of time with maps and binoculars,” Matt says. “Many of the central mountains have never been climbed or skied before. That’s what’s really exciting.” —BEN YEAGER

Kaylee and Matt Moniz



WISHFUL THINKING

The trends, tools, and irritations we hope will disappear with the snow in the coming year

- RUNNING'S DOPING PROBLEM
- "SLACKCOUNTRY"
- TRAIL-RUNNING FILM FESTIVALS
- SELFIE STICKS
- THE EFFECTS OF *WILD* AND *A WALK IN THE WOODS* ON TRAIL TRAFFIC





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BIOLITE WILL SAVE THE WORLD WITH A STOVE

► If you camp, you've seen a BioLite CampStove, which uses kindling to cook your oatmeal while generating electricity to charge a phone or camera. But the greater contribution from founders Jonathan Cedar and Alec Drummond may be the store they're opening in India, which will sell a home-powering stove aimed at the developing world.

The HomeStove is an 18-pound version of the CampStove. Cedar

says it produces ten times fewer emissions than the smoky fires that three billion people now use to cook with worldwide. It also produces electricity, something 1.2 billion people still don't have.

There are currently hundreds of clean-burning stoves aimed at the same market, but few burn as cleanly as the HomeStove, and even fewer provide electricity. University of California at Berkeley professor Kirk Smith,

who studies these stoves' impact, says BioLite could have staying power. Though the stoves don't burn as cleanly as he'd like, "they're one of the better ones out there," he says.

Cedar, 35, believes BioLite has an edge due to what he calls a "parallel innovation" business model. "The profits from the recreational markets help get things off the ground in the developing world," he says. It's a model other outdoor companies are using, too: recently, MSR announced that it had worked with a nonprofit to create a soup-can-size device that can purify water using table salt and a moped battery.

NGOs are taking notice of BioLite's plan. The company has received more than \$5 million in grants from groups like USAID and another \$5 million from venture capitalists. BioLite has already sold 10,000 HomeStoves and in November 2015 was slated to open its store in Bhubaneswar, in eastern India, where it hopes to sell 100,000 units for \$50 each.

The company also recently introduced the NanoGrid, a combination battery, flashlight, and lantern that can store power from the stove for later use. Next up, Cedar hopes to develop refrigeration and water-purification technologies that can also be powered by the HomeStove. "Broadly speaking, we want to reinvent everything the grid does, but on a personal scale," he says.

BLOW HARD

Air-filled gear like sleeping pads, rafts, and travel pillows are a good way to keep things light and packable. Now companies are expanding the concept to paddleboards, backpacks, and even tents. Expect to see more blow-up gear than ever in 2016—though that doesn't mean you should buy it.

AIRTIGHT

DRIFT BOATS
BIKE TRAVEL BAGS
SNOWSHOES

THE LINE

RUNNING SHOES
LANTERNS
HOT TUBS

LEAKY

ANYONE WILL BE ABLE TO RUN A MARATHON FROM THEIR LIVING ROOM

► Didn't land a spot in your favorite road race? Pretty soon you'll be able to switch on your tablet and toe up to a virtual starting line. Boston's Outside Interactive (no relation) allows runners to participate in races even though they live thousands of miles away. A pilot effort was held in summer 2015 at the New Balance Falmouth Road Race, the famed seven-miler on Cape Cod. One hundred virtual participants paid a reduced entry fee to download an app, then placed the screen before them on a treadmill and competed in a remote-runners-only category. The app shows footage filmed from a Segway before the race, providing a Kenyan's-eye view of cheering fans. Pace and incline can be adjusted manually with on-screen prompts to match the POV, or a device on your shoe will automatically slow the video to match your speed. The company is now talking with organizers of several running events nationwide to make their races available. Says founder Gary McNamee: "Our internal motto is, 'Making treadmill running suck less since 2011.'"



FROM TOP: COURTESY OF BIOLITE; TOMMY/GETTY

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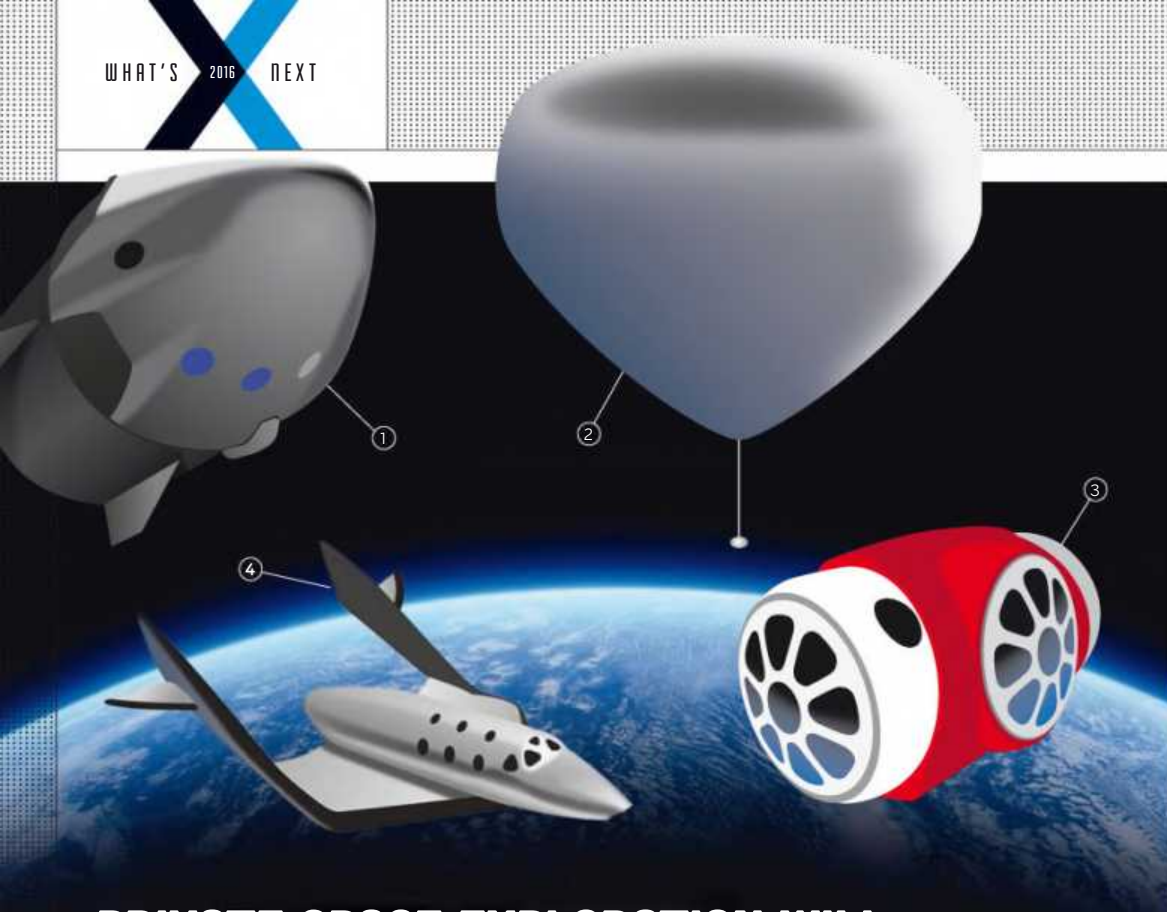


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PRIVATE SPACE EXPLORATION WILL RECLAIM ITS MOJO

1. SpaceX

One of its Falcon 9 rockets broke apart in a June flight, but Elon Musk resumed tests by December and plans to launch the larger Falcon Heavy in the year ahead.

*spacex.com

2. Zero2Infinity

Who needs rockets? This Spanish company, which aims to carry passengers to 118,000 feet in balloons, should complete final testing in 2016 or 2017.

*inbloon.com

3. World View

Your nearest bet for a suborbital joyride. Once final tests have been completed in 2016, passengers will enjoy a six-hour ride to 100,000 feet in a pressurized capsule.

*worldviewexperience.com

4. Virgin Galactic

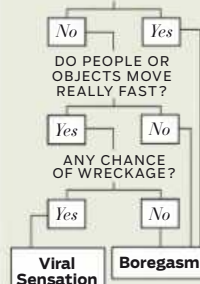
In October 2014, Richard Branson's flagship VSS *Enterprise* exploded at 45,000 feet, killing the copilot. Flights will resume next year with a new, safer craft.

*virgingalactic.com

LIVE, FROM A THOUSAND GOPROS, IT'S THE TOUR DE FRANCE!

Next year, according to Todd Ballard, senior director of lifestyle marketing at GoPro, the action-cam company hopes to live-stream the view from inside the peloton at the Tour, with cameras on the handlebars of top riders. It plans to expand soon after. "I don't think we've ruled any sport out," says Ballard. Well, you should, GoPro. Use our handy decision tree to determine what might play and what certainly won't.

IS IT BASS FISHING?



View from a
Blue Moon



JOHN JOHN'S NEW MOVIE WILL BLOW YOUR MIND



» Fans of 23-year-old Hawaiian pro surfer John John Florence have long been dismayed by his inability to win a World Championship. (He has never finished better than third.) The main problem: while his competitors surf conservatively, ever mindful of the judges, Florence airs it out every time. This makes for exciting spectating but erratic results (and the occasional injury).

But just in time for the holidays, we get to see Florence do what he does best in *View from a Blue Moon*. Made in collaboration with innovative production house Brain Farm, it should provide a stunning look at Florence's talents on location in Brazil, Australia, South Africa, Hawaii, and Tahiti.



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THE PROGNOSTICATOR

Our podium picks for the year's biggest competitions

FIS ALPINE SKI WORLD CUP

OCTOBER 2015–
MARCH 2016

» After sustaining injuries, Bode Miller's a maybe this season, and Lindsey Vonn's looking less sure for the title. Instead, on the men's side, look for Austrian **Marcel Hirscher (1)**, one of the best of all time, to win his fifth straight

overall title. American **Mikaela Shiffrin (2)** will dominate slalom again, taking home top honors for women.

BEER MILE WORLD CHAMPIONSHIPS

DECEMBER 2015

» The sub-five-minute floodgates have opened, thanks to a recent switch to chug-friendly bottles instead of cans—even

temperatures have been optimized for quicker quaffing. The money is on 21-year-old Canadian **Lewis "Louie Beer K" Kent (3)**, who still hasn't peaked and will definitely regain his world record. But there's no shortage of competitors. A beer-miler will likely flirt with a sub-4:50 mile in 2016.

TOUR DE FRANCE JULY 2016

» **Chris Froome (4)** wins again. Alberto Contador is on the downslope of his career. And if Nairo Quintana couldn't outclimb Froome to victory last year, on a course that favored him, nothing will stop the Brit in 2016.

WORLD SURF LEAGUE CHAMPIONSHIP TOUR

MARCH–
DECEMBER 2016

» Gabriel Medina will

win his second world title in 2016. John John Florence may be the better surfer overall, but Medina is ruthlessly competitive.

OLYMPIC MARATHON AUGUST 2016

» Boston and New York City won't be the focus in 2016. Look for Kenyans to clean up in Rio: **Eliud Kipchoge (5)** on the men's side and Gladys Cherono on the women's.

THE UCI WILL FINALLY GIVE CYCLISTS A BRAKE

In 2016, for the first time, disc brakes will be allowed at the Tour de France and other UCI-sanctioned races. Hydraulic disc brakes have been popping up on road bikes in recent years, but the UCI, citing safety concerns, banned them. In 2015, cycling's governing body permitted pro teams to test disc-brake bikes in two races of their choice, with an eye toward allowing them in all events in 2016. "The benefit of disc brakes of course is the stopping power," says Paul Lew, director of technology and innovation for Reynolds Cycling and vice chairman of UCI's wheel committee. Disc brakes also give cyclists the ability to slow down in smaller increments, which means greater control.

SCIENTISTS WILL ATTACK THE WEST'S MOST DANGEROUS INVADER

» The invasive weed cheatgrass can be found in every state in the U.S., infesting some 100 million acres in the West alone. If you hike, you've likely brought some home on your socks and in your pup's ears. It's most notorious, though, for crowding out native vegetation and fueling the hellacious wildfires that now rage across the country. But help is finally at hand: Ann Kennedy, a soil scientist with the Department of Agriculture who has worried about the weed for 30 years, has discovered naturally occurring bacteria in the dirt that suppress root growth and help clear the way for native species' return. Next year, the first EPA-approved product using that bacteria will come to market.



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below, Taos
peaks

1

El Niño Is Back (And They're Calling It Godzilla!)

Since 1950, about one-third of winters have been granted El Niño status. "If it feels like we're constantly talking about it, you're right," says Joel Gratz, the CEO of OpenSnow, a weather-forecasting website for skiers. But the strong El Niños—the winters that bring more than 500 inches of snow



to places like Telluride in Colorado and Mammoth in California—happen only about once a decade. The good news: this winter, forecasters at the National Weather Service are predicting a particularly strong El Niño, expected to last into March. But let's back up: What is El Niño, exactly? It's when water temperatures in the equatorial

Pacific Ocean become warmer than usual, which affects the prevailing winds and ultimately brings heavy precipitation to the southern half of the United States. So when you're planning a ski trip this winter, keep your eyes on California, Utah, New Mexico, and southern Colorado for deep powder. —MEGAN MICHELSON



Airing
it out in
Taos

3

The Southwest Could Have an All-Time Winter

Because of its location in the Southern Rockies, New Mexico's **Taos Ski Valley** could get hit hard by El Niño—fueled storms. "I've been geeking out on the models," says ski patroller Justin Bobb. "Taos is such a steep, rocky mountain that a big snowfall makes a huge difference." If the snow does come down, the Kachina lift—which last year opened up more than 50 acres of experts-only runs previously accessible only to those willing to hike—will run more consistently. After blasting through chest-deep powder, drop into the slopeside Bavarian Lodge and Restaurant, as authentic a German eatery as you'll find outside of Munich.



Clockwise:
Tele turns on
the Minturn
Mile; Vail
Village at
night; up for
a skate?

2



You Don't Know Vail

It has a reputation for catering more to oligarchs than young rippers, and yes, there are luxe hotels and gondolas with heated seats. But with all the Epic Pass options available (see "Season Passes Keep Getting Better," page 48), **Vail** has never been more affordable, and the mountain is full of challenging terrain.

→ LAP CHAIR 10

Even on the busiest days there's never a line, since this lift mostly serves 1,500-vertical-foot pitches of thigh-destroying moguls. Warm up on Blue Ox, then charge straight down the lift line: it's steep, narrow, and pockmarked with rock drops, and skiers on the way up will let you know how you're doing.

→ BYO RIBEYE

Round up some friends and head out to the summit of Blue Sky Basin, where the resort runs two huge, free gas grills. Pack a Bluetooth speaker, some steaks, and a case of beer, and take in the views across the valley of the 14,009-foot Mount of the Holy Cross.

→ SKI THE MINTURN MILE

Duck out the backcountry gate at the top of chair 7 and ski down to the 111-year-old mining town of Minturn. It's by no means a scary run, but get the lowdown from a local, and take standard backcountry precautions. Then grab a beer at the Minturn Saloon while you wait for your hotel or a buddy to come pick you up.

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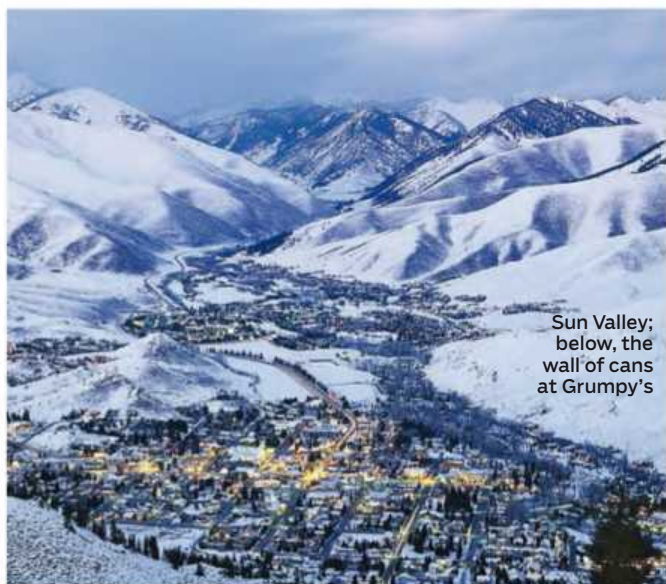
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Sun Valley;
below, the
wall of cans
at Grumpy's



4

Sun Valley Goes Both Ways

Plan to bring two pairs of skis to this Idaho gem, which was added to the Mountain Collective Pass this year. First, turn to your frontside carvers, because the resort is known for its outstanding groomers and wide-open, 3,000-foot runs like Warm Springs and Limelight. Local Chopper Randolph, a former pro mountain biker, says, "Sharpen your edges and let 'er rip." **Sun Valley** is also known for having the best

snowmaking in the business, so it's a good choice for December, when snowpack elsewhere can be unreliable. When it gets deep, bust out your fat boards and book a trip with Sun Valley Heli Ski, which takes off from the resort and serves up the largest area in the lower 48 (\$1,375; sunvalleyheliski.com). With access to 750,000 acres spread across three mountain ranges, you're guaranteed fresh tracks. Book a room at the newly renovated Sun Valley Lodge, where Hemingway wrote much of *For Whom*

the Bell Tolls (\$369; sunvalley.com). For après, local dive bar Grumpy's has good burgers and frosty 32-ounce chalices of beer. Or score a table at tiny Rickshaw, which serves authentically spicy Vietnamese and Thai street food.



Sun Valley
heli drop



5

Season Passes Keep Getting Better

Thanks to a surge of new deals covering more resorts at lower prices, it has never been easier to pull the trigger on a pass. The math speaks for itself; in most cases, you'll need to ski less than five days to cover the cost. Now you just have to choose. —M.M.

→ **MOUNTAIN COLLECTIVE** has added Stowe and Taos to its roster of

over a dozen world-class resorts. \$399 for two days at each resort; mountaincollective.com

→ Vail Resorts' **EPIC PASS** is better than ever: good at some of the best spots in the country and, new this year, Australia's Perisher. From \$769 for unlimited access; snow.com

→ If you don't use your **TAHOE SUPER PASS** at least five days at Squaw Valley/Alpine Meadows, you'll get full credit for the next season. From \$410; squawalpine.com



6

Magic Mountain Is the Powder Capital of the East Coast

One of New England's steepest resorts, Vermont's **Magic Mountain** has 1,700 vertical feet packed into just 195 acres served by a mere two chairlifts. Even better, because it's closed Monday through Wednesday, those willing to skin up can have the mountain to themselves early in the week. The resort is uphill-friendly on weekends, too—make it to the top lift shack on your own steam and they'll give you a token for a free chair ride. Take that second trip up on the Red Chair and head for Timber Ridge, an abandoned resort on Magic's back side. The benevolent landowner allows backcountry riders free access to the ten cut trails.

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THE ALL-NEW
TACOMA



Squaw
steeps;
below,
take in a
tram view

7

Tahoe Is Due for Deep Snow

After receiving less than half the normal 450 inches of snowfall last year, **Squaw Valley/Alpine Meadows** is counting on a comeback. And when the El Niño storms blow in, the combined resorts are a primo place to be, with 6,000 acres of Olympic-downhill steeps (Squaw hosted the Games in 1960), back bowls with Lake Tahoe views, and the ski-flick-starring crags and couloirs of the KT-22 peak. Fortuitously, this summer Squaw replaced the Siberia Express, often closed during windy storms, with a new six-person chair that should run even



when it's nuking. Squaw is also known for its après scene. Start at the classic Le Chamois, at the base. Locals string Le Chamois's Buddy Pass—20 Budweisers for \$20—next to their season pass. Nearby, the deck at the Rocker Bar, named for late freeskiing legend Shane McConkey's plank-shape innovation, is the place

to soak in the sun, watch skiers descend, and quaff a few pints of Sierra Nevada. For lodging, check out the Plumpjack Inn. Built for the 1960 Olympics, the inn has been remade into a dog-friendly base camp and is located just across the street from the gondola (from \$265; plumpjacksquawvalleyinn.com).

**Fireside
at Stein
Eriksen
Lodge**



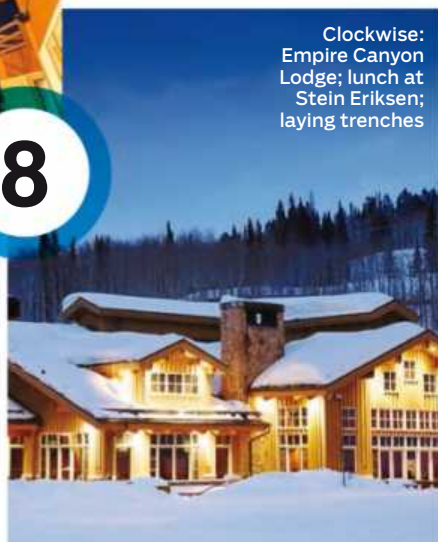
8

A Utah Classic Will Never Change

Two-thousand-acre **Deer Valley** is the perfect counterpoint to now enormous Park City. The posh mountain caps skier numbers at 7,500 per day. (Sorry, knuckle-draggers, snowboards still aren't allowed.) Furthermore, a significant portion of Deer Valley's patrons aren't powder hounds, which means that it's easy to find fresh lines through its terrain days after a storm hits. (Alta and Snowbird, just over the ridge, are usually tracked out by 11 A.M.) So even on a powder day, feel free to break for lunch. Deer Valley's Empire Canyon Lodge is known for its chili; you can even get cheese fries doused in the stuff. (Work that off in the trees under Lady Morgan Express.) For lodging, book a room at the Stein Eriksen Lodge, which has been called the world's best ski hotel for good reason—it's slopeside location makes for seamless mornings, and the 145 fireplaces will get you warmed up on your return (\$795; steinlodge.com).

Ski Resorts

Clockwise:
Empire Canyon
Lodge; lunch at
Stein Eriksen;
laying trenches



Skinning above Aspen

9


Snowmass Is a Touring Paradise

→ The resort has the most liberal skinning policy of any major area—you can ski laps 24 hours a day and even bring your dog, provided you keep it leashed.

→ Locals say it takes about two hours to reach 11,835-foot Big Burn.

→ No touring gear? No problem. Ute Mountaineer in Aspen rents complete setups (\$58; utemountaineer.com).

→ Swing by Fuel for a bagel after your morning skin—you earned it.



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Rock Solid

FOR CLIMBER AND FILMMAKER CEDAR WRIGHT, THE KEYS TO A SUCCESSFUL CLIMB AND MARRIAGE ARE THE SAME: TRUST AND FLEXIBILITY

PROFESSIONAL CLIMBERS are usually known for first ascents, speed records, or pioneering new routes. Boulder, Colorado's Cedar Wright, 40, has plenty of cred in all three. He's starred in dozens of climbing films, set the speed record on multiple El Cap routes, freed El Cap in a day, and on-sight free-climbed Zion's Moonlight Buttress.

While all those feats are undeniably impressive, they're only a small part of what makes Wright such a popular and influential climber. As Wright would be the first to tell you, he isn't blessed with superhuman talent or abilities, like Alex Honnold or Chris Sharma, two of the sport's biggest stars. What he does have is a deep passion for the sport and a mojo that's as entertaining as it is creative. "I try to keep it humble," he says, "and not take myself too seriously. My goal is more to entertain and inspire." If the hilarious Instagram feed of Gus, his "all-terrain" black pug, is any indication, he's winning.

Like most of his peers,

Wright can trace his trajectory as a professional climber back to Yosemite, where he fell in love with the sport. "Yosemite then was a fairy-tale place with the biggest rocks and biggest climbing community," Wright says. "I was living out of my truck, splitting my time between Yosemite in the summer and Joshua Tree in the winter, living on \$5,000 a year."

Fast-forward to today and Wright has achieved what only a handful of climbers have. In addition to making a living as a sponsored climber, he's also made a name for himself as a speaker and filmmaker. Over the past few years, he's produced two adventure-travel flicks, *Sufferfest*, which chronicled his adventures cycling between arduous climbs throughout California and the southwestern desert, and *Sufferfest 2*, which won several prestigious awards, including People's Choice at the Banff Mountain Film Festival.

Along the way, he fell in love with an equally badass climber, Nellie Milfed. "She



can climb anything," says Wright. "She's free-climbed Moonlight Buttress, put up the second female ascent of Squat [a burly off-width climb in Vedauwoo, Wyoming]. She's the real deal."

She's also one of Boulder County's most successful public defenders, and her dedication to her legal career has helped the couple keep things in perspective—both personally and professionally. "Because she has her own thing, they're not competing with each other when they climb," says Dana Richardson, a longtime friend. "They completely trust each other and give each other the flexibility to thrive with their own lives."

Nellie, 32, concurs. "I'm fairly independent myself.

We do what we need to do to make ourselves happy." And unlike Wright's, her climbing feeds off the stress of her real job. Indeed, some of her best climbing took place recently while she was working a first-degree murder case. "I was so focused," she says.

Outside of solving rock problems, the true litmus test of their marriage involves Gus, who accompanies them on many of their climbs. "He's the perfect crag dog," says Milfed. "He doesn't bark, doesn't get into people's stuff. He just sits there." Technically, Gus belongs to Nellie—she picked him up while she was in law school—but with nearly 8,000 followers on Instagram, he might tell you he's his own dog now.



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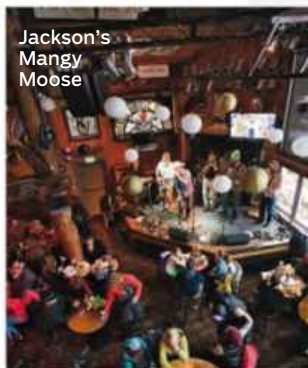
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Ski Resorts



Earning turns in the Teton back-country



Jackson's Manky Moose

10

There's a New Megaresort in Town

The biggest change in the ski world last year was Vail's acquisition of Utah's **Park City**. The latter is now on the Epic Pass, which makes a visit to sample the Wasatch Range's famously light powder practically mandatory if you put in for one of those. The most notable shift under the new ownership? The brand-new eight-person Quicksilver

gondola rises up and over Pinecone Ridge and connects Park City to the Canyons ski area. Or, rather, the resort formerly known as Canyons: as of this year, it's all called Park City, and at 7,300 acres, the combined terrain makes it the largest resort in the country. Unchanged is the excellent in-town scene. For lodging we love the Old Town Guest House, a tidy B&B within walking distance of the lifts run by ski guide Deb Lovci, who can be counted on to point you to the goods on powder days (from \$189; oldtownguesthouse.com). Over the past decade, the High West Distillery

Downtown Park City



has become a staple even in teetotaling Utah, serving small plates paired with whiskey and vodka at the base of Quittin Time run. This fall it opened a distillery at Blue Sky Ranch, a 3,500-acre property 20 minutes outside town. The new facility features tastings, a restaurant serving high-end comfort food, and, coming soon, a 60-room hotel (highest.com).

11

America's Toughest Hill Just Added More Terrain

Jackson Hole Mountain Resort, in Wyoming, will celebrate its 50th anniversary on

November 27 with \$6 skiing, the price of a lift ticket in 1965. The resort's real gift, though, is the new Teton lift, a 1,650-foot high-speed quad that opens up three new advanced groomed runs in steep terrain

Big line, Jackson Hole



12

Vermont's Food and Drink Scene Is as Good as the Skiing

→ **Whistle Pig:** Whiskey from the Green Mountain State sounds like an oxymoron, but that's changing thanks to this distillery's award-winning rye. Consider filling a flask for tomorrow's chilly chairlift rides. whistlepig.com

→ **Hill Farmstead Brewery:** Possibly the most revered brewery in the country is in tiny Greensboro Bend, 45 minutes east of Stowe. Swing by for a growler of *Bierre de Norma*, its flagship sour farmhouse ale. hillfarmstead.com

→ **Fat Toad Farm:** Make a reservation for a \$12 tour of the 30-acre spread, half an hour south of Montpelier, then take home as many jars of goat's-milk caramel as you can carry. fattoadfarm.com



Beer-geek Valhalla



Bob Downs and Susannah Calvin, La Parva, Chile. Photographer: Adam Clark



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BlackDiamondEquipment.com

Free-heeling
Big Sky
steeps;
below, pizza
party

13

Montana Is the Ultimate Family Trip

With a whopping 5,800 acres served by 34 lifts, **Big Sky** is roomy. And with an average of just 3,000 visitors a day, the resort figures that there are two acres for every skier. That's good news for everyone but especially for families, who don't have to worry about reckless riders plowing through the brood as they're practicing pizza and French fries. Indeed, the resort is working hard to be family-friendly. It renovated the terrain parks this summer and added a new stash park, bringing the park total to seven, four of them beginner or inter-



mediate level. Best of all, if guests stay at a resort-owned property, kids under ten ski free. Under-fives ski free anyhow, and there's no charge for nightly PG- and G-rated movies shown in the Yellowstone theater at the base. Our favorite place to stay is the pet-friendly, slopeside Huntley Lodge, which has outdoor hot tubs and a heated swimming pool (from

\$202; bigskyresort.com). Meanwhile, there's plenty of serious terrain to test yourself once the kids are in ski school. The 2,000-foot lines off Headwaters, on the Moonlight Basin side, host Freeride World Tour qualifiers. To ski the Big Couloir, a 1,000-foot, 56-degree pitch that rolls right off the top of the resort, sign in with ski patrol—and bring avy gear.

Untouched
snow in Garibaldi
Provincial Park

14

British Columbia's Backcountry Beckons

B.C.'s **Whistler Blackcomb** spans 8,171 acres, but despite that quantity of terrain, it can get tracked out after a big drop, thanks to all the snowboards and powder-slaying

fat skis. To find fresh lines, head outside the resort's ropes into the serrated wonderland of Garibaldi Provincial Park. The guide service Extremely Canadian runs programs for backcountry newbies and experienced riders who just need someone to show them the lines (about \$175; extremelycanadian

.com). The guides use the resort's lifts to boost them into the high country. From there you'll skin up a nearby peak and harvest the goods on the long run down. Even experts will pick up a few pointers. As co-owner Peter Smart says: "Better technique opens up more interesting terrain."



Sizing up
the pack

15

There's No Time Like the Present to Learn Snow Safety

The backcountry is more popular than ever. But before you charge out there, enroll in the three-day level-one class at **Silverton Avalanche School** (\$340; avyschool.com) in Colorado. You'll learn the basics of reading the snowpack and not taking stupid risks.

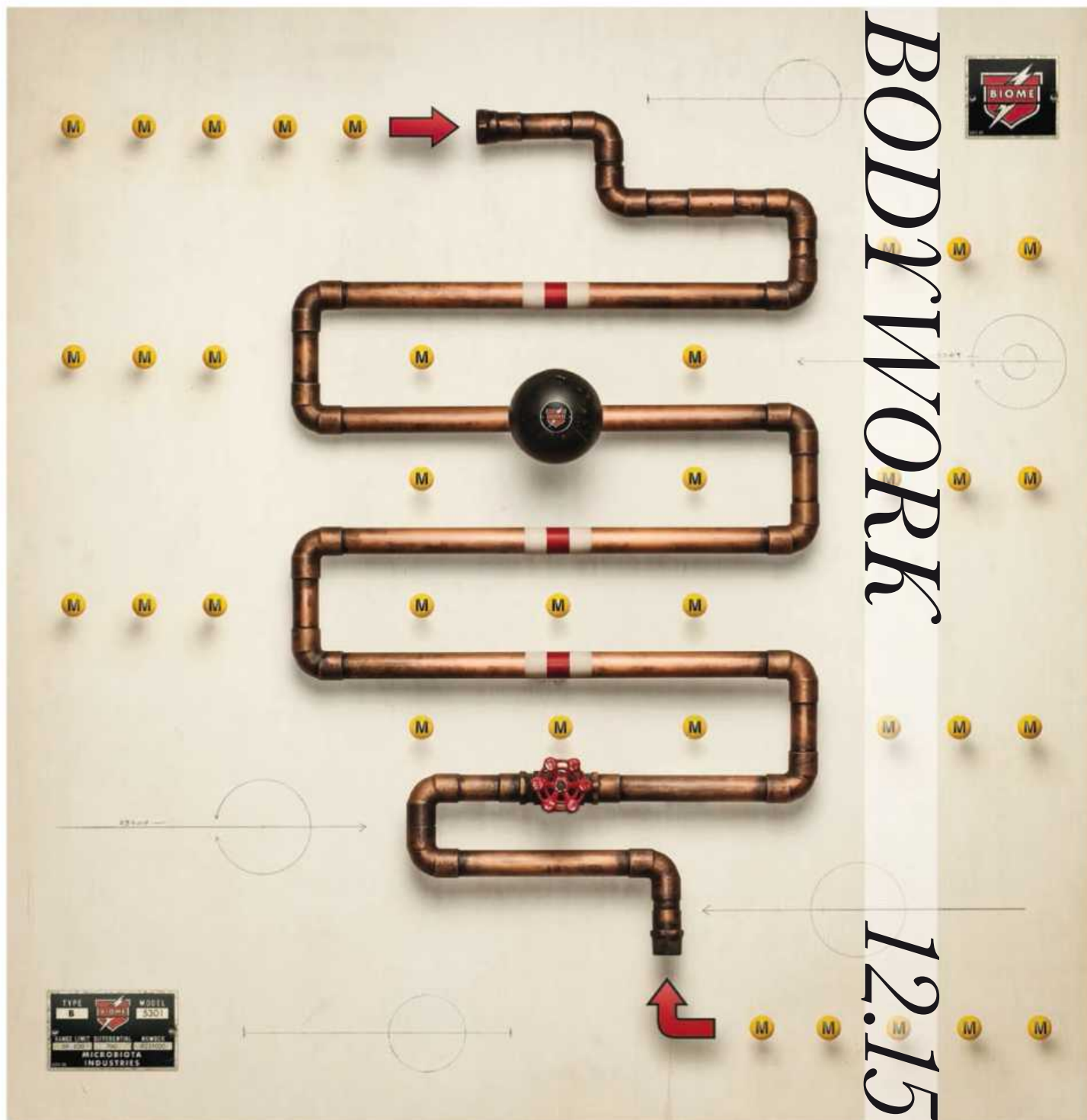


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THE HUMAN BODY IS AWASH WITH MICROBES, INSIDE AND OUT. AND SCIENTISTS ARE NOW DISCOVERING JUST HOW IMPORTANT THAT IS FOR ATHLETES.

by Alex Hutchinson

SOME OF THE challenges runners faced in the 140-day Race Across USA earlier this year were to be expected: traversing 8,000-foot mountain passes, popping countless blisters, and dealing with accumulating fatigue while covering the vast 3,098-mile distance between Huntington Beach, California, and the Chesapeake Bay in Maryland. Others, not so much, like the arrival every few weeks of sample-collection kits packed in dry ice, which racers were required to fill up with their own feces and FedEx back to a lab at the University of California at San Francisco within 24 hours. "You're focused on your daily routine," recalls Bryce Carlson, a Purdue University anthropologist who both competed in the race and coordinated the research project with fellow runners, "and now you're being asked

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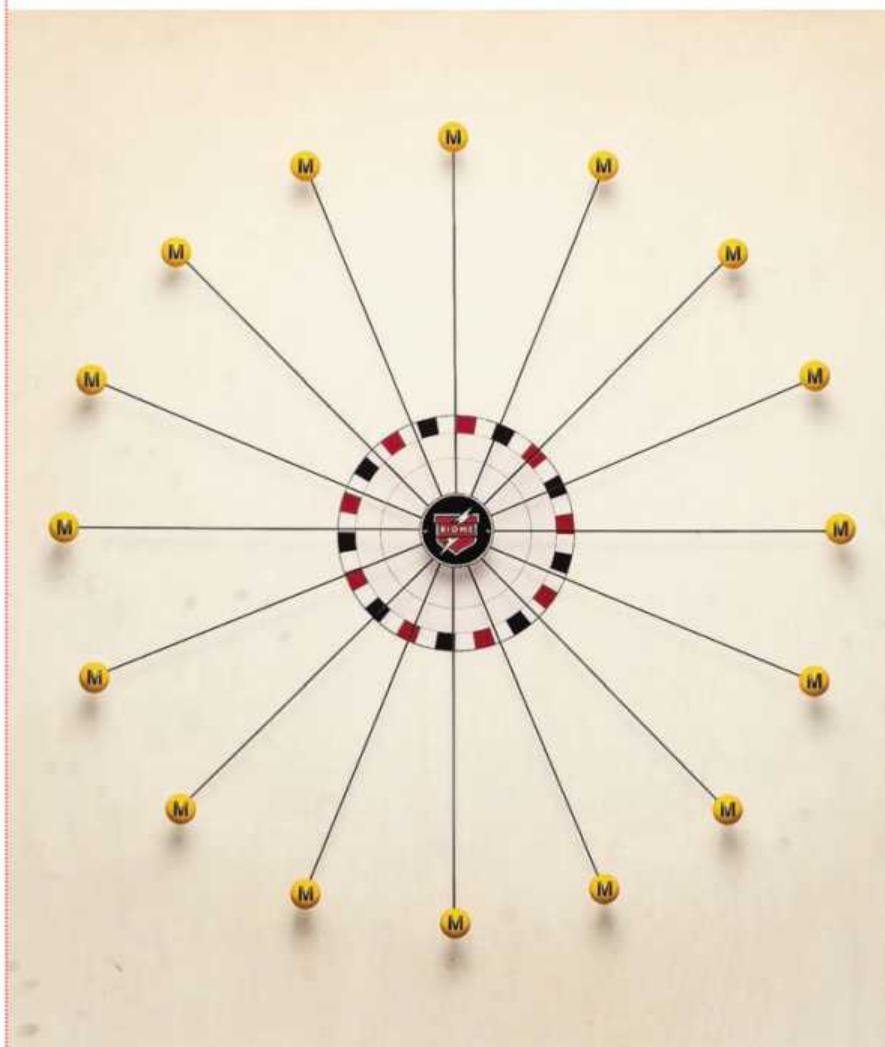
to poop on command.”

The project’s goal was to study how the grueling race affected the athletes’ microbiota, the trillions of bacteria that live in and on each of us. It’s well established that microbes play a crucial role in digestion, immune function, and even brain chemistry, but only recently have scientists begun to explore how and why they might affect physical performance, too. And vice versa.

The microbiota of an elite athlete, it turns out, may be quite different from that of a sedentary person. Last year, Irish researchers compared the gut microbes of 40 professional rugby players with nonathlete controls and found that the rugby players had, on average, twice the microbial diversity. It’s unclear whether it was training, diet, or something else that accounted for the difference, but a recent study on mice at the University of Calgary suggests that exercise has a direct effect on the variety of a person’s microbes.

More heterogeneous microbiota could be beneficial to athletes for many reasons. Taiwanese researchers found that mice with greater diversity in their gut flora lasted longer in a swim-to-exhaustion test and produced more antioxidant enzymes to protect their bodies from the stress of intense exercise. And a University of Tasmania study found that runners performed better on a treadmill in 95-degree heat after taking a multistrain probiotic for four weeks. Bacteria leak from the gut into the bloodstream during strenuous activity, explains lead researcher Cecilia Kitic, causing inflammation that can raise core temperature. By making the gut lining healthier, the probiotics appear to help the body tolerate hot conditions. The microbes in your gut also release hormones like dopamine, serotonin, and nor-adrenaline into your bloodstream, and they play a key role in teaching your immune system to distinguish between friendly and harmful bacteria.

None of this research has established a definitive link between improving your microbiota and finding a spot on the podium at your next race. Still, if you’re a serious athlete, it’s clear that you need to pay attention to this stuff. One way to do that: immune support. Probiotics can increase levels of gut microbes associated with immune function to keep you from getting sick during heavy training. The evidence points to “small, variable benefits” for athletes, says David Pyne, a physiologist at the Australian Institute of Sport, primarily in warding off gastrointestinal illness. Pyne and his colleagues also found



FOUR TIPS ON OPTIMIZING YOUR BACTERIA, FROM CLEVELAND CLINIC SPORTS NUTRITIONIST JENNIFER SYGO

→ “Fermented foods contain bacteria that can help build a healthy gut. So load up on yogurt, kefir, sauerkraut, miso soup, tempeh, and kombucha.”
→ “Eat onions, leeks, chia seeds, bananas, artichokes, and honey. They contain non-digestible carbohydrates that serve as food for probiotics.”
→ “Take a wide-spectrum probiotic that contains both *Lactobacillus* and *Bifidobacterium*, which provides the intestines with healthy bacteria.”
→ “Don’t use antibacterial soaps. Not only is there little evidence that they provide more benefit than regular soap and water, but there are also concerns that they could breed antibiotic resistance.”

that runners taking *Lactobacillus fermentum*, a probiotic used in supplements, cut incidence of respiratory illness in half during a four-month winter training block.

Just as important is holding on to the microbes you’ve already got. Helpful bacteria on the back of your tongue convert nitrate from food into a form that makes aerobic exercise more efficient. That’s why top marathoners and other endurance athletes drink nitrate-rich beet juice before competing. But you won’t get any benefit from dietary nitrate if you’ve killed your tongue bacteria, which you can do even with weak, nonprescription mouthwash, according to a study published in September by Sinead McDonagh and her colleagues at the University of Exeter. After the study came out, about 50 people at Exeter—mostly athletes and fellow researchers—stopped using mouthwash.

Currently, the stool samples from the Race Across USA runners are being sequenced to reveal the genes and bacterial communities present. When the analysis is complete, the results will offer the first look at what serious endurance exercise does to your microbes. Given the mounting evidence about their importance, Carlson’s curiosity is as much personal as professional. “I have a research interest,” he says, “but I’m also a runner.”



|

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Images shot in the Pacific Northwest with help from the #evoCrew.

 Tim Dolen, Adam Clark, Paris Gore

Eight Greats for the Great 8: evo's Core Values

EVOLUCIÓN

Lars Sternberg - evoCollective Athlete

“ Without it, things become stale. With it, every day presents a new challenge. **Evolución** provides us with a path for growth. Whether it's on a personal level, my role with Transition Bikes, or as an evo athlete, I live for this and any day without it is one of compromise. ”



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Curtis Names - Retail Design Collaborator



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BLACK DIAMOND JetForce

RESPECT

Steve Osborn - *evo Senior Buyer*

“Respect in 360 degrees: yourself, family, friends, those you work with, those who work for you, those you work for. In the best culture, we’re all players on the same team with the same values and goals. We’re all in this together because we love to have fun and we love to share these experiences with those that mean the most to us.”

CREDIBILITY

Lucas DeBari - *evoCollective Athlete*

“The most important lesson that I have learned in attempting to maintain my own **Credibility** throughout my career is a quote from an old friend. ‘You absolutely cannot go wrong in life by staying true to who you are.’”



THE NORTH FACE Andrew Miller



K2 T1



K2 Rescue Shovel



K2 Joy Dri

INVITATION

Ashley Miller - Manager of evoTrip & Giving Back



“Invitation is all about discovering activities, places and causes people are passionate about. Invitation should be tailored to individuals; by listening and building authentic relationships, we can remove barriers to entry and facilitate connection in order to address and tackle the challenges we face as a community.”



PATAGONIA PowSlayer



32 Binary Boa



ARBOR Poparazzi

BALANCED AMBITION

Adam Clark - Contributing Photographer



FLYLOW Compound 2.0

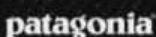
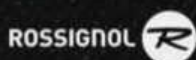


FLYLOW Lab Coat 2.0



SALOMON MTN Lab

“Balance is hard, it takes practice and persistence. Success usually comes from focusing on the moment, taking it all in, enjoying where you are and who you are with. Too much ambition and you won’t enjoy the ride. Not enough and you won’t get the ticket to go!”



LEADERSHIP

Ingrid Backstrom - *evoCollective Athlete*

“Great **Leadership** is about communication - not just the ‘talking’ part, but more the ‘observing, listening, and asking questions’ part. Good leaders are not afraid to admit their mistakes or step out of the way and cede control. They allow others to make mistakes, knowing that’s how the best learning is done. They lead by example, and recognize a job well done.”



THE NORTH FACE Sickline



GIRO Range



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evoSTYLE

Brandon Cocard - *evoCollective Athlete*

“If you have free will then you have **Style**. It’s what we use to set ourselves apart from our peers. I think the best Style comes from people that don’t even know they have it.”



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Slumber Party

ONE ATHLETE'S QUEST FOR BETTER SLEEP

by Gordy Megroz

FOR MY FORTIETH birthday, I decided to climb the Grand Teton, a 13,770-foot peak in my backyard of Jackson, Wyoming. The Grand is technical, requiring rock climbing and rappels on exposed faces with 5,000-foot drops. Make a mistake and you're dead. I'd decided the ascent would help me feel less 40. I gathered the gear I needed and did all the necessary training, including steep, hourlong hikes wearing a 60-pound weight vest. The one thing I was missing to perform at my best? Enough sleep.

If you're like me, work and life prevent adequate time to snooze. That's bad. Besides weakening your immune system (a recent study shows that getting only six hours of sleep a night makes you four times more likely to catch a cold, compared with those who get more than seven), not getting enough rest can sabotage athleticism. A new study in *Sports Medicine* determined that inadequate sleep results in decreased motor skills and cognitive function, as well as increased inflammation—symptoms similar to overtraining. Conversely, researchers at Stanford University found that when the school's basketball players got ten hours of sleep each night, their shooting accuracy improved by 9 percent.

There's no way I'm sleeping ten hours. I usually get six. But I wondered if I could make a few simple changes to squeeze out another hour. I called Charles Czeisler, the director of sleep medicine at Harvard Medical School and a sleep consultant to several professional sports teams. I told him I'd been wearing a sleep monitor and that it indicated I wasn't get-

ting enough "deep sleep." "That might be true," he said. "But I wouldn't count on any sleep tracker on the market. None of them have been proven to work."

Czeisler and I talked through what the problem might be. Was my room cool enough? Ideal temperature is different for everybody, but studies have shown that people sleep best when their room is cooler. (I like mine around 68 degrees.) Should I get blackout shades? Probably not. Some studies say they can negatively affect your circadian rhythms, which let you know when to sleep and rise based on sunlight. Mess with that and you could end up walking around zombie-like for the rest of the day.

Czeisler asked how much I stare at screens each night. "The blue light could be screwing up your sleep," he said. It's emitted from computers, phones, and TVs, and prevents you from producing melatonin, the hormone that makes you sleepy.

Bingo. I work at a computer most of the day, leave it to go exercise and eat dinner, then return for a few more hours' work. After that I'll scroll through my phone or turn on the TV. I'm typically not in bed until around midnight and lie there for an hour before I fall asleep. (Sound familiar?) Then I'm up by seven. I awake groggy, and my concentration is dismal until about noon. That afternoon workout? I usually need to fuel it with a caffeinated sports drink, which, Czeisler points out, has a six-to-nine-hour half-life.

I immediately cut out screens after dark, save for the occasional 10 P.M. e-mail that I absolutely have to send. For those I used a Czeisler-recommended computer program called F.lux (free; justgetflux.com), which makes your screen look orange and blocks blue light. On my phone, I downloaded the Unblue app (iOS; \$2), which did the same. And I avoided TV entirely, getting in bed and reading until I passed out, which took only about 20 minutes and was usually around ten o'clock—a full two hours earlier than I usually go to bed—still waking up at seven.

Going into my experiment, I worried that not working at night would put me way behind schedule. But after just three days, I was feeling so refreshed each morning that I was far more efficient behind the desk. By six I'd completed most of my work for the day and still had plenty of energy for my workouts, without having to caffeinate.

Ten days later, my friend Andy and I climbed to the top of the Grand, summiting just before sunset. On the way back down, after a good nine hours of effort, Andy let out a big yawn. "Man, I'm getting tired," he said. "Weird," I responded. "I'm not."

THE TAKEAWAYS

1. Experiment with room temperature.
2. Block blue light on gadgets during nighttime use.
3. Skip the afternoon latte.
4. Stick to a sleep schedule.

Pistol Squats

Using poles for balance, stand with your right forefoot on a stability disc (\$35; freogear.com). Extend your left leg forward, then squat as if sitting in a chair. Do three sets of 25 on each leg.

Slant-Board Leg Lifts

Stand with your left forefoot on a slant board (\$40; freogear.com)—essentially an angled balance board—with the slant facing right. Lift your right leg sideways. Repeat with the slant facing left. With forward slant, lift your bent knee up toward your chest. Do 25 reps per leg per position.

Hip Rotations

With your left forefoot on a stability disc, lift your right knee up toward your chest. Rotate your right hip 90 degrees to each side, keeping your knee as high as possible. Do three sets of 15 rotations for each hip.

Slant-Board Balance

Stand with your right forefoot on a slant board. With the slant facing left, hold for two minutes per foot. Repeat with the slant facing right and then front for two minutes each. Harder: one pole. Hardest: no poles.

Exercise-Ball Lunge

With your left foot on the floor and your right leg on an exercise ball, roll the ball backward and squat your left leg. Do three sets of 25 on each leg. Harder: stand on a slant board. Hardest: stand on a stability disc.

Start from the Bottom

AS THE TRENDS HAVE SWUNG FROM MINIMALIST SLIPPERS TO FAT SHOES AND BACK AGAIN, ONE THING HAS REMAINED THE SAME: TO AVOID INJURY, YOU NEED BURLY FEET

by Frank Bures

WHEN RUNNING COACH Eric Orton got an e-mail from a writer named Christopher McDougall in 2005, he had no idea that it would land him in a book that launched a revolution. Yet even as *Born to Run* took off, and the barefoot craze with it, Orton quietly shook his head. Everyone missed the point. It wasn't the shoes that mattered. It was what was in them. If your feet are weak, Orton believes, injuries will follow. If they're strong, they won't.

New research is confirming Orton's theory. A 2014 study found that by increasing foot strength, athletes also improved their one-legged-long-jump, vertical-jump, and 50-yard-dash times. Last year, in the *British Journal of Sports Medicine*, researchers proposed a whole new paradigm: the foot-core system, which stresses intrinsic muscles like the abductor hallucis and the flexor digitorum brevis that have been "largely ignored by clinicians."

Orton still coaches, and he recently founded the Mountain Running Academy in Jackson, Wyoming. Here are five exercises from his book *The Cool Impossible* (\$16, Penguin Random House) to help you run injury-free.

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Photo: Gabe Rogel

Athlete: Monica Purington

What About Caffeine Powder?

Avoid. The supplement has been linked to overdose deaths, and the FDA issued a warning about it. "Controlling the quantity you ingest can be a challenge," sports nutritionist Sarah Koszyk explains. One teaspoon contains as much caffeine as 16 cups of coffee.



Jump Start

CAFFEINE IMPROVES BRAIN FUNCTION, REACTION TIME, AND YOUR ABILITY TO BURN FAT FOR FUEL. HERE'S HOW TO UTILIZE EVERYONE'S FAVORITE LEGAL PERFORMANCE ENHANCER.

by Meaghen Brown

PRE-WORKOUT

1. Run Gum

Nick Symmonds is one of the best track runners in the country. He also has a degree in biochemistry and is a cofounder of Run Gum. While the after-taste leaves something to be desired, the one-two-three punch of caffeine, taurine, and B vitamins is designed to stimulate your central nervous system and aid muscle function. \$18 for 12 pieces; getrun gum.com

Why It Works:

Caffeine consumed sublingually (think putting a pill under your tongue or chewing a piece of gum) is absorbed straight into the bloodstream.

2. Secret Squirrel Cold-Brew coffee concentrate

Whether you're running 50 meters or 50 miles, hundreds of studies have shown that your morning joe helps you do it faster. \$9 for six servings; squirrelebrew.com

Why It Works:

As a caffeine delivery system, coffee is tough to beat—it's ubiquitous, inexpensive, and delicious. It's also a rich source of disease-fighting antioxidants.

MIDRACE

3. Coca-Cola

High-fructose corn syrup aside, it's hard to deny the power of Coke when consumed at an aid station in the middle of a race. In an unscientific poll, athletes praised

Coke's ability to relieve soreness. \$1; us.coca-cola.com

Why It Works:

According to sports nutritionist Sarah Koszyk, periodic consumption of low doses of caffeine during a long-distance event gives athletes an energy and performance boost without affecting heart rate or lactate levels. Research also supports drinking something sweet like Coke during a long endurance event as a way to

activate your "happy hormones" and help you concentrate.

4. Clif Shot energy gel

It's easy to carry and comes in dozens of flavors. \$30 for 24; clifbarstore.com

Why It Works:

Gels are designed to meet the body's nutritional needs during exercise, explains coach Matt Fitzgerald. "They contain only what's useful and nothing that isn't."

5. Clean Energy patch

It's the size of a nicotine patch and supposedly works for up to eight hours. \$10 for three; cleanenergy patch.com

Why It Works:

The patch, which sticks to your body via kinesiology tape, provides the wearer with a steady stream of caffeine through the skin.

POST-WORKOUT

6. Tcho Mokaccino chocolate

In one study, cyclists who consumed caffeine after a ride replenished 66 percent more of their glycogen stores than a control group. \$6; tcho.com

Why It Works:

Cacao has an anti-inflammatory effect and, adds Koszyk, "reduces oxidative stress from strenuous activity, which can cut recovery time."



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Essentials Special

PHOTOGRAPHS BY INGA HENDRICKSON

IT'S IN THE BAG

You can stop worrying about what to get the adventurers in your life. We've got the perfect list for athletes, explorers, technophiles, and even the foodie crowd. Plus, the gear our editors are jonesing for this season.

BY JOE JACKSON



Pared-down styling and muted colors make the **Filson Dry Day backpack** (\$125; filson.com) the only fully waterproof pack we'd proudly wear into a four-star hotel, but the bombproof polyester exterior and roll-top closure give this 29-liter sack enough sturdiness for a weeks-long rafting trip.



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LYNSEY DYER
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Sweeten the Pot



True ditched the high-fructose goop in favor of natural cane sugar for its **a. Authentic Tonic syrup** (\$15; truesyrups.com). And the added cinchona bark—cultivated by the British in India to treat malaria—was enough to persuade us to stash a bottle in our “emergency” cocktail kit.

b. Izola's 4-in-1 bar tool (\$30; izola.com) is the back-packing mixologist's Swiss Army knife. This sturdy six-ounce brass unit can break ice, measure precise pours, unscrew a wine cork, and pop open a beer.



A single square of the crunchy **c. Chuao Chocolatier Pretzel Toffee Twirl bar** (\$6; chuaochocolatier.com), made with dark chocolate, pretzels, and toffee, hits three of your five taste buds—bitter, salty, and sweet. It's not just a bar; it's a complete dessert.

The **d. Tiktaalik Field Knife set** (\$279; tiktaalik.com) comes with three crazy-sharp blades—a small paring knife, a long serrated cutter, and a hefty chopper. Forged from kitchen-grade stainless steel, the ten-ounce trio is light enough to stow in a trail pack.

It's a bold move, putting vinegar in candy, but **Olive and Sinclair Chocolate Co.** makes it work. Its handcrafted **e. Sea Salt and Vinegar caramels** (\$20; oliveandsinclair.com) are a delightfully mild mix of sweet and tart.



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Up Your Game

d. Keen's The 59 boots (\$150; keenfootwear.com) boast a tough rubber outsole to shrug off light rain and a breathable mesh liner for airy comfort. The suede upper is stylish enough for a dinner date.



Unlike the standard cotton kind, **e. Farm to Feet's Cokeville socks** (\$20; farmtofeet.com) are made to be worn every day. The funk-fighting merino wool (sourced from American sheep) keeps them from taking on that gym-bag odor.



A step above your traditional flannel, the diamond-patterned cotton exterior of **a. Toad & Co's Klamath Quilted Shirtjac** (\$129; toadandco.com) dresses up well for a casual winter date, while the 30-gram polyester insulation gives it the warmth and feel of a light jacket.

A matte black dial, lighted hands, and a satin finish make the face of **b. Tudor's North Flag watch** (\$3,675; tudorwatch.com) easy to read in the worst conditions. And this adventure piece is designed to survive them, with a scratch-resistant sapphire crystal and waterproofing to 330 feet.

The folks at **Below the Boat** turn underwater bathymetric maps into art. The gorgeous wooden charts are laser-cut from Baltic birch in the shape of various islands and bodies of water around North America, like the **c. Lake Tahoe map** (\$228; belowtheboat.com) shown here.



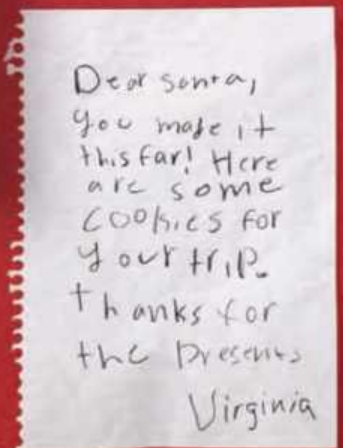
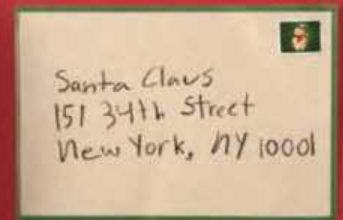
Wish List

I despise loose snowboard bindings, but I refuse to hassle the lifties with my gear woes. That's why I want the **686 Original Snow Toolbelt** (\$45; 686.com). It holds your pants up like a good belt should, the buckle's two prongs disguise Phillips and flathead screwdrivers, and the detachable keeper has three sockets for wiggly bolts. Most important, there's a bottle opener notched into the attractive brushed metal, so if you can't fix your equipment troubles, at least you can crack open a cold one and forget about them. —JON GUGALA



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Play It Safe

a. Zeal Optics' HD2 goggles (\$499; zealoptics.com) incorporate a 170-degree high-definition camera that's operated by a three-button control on the side of the frame, so you can discreetly capture action footage.



b



The pods, nitrogen canisters, and pneumatic trigger of **b. The North Face's Modulator ABS** (\$1,000; thenorthface.com) turn any pack into an avalanche airbag. Attach it to the shoulder straps before heading beyond the resort boundaries.

The Bluetooth-equipped **c. Noke bike lock** (\$100; noke.com) opens via smartphone app. If a thief hacks at it with a blade or jack, it blares an alarm audible to anyone within 150 feet.

The **d. Ecoxgear EcoCarbon speaker** (\$130; ecoxgear.com) blew us away when cranked up indoors. Better to take it out on the water: made of polycarbonate and rubber, this raft-party companion floats. The rechargeable battery lasts for 12 hours.

Colorado startup **Voormi** uses wool—the premium next-to-skin material for decades—as the outer layer of its backcountry **e. AN/FO jacket** (\$549; voormi.com). The secret sauce? A Lycra, merino, and nylon blend treated with proprietary waterproofing.



e

d



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 **Columbia**

2015 GIFT GUIDE

Imbibe



a. Strongwater Cherry and Thyme Classic Shrub tonic (\$25; sipstrongwater.com) is made from vinegar, fruit, and herbs and slips easily into any car-camping chef's kit. It works just as well as a marinade, salad dressing, cocktail mixer, and hangover cure.

Crafting cocktails in the field can be a chore. Enter the **b. Stanley Adventure Happy Hour Set 2X** (\$35; stanley-pmi.com), which packs a strainer, two glasses, a reamer, and a jigger into a 20-ounce stainless-steel shaker.

San Francisco wood-worker **Windy Chien** personally carves each 17-inch-long walnut **c. Ultimate Kitchen spoon** (\$200; windy.chien.com). The deep bowl and square corner let you stir a big pot of soup and scrape a casserole pan with equal ease.

A smooth-drinking combo of sweetness and peppery spice, **d. Tincup American Whiskey** (\$28; tincupwhiskey.com) is blended in Colorado, cut with pure Rocky Mountain water, and aged in American oak barrels.



We were set on using **e. Royal Rose's Cardamom Clove simple syrup** (\$12; royalrosesyrops.com) in a classy concoction like a Tom Collins but found that the spicy-sweet mixture worked better with soda water for a refreshing libation.



Sleeping in a tent doesn't have to mean drinking wine from the bottle. The 13-ounce stainless-steel **f. Avex Claret wineglass** (\$20; avexsport.com) is double-walled to keep creek-chilled chardonnay crisp for hours.

g. Manready Mercantile Whiskey Soaked Campfire jerky (\$16; manready.com) is so smoky, it tastes like you pulled it right off the spit. For added punch, the beef is soaked overnight in Bulleit bourbon.



Sit and Spin



In French, *émonder* means “to pare down,” and **Trek** did just that to the carbon tubes of its **a. Émonda S 4 road bike** (\$1,499; trekbikes.com). The frame is stiff but forgiving, with the feel of a high-end racing steed at an entry-level price.



Kinetic brings strength conditioning to your garage workout by adding a power sensor to its **b. Road Machine Smart trainer** (\$409; kineticfit.com). It syncs with Strava and the company's own Kinetic.Fit smartphone app.

Wish List

Not long ago, I visited one of my closest college friends in Salt Lake City, where he'd landed for graduate school. Noah taught me to nordic ski, and we'd spent countless hours on groomed Vermont trails in our early twenties. Which is why, as soon as I arrived, we immediately headed up the hill to where he coached a team of junior Olympians. It was freezing, so Noah handed me his **Swix Race hat** (\$30; swixsport.com), a black beanie with a vented top designed for high output in negative temperatures. I instantly felt faster, chasing the team on highway-size tracks, kicking and gliding until my face turned pink. At the end of practice, Noah and I made one last lap together. Technical caps like the Swix—with its mesh panel and warm ear bands—remind me of that day and of our years of effortless friendship. At least that's what I told him when I tried to steal his. —MEAGHEN BROWN



c. Sol Republic's Relays Sport earphones (\$50; solrepublic.com) demonstrate the principle that simpler design is often better design. The spongy tips keep the low-profile buds snug during runs and are comfortable enough for podcast binges.

So well do toes stick to the grippy nylon surface of **d. Prana's Transformation mat** (\$59; prana.com), we're able to add inches of extension to our down dog. And with the elegant print, it can easily double as a throw rug.



Float



a



b



c

The crew at **Tahoe SUP** shaved pounds off the 12-foot **a. Rubicon Keep Tahoe Blue paddleboard** (\$1,299; tahoesup.com) by constructing the core from layers of partially hollow, laminate-encased foam, yet maintained a massive 280-pound carrying capacity. The result is a durable, lightweight, 30-inch-wide touring board that doesn't lose any of its excellent trim or glide when loaded down with gear.

Don't let the big scooped nose, wide girth, and swallowtail fool you: the **b. K2 Cool Bean snowboard** (\$500; k2snowboarding.com) isn't just for powder days. K2 made it remarkably playful by squishing the dimensions of a standard board, bringing more surface area to your feet for responsive handling on choppy snow.

Boutique Denver brand **Icelantic** is well known for making sick powder planks. The **c. Pioneer skis** (\$599; icelanticskis.com) are just easy enough to jump on and ride, with an inviting 96-millimeter waist, ample camber underfoot for ripping GS turns on groomers, and plenty of rocker to float through deep stashes off-piste.

Train

The Surge's smaller, sleeker sibling, **a. Fitbit's Charge HR wristband** (\$150; fitbit.com) tracks your heart rate 24/7 while monitoring steps walked and calories burned. Pair it with your phone and it will also tell you who's calling.

Bollé leaped into the lifestyle realm when it brought out the **b. Jude sunglasses** (\$120; bolle.com). The nylon frames sit comfortably during multi-hour rides, but the blocky design and plaid inlay make them sharp enough to wear off the bike.

The **c. SmartWool** women's **PhD Propulsion 60 hoodie** (\$200; smartwool.com) matches 60-gram merino insulation on the torso with breathable 100-gram merino on the back, hood, and arms for dry warmth on chilly runs.

The dots that give the **d. Lululemon Pace Tight SE Reflective leggings** (\$198; lululemon.com) their snakeskin charm light up when hit by headlights, making them highly visible on post-sundown jogs. Our tester described them as more comfortable than wearing no pants at all.

The **e. Moji Curve Pro massager** (\$50; gomoji.com) looks like a series of golf balls embedded in a handle, but the arc and flex let you lay into scar tissue from your toughest runs and rides. Freeze it for another level of recovery.

The combination of a featherweight mesh upper and flexible, rock-ered forefoot makes the **f. New Balance Vazee Pace running shoes** (\$110; newbalance.com) our go-to high-speed roadsters for midday interval training.

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Pack It In



The **e. VSSL Supplies kit** (\$98; vsslgear.com) is a battery-powered torch that carries like a Maglite, but the aluminum cylinder houses seven refillable pods stocked with a first-aid kit, a fire starter, fishing gear, water-purification tabs, and other survival essentials.

The **a. Maui Jim Voyager sunglasses** (\$219; mauijim.com) feature incredibly thin glass lenses—20 percent skinnier than standard glass—and deliver all-day sporty comfort in a polarized, retro package.

An airline-grade rum and Coke makes for a crappy international flight. The **b. W&P Design Carry On Cocktail Moscow Mule kit** (\$24; carryoncocktailkit.com) solves that problem. Order a vodka, then use the ginger syrup, muddler, and coaster to make two elevated mixed drinks.

With waxed cotton-poly on the chest for wind resistance and thick lamb's wool all over, **c. Fjällräven's Sarek Torso sweater** (\$200; fjallraven.com) is a durable insulator that will keep you warm in soggy conditions. Bonus points for the kangaroo pocket, which swallows wallet and keys.

The 600-denier monster that is **d. Eddie Bauer's 70-liter First Ascent Maximus duffel** (\$129; eddiebauer.com) has five heavy-duty nylon-web handles, plenty of daisy chains for toting gear, and stowable straps for backpack-style carrying.



SWISS + MADE



ESSENTIAL GEAR.

RECON Leader Chronograph Alarm Series No. 8841 (kilometers) or 8842 (miles): 48mm, carbon reinforced polycarbonate case with stainless steel case back, World Time City Zones bezel, antireflective sapphire crystal, walking tachymetric scale, water resistant to 100 meters, PU watch strap has an inch/cm measurement (for use on maps) and comparison chart, and Luminox self-powered illumination. Swiss Made.

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FLY

Pearl Izumi 3-D-printed stretchy plastic onto the seamless mesh upper of its a. Road N2 V2 road shoes (\$120; pearlizumi.com). On top of reducing waste, the process allowed designers to cut the weight to just 9.6 ounces.

The Snickers-bar-size **b. GoTenna communicators** (\$199 for two; gotenna.com) free you from the shackles of cell service. Utilizing long-range radio waves, they enable you to send texts and location data to other GoTenna users up to 50 miles away—handy on a remote trek or during a natural disaster.



b



c. Patagonia's featherlight Merino Air hoodie (\$149; patagonia.com) is fabricated with air-injected wool threads—a method that gives equal loft from less material—paired with a seamless knit for less waste. In the field, it had the best warmth-to-weight ratio of any base layer we tested.

c



The **d. Yuneec Typhoon G drone** (\$900; yuneec.com) shares several features with others of its ilk, like Follow Me mode and an LCD screen on the controller to watch footage live. What's new is that it's the first Typhoon that's designed to pair seamlessly with your GoPro, which attaches to the three-axis, self-stabilizing gimbal.

Wish List

Bikes have gotten pretty damn complicated lately. Internal cable routing and disc brakes for the road, a growing range of wheel sizes for mountain bikes, and even purpose-built frames for gravel and bikepacking have resulted in a flood of specialized machines. And I love it. My favorite innovation to date: **Shimano's XTR Di2 M9050 electronic drivetrain** (\$2,825; bike.shimano.com). This fast, accurate, programmable mountain-bike system has a brain of its own that selects gears better than you ever could, automatically and flawlessly moving both the front and rear derailleurs. Sure, it costs more than a lot of complete bikes, but game-changing tech rarely comes cheap. And a girl has to have her standards. —AXIE NAVAS



David W.
Pensacola, FL



Al M.
Grant Island, FL



Indira S.
Clearwater, FL

Give Joy

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westmarine.com



Christopher P.
Bimini, Bahamas



Steven J.
Two Harbors, Catalina Isl.



Emily Z.
East Falmouth, MA



Ray M.
Lake Oolagah, OK



Perry J.
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We've got the
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Beth D.
Indianapolis, FL



Show us your joy on the water #givejoy

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Smoke It

The retro smokestack and grease bucket of the **Traeger Lil' Tex Elite grill** (\$700; traegergrills.com) belie its ease of use. It automatically feeds hardwood pellets into its flame for reliable, consistent smoking. Throw in a brisket, set the temperature, hit the slopes, and come home to some perfectly cooked protein. The 424-square-inch grilling area easily accommodates ribs, whole chickens, and pork shoulders.

Wish List

Last summer I hiked three warm miles up Colorado's Gunnison River in search of the bread-loaf-size trout that feed each June on the salmonfly, a bug so massive it most closely resembles a CIA drone. This was to be fishing at its best: big bait, big quarry, big fun. Except the river was high, and the water spilled over the banks into the grass. Many hours of diligent casting into the brown muck resulted in zero biters and a healthy thirst for something ice cold. The Tecate I pulled from my pack, however, was a balmy 70 degrees. My friend Kara, meanwhile, had stowed her beer in a **Yeti Colster** (\$30; yeticoolers.com)—a coozy that keeps beverages frigid even after six hours in a pack in the summer sun. She gave me a sip, and the stainless-steel insulator has been on my Christmas list ever since. —JONAH OGLES

**SOME
THINGS
CHANGE.**

**THE
VODKA
ISN'T
ONE OF
THEM.**

Stoli.

**THE
VODKA**



2015 GIFT GUIDE

clean up

The aloe and jojoba in **a. Brickell's Purifying Charcoal face wash** (\$13; brickellmensproducts.com) make this cleanser gentle on cheeks. But it's still capable of busting through caked-on dirt, thanks to the gritty ingredient in its name.

Scratchy charcoal and pumice make the **b. Portland General Store Hunting Camp soap** (\$13; portlandgeneralstore.com) one powerful exfoliator. The intense cleansing and sandalwood aroma are addicting, especially after nights in the backcountry.

Bathing in geologic fallout sounds gimmicky, but the Oregon-sourced bentonite in **c. Lava Love's Volcanic Ash bath powder** (\$22; lava lovebend.com) detoxifies skin by binding to pollutants. Lavender, juniper, and cedar impart an herbal scent.

The **d. Brooklyn Grooming Beard Lovers set** (\$95; brooklyngrooming.com) includes sesame and hemp beard oils for keeping your winter chin-blanket smooth, a hair tonic to tame frizz, and a mustache comb to give each strand its due attention.

e. Sam's Natural Leather deodorant (\$10; samsnatural.com) gets its musky scent from ingredients like aspen bark, while shea butter and aloe keep pits comfortable and cool without feeling sticky.

The **f. Imperium Woodcraft Double Edge Hardwood safety razor** (\$65; imperiumwood.com) has a hefty rosewood handle and a nickel-plated head that positions the blade to shear even the most persistent stubble.

Bergamot-scented **g. Byrd Light pomade** (\$22; byrdhair.com) is minimally greasy because its main ingredient is water. It controls bedhead without broadcasting that you're using fancy hair product.

OWN THE COLD

Born in the Arctic.
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2015
GIFT
GUIDE

Ride

The Coleman Powersports CT200u minibike (\$500; colemanatv.com) makes us feel like a teenager again, in a good way. A governor limits the powerful 196cc engine to a top speed of about 19 miles per hour, plenty fast for tearing down fire roads. With burly 19-inch tires that devour all types of terrain, the CT200u proved an excellent shuttle for kayak and mountain-bike trips. At 112 pounds, it can be thrown into the bed of a truck.



MIKE RUTT - HOKA ONE ONE ELITE 800 METER RUNNER



THIS IS NOT A SHOE. THIS IS AN INVITATION. YOUR PRESENCE IS REQUESTED TO GO POUND THE PAVEMENT, GIVE THE HILLS A LITTLE HELL, AND PUT YOUR DAILY AMBITION TO THE TEST. TO GO UPTOWN, DOWNTOWN, CROSSTOWN, AND, FOR AS LONG AS IT TAKES, TO GET OUT-OF-TOWN. TO GO EXPRESS. TO BE A LOCAL. TO GO WITH THE CLIFTON 2 - 8.3 OUNCES OF SMOOTH RUNNING THAT SHOWS THESE STREETS WHO'S BOSS. LET'S GO.

HOKA ONE ONE

HOKAONEONE.COM



Room

The **a. Nautica Breakwater II rolling carry-on** (\$300; nautica.com) streamlines cross-airport treks with clever features like four 360-degree-range wheels and a single button-locking handle. The indestructible polycarbonate shell keeps your tchotchkes intact when crammed into the overhead.

Danner traded some of the durability of its iconic seventies moccasins for style with the **b. Canoe Mocs** (\$160; danner.com). The sacrifice paid off. The squishy crepe sole, leather upper, and polyurethane footbed are as comfortable as slippers but still good for long days on foot.

Part windproof shell, part breathable fleece, the **c. Patagonia Dual Aspect hoodie** (\$249; patagonia.com) is a smartly crafted layer with Polartec panels that vent heat under the arms, while the burly, lofted squares on the chest, arms, and upper back stave off wind and make this highly packable Frankenshell feel like armor.

Wish List

I've had a strong fear of flying my entire life. This is particularly inconvenient for a travel editor. My coping strategy has always been to lose myself in a movie the moment I get above 10,000 feet. Which is why I want a pair of **Bose QuietComfort 25 noise-canceling headphones** (\$300; bose.com). Bose more or less invented the category, and the QuietComfort 25s are still the best option. For feet-on-the-ground listening, I'm partial to the packability and unobtrusiveness of cheap earbuds that I can afford to lose. But when I'm trying to forget that I'm sitting six miles up in a claustrophobic aluminum tube, sophisticated tuning out is in order. —CHRIS COHEN

The **d. Rumpl Puffy blanket** (\$95; gorumpl.com) strikes a perfect balance between hearty adventure comforter and plush lounge, with light synthetic fill stuffed into a water-repellent, 20-denier nylon-ripstop shell. Packed down, the two-pound, four-by-six-foot Puffy makes an excellent pillow.

e. Amazon's new Kindle Paperwhite (\$120; amazon.com) has twice the pixels of its predecessors for a notably crisper contrast between text and screen, and there's enough storage for thousands of books in a slim, 30-square-inch package.

Stretchy, seamless, moisture-wicking mesh panels surround the crotch of **f. Saxx's spandex-blend Vibe boxers** (\$32; saxxunderwear.com). You get the support you need, and your nethers can breathe when the heat is on.

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Project Fiji: The Dream Machine Foundation recently gave the Rainbow® Sandals you donated back to us through our Repair • Reuse • Recycle program and put them on the feet of children in the remote areas of Fiji who do not have footwear, let alone many basic living necessities. Thank you for helping us help others.

Repair • Reuse • Recycle

In 1974, realizing surfers needed a more comfortable, long lasting sandal, I developed a "layered construction" combining improved densities of sponge rubber, 2000 lb. test nylon webbing with a parachute box-X stitch to secure the toe piece, better leather sources, and formulated my own glue to hold the layers together.

Today, our goal remains producing high-quality sandals that don't end up in landfills. That commitment doesn't end when our sandals leave the store. If your Rainbows are nearing the end of their run and are past warranty but still have some life left, please return them. We will repair and donate each pair to people who need them throughout the world.

Rainbow® Sandals philosophy to Repair • Reuse • Recycle is one we hope you share too.



—Jay "Sparky" Longley
Founder & CEO

Learn more about the Repair • Reuse • Recycle program by visiting our website below.

www.rainbowsandals.com

2015 GIFT GUIDE

Romp

Each **a. Victorinox Swiss Army Ranger-Wood Damascus knife** (\$300; swissarmy.com) is unique. The handle is fine-grain walnut, and the blade's wavy pattern is achieved by hammer-welding strips of iron and steel during forging. It's got looks, but the RangerWood boasts all the utility you expect from a Swiss Army knife.

You might be wearing waders, but you don't have to completely forgo style when fly-fishing. The **b. Topo Designs x Tenkara Rod Co. kit** (\$259; topodesigns.com) couples a beautiful leader wallet and hip pack from Topo with a mid-action, telescoping, reel-free wand that's perfect for chasing bluegills around small creeks.



a



c



The handcrafted **c. Of One Sea Paddleball set** (\$90; ofonesea.com) offers the same countless hours of entertainment as a classic wooden beach kit. But unlike its bargain counterparts, the birch top, tape-gripped handle, and suede ties make it classy enough to leave on the mantle when you're done playing.



e

d



Natural rubber and organic cotton give the **d. Brooks Cambium C17 saddle** (\$175; brooksengland.com) hipster charm, but they hide true performance. The waterproof seat won't soak up moisture and delivers a cushy ride for such a minimalist package.

Resist the urge to leave the **e. United by Blue Explorers ax** (\$165; unitedbyblue.com) mounted above the fireplace. The sturdy hickory handle and two-pound head make it an excellent choice for actually chopping wood.

Wish List

Winters back in my New York hometown can be brutal, unlike the brief, icy affairs here in Santa Fe. To be sure, spending snow days shoveling the car out from under three feet of fresh got old fast. But it was still my favorite season, partly for the one weekend every January that my family headed upstate to a campground with the best sledding hill I've ever careened down. A snow bank stood at the end of the 200-foot tree-lined run, giving riders some air before they skidded onto a frozen lake. Looking back I would have gladly traded the camp's patched-up tube for a **Mountain Boy Sledworks Classic Flyer sled** (\$190; mountainboysleds.com). Its birch body and coated steel runners are built to endure years of downhill action, and instead of merely hopping off that jump, I would have flown. —WILL EGENSTEINER

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Photos: Austin Siadak, Eastern Sierras

mountainhardwear.com

Life coach

in

AUGUST, about three weeks before Bear Grylls took President Obama hiking in Alaska, he placed his 12-year-old son, Jesse, on a cluster of rocks off the coast of North Wales and left him there as the tide was rising. Grylls owns a tiny island in the area that serves as his family's summer retreat, and he has helped stage rescue exercises for the Royal National Lifeboat Institution (RNLI) a number of times in recent years. Whenever possible he tries to involve his three sons—Jesse's brothers are Marmaduke, 9, and Huckleberry, 6—in his adventures because, as he later tells me, "The boys love it!" Plus, he gets tired of doing this kind of stuff on his own. "It's always great fun," he says. "I can pour ketchup on their heads and pretend it's blood. They get to wear the oxygen mask and be put on a backboard and carried down a rock face."

As he pulled his boat away from his eldest son, Grylls tweeted a photo to his 1.2 million followers, with the message: "Jesse and the @rnli on a training exercise to rescue him off the rocks!" Almost immediately, critics slammed Grylls for what they saw as a reck-

less stunt. Soon the RNLI was backpedaling, announcing its support of Grylls but saying the organization had not been aware of the details of the drill. "I certainly wouldn't put my young son on those rocks," one lifeboat station manager told British newspapers.

Several days later, Grylls issued his retort: an op-ed in *The Times of London* encouraging his countrymen to live more boldly. "When we try to strip our kids' world of risk we do them a gross disservice," he wrote. "We teach them nothing about handling life. I believe it is fun-

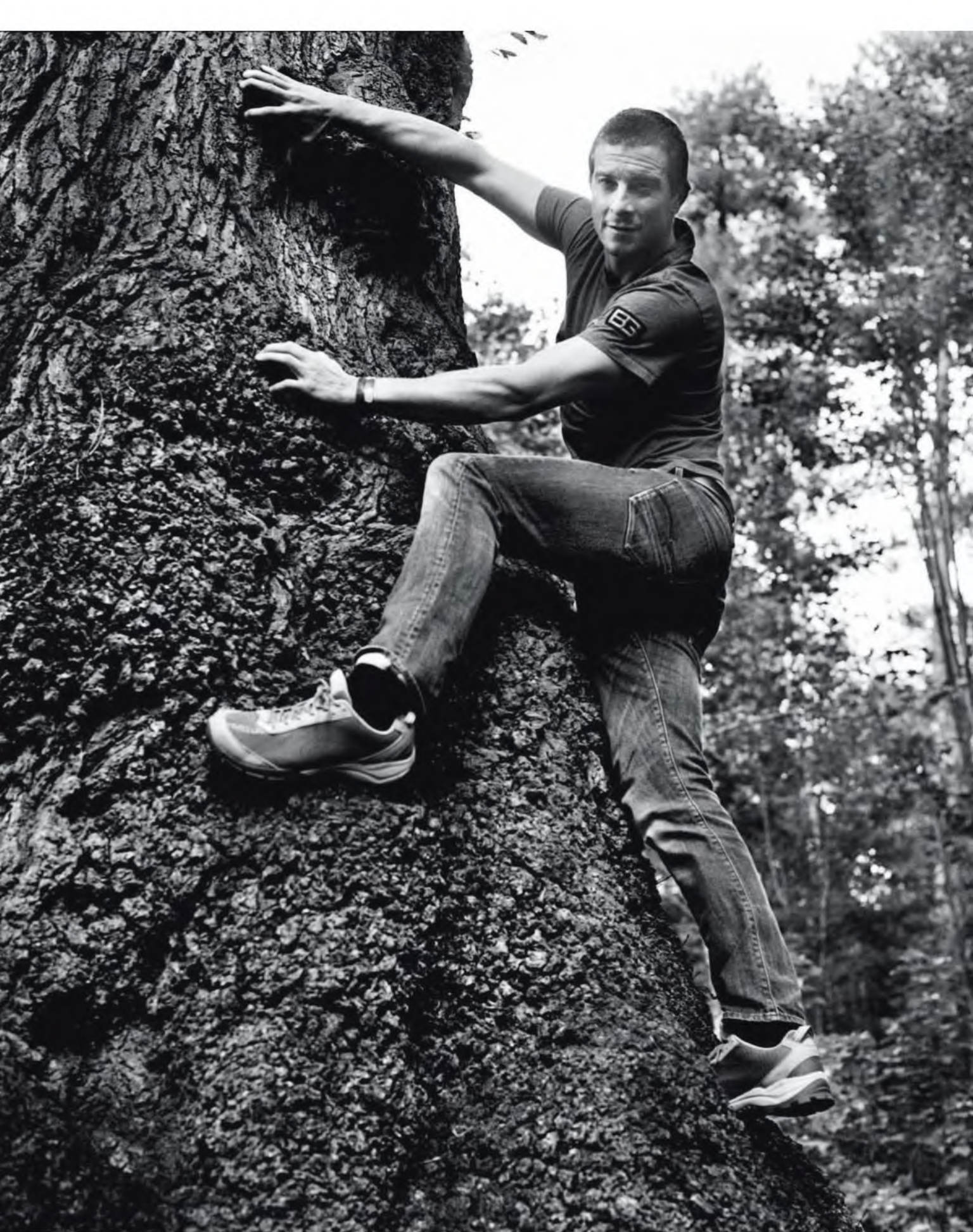
Running Wild with Bear Grylls has its host short-roping celebrities on two-day buddy adventures. What he gets these stars to do is stunning.

damentally unfair to put children in a holding pen until they are 18." It was a perfectly on-brand response from Grylls, who, nine years after exploding into television stardom as the charming, carion-eating, pee-drinking host of the Discovery Channel survival show *Man vs. Wild*, has become the global voice for embracing danger and hardship in the name of self-improvement. When Discovery canceled his show three years ago, Grylls could easily have ended up in the cable-TV adventure **continued on page 139**

Why would President Obama ask to appear on a survival TV show? Because, as Bear Grylls keeps telling us, a little fear and danger only makes you stronger—and there's no better place to power up than in the wild.

BY MICHAEL ROBERTS

→ Bear Grylls in London, October 2015



stand up

Want to find the crowd-free surf of yesteryear? Drive from Los Angeles to Baja, load five days of gear onto a SUP, and haul ass through thick fog, screaming seagulls, and open ocean to the rocky, big-wave coast of Todos Santos.

BY **JOE CARBERRY**

Dave Boehne
surfing a Todos
Santos gem

PHOTOGRAPHS BY
PAOLO MARCHESI

ride



I'm pretty sure we're going in circles.

Visibility is 40 feet, and a thick gray mist hovers over the Pacific Ocean as our paddleboards part the eerie fog. We're somewhere between the rugged, mountainous foothills of the Mexican mainland and Islas de Todos Santos, a desolate pair of islands eight miles off northern Baja's shore. "That's the same point we just paddled by," says Jack Bark.

We thought this would be easy: the day before, Bark, Dave Boehne, and I drove 170 miles from Dana Point, California, to La Bufadora, Mexico, loaded our paddleboards with everything we could carry—shortboards for surfing, sleeping bags, tents, food—and headed out across the bay to Todos Santos for a long weekend of summer swell. Bark is on a traditional prone paddleboard, hand-paddled from the knees or while lying flat; Boehne and I are on SUPs. Why come all this way? Because while lifelong surfers like Bark, 21, and Boehne, 39, still paddle out into crowded lineups near their homes in the Los Angeles area, the sport's population problem instills in them a common ethos: the search for emptiness.

Todos Santos (the islands, not the resort town farther south) is virtually deserted, even though it has a storied surfing history. The southern landmass is surrounded by nameless waves, but the northern island made Todos Santos famous. That's where you'll find Killers, a big-wave break that remains a proving ground as brave surfers charge 40-foot behemoths each winter.

While Killers inspires awe, the islands' true geological gift to surfers is exposure. The points of land face the Pacific's swells unencumbered year-round. In winter, massive waves pound in from the west and northwest; in summer, little-known breaks that are much less dangerous but just as high quality go off during Southern Hemisphere swells.

But first we have to get to them. Five hours

in, we're still on our boards in open water with no clue where we are.

"Somebody's gotta take charge," yells Boehne, his usually calm demeanor broken slightly by the frustration of paddling blindly in the fog. Bark, who has blond hair and the toned physique of a distance runner, looks at me in disappointment: "Does anyone even have a map?"

WE DON'T HAVE a map. Or a compass. Or even a GPS. The navigation system was left in the van during the hustle to rig our boards that morning, amid the haze of a hangover—we'd got a little too wrapped up the night before at the local tequileria, celebrating our arrival. We've been planning the trip since

last winter, when Boehne pitched it to me over beers in a crowded bar on the Pacific Coast Highway near Dana Point. He grew up visiting Todos Santos with his family, who went there to camp and ride waves. His parents, Steve and Barrie, are former world champions in tandem surfing, a largely forgotten art of lifts and poses—like figure skating on surf. They started Infinity Surfboards in 1970 and used to load up their catamaran and

sail everyone out to Todos Santos for days of surfing and exploring the rocky coastline.

Bark, meanwhile, grew up in Torrance, a suburb of L.A., sweeping the floors of the shaping room at the Bark Paddleboards headquarters. His dad, Joe, has produced thousands of surfboards—big-wave guns, SUPs, and prone boards—since founding the business in 1982. Steve Boehne and Joe Bark were among the first to start handcrafting SUPs, around 2005, and Joe is one of the few still shaping prone boards.

Both Jack and Dave are gifted ocean athletes, so instead of a sailboat, panga, or anything remotely convenient, we decided to

haul our gear over the open ocean on paddleboards, which we could then use to explore and surf once we reached the islands.

Around 12 feet long, the hand-powered prone board is older than American surfing. Tom Blake, credited with developing California surf culture, reinvigorated the obscure Hawaiian *olo* board in the late 1920s, constructing his hollow version from redwood and promoting it as a lifeguarding tool. While the boards remained somewhat popular in Australia and along the East Coast, in California they were confined to a few races, like the International Paddleboard Competition (now called the Catalina Classic), from Catalina Island to the mainland.

Then came the stand-up paddleboard's popularity, credited to its adoption by Laird Hamilton in the early 2000s. Around 2010, prone paddling experienced a resurgence as athletes like Jamie Mitchell, who won ten straight Molokai-2-Oahu titles, and young paddlers like Bark and Queensland's Jordan Mercer, who've each won multiple Molokai races, provided the sport with new life. "Stand-up paddling's boom has brought a lot of visibility back to prone boards," Bark says. Many of today's SUPs borrow traits from traditional prone designs—rail lines, displacement noses, domed decks.

Bark and Boehne have taken to the family business. When he's not in environmental-science classes at California State University at Dominguez Hills, Bark works alongside his father to fill custom board orders and manages the brand's social-media accounts. Boehne grew up doing pretty much everything at Infinity—from answering phones to board design to marketing. "I shape boards. Jack shapes boards," says Boehne. "Riding our bikes over the hill at lunch to check the surf was a big part of both of our families' business plans."



AFTER circling for hours, arguing over which way the swell is moving, we finally hear ocean water hitting coastline through the dense fog and paddle until we reach land. We drop our gear on the north island's protected side and bivouac above a tiny cove. I build a small fire to make tacos

Clockwise from top left: Dave Boehne (left) and Jack Bark with their family boards; Bark on an empty one; paddling channelized canyons; Bark en route to Todos Santos; hiking on the north island; the locals; Bark in sun gear; Boehne rips one; swell perfection; Bark sets up camp



DD

THE SPORT'S POPULATION PROBLEM
INSTILLS IN THEM A COMMON ETHOS:
THE SEARCH FOR EMPTINESS.

DD



while Bark and Boehne drink warm Tecates and devour tortilla chips.

With our blood sugar levels back up, we spend the next three days exploring the islands. We pick our way through the rocks on our boards, touring hidden caves tucked into pristine coves where surprised elephant seals bark loudly as we paddle by, flopping toward the water in panic. “Hold up,” says Bark. “I wanna jump out of that cave.” He points to a small nook 20 feet off the water, quickly climbs the scree-strewn slope, and launches into the deep salt water.

We comb the rocky point where Killers terminates in the winter, and thousands of seagulls try to dismember us for plodding among their nests. In the brush, we find a broken Bark board, a battered remnant of


heavy winters past. “It was one of my buddies,” Bark says, recognizing the orange and red design. Bark’s friend surfed it here two years before, destroyed it on an exceptionally big wave and relayed the death-defying tale upon his return.

The surf we ride isn’t quite as huge—waves rarely reach seven feet—but it is *everywhere*. Of our three options, the break in the channel off the north point of the south island has the best shape. The wind is nil, and the water is glassy. The peak looks like it should be a left, only the left fattens out; the right reels toward the point and culminates thunderously on the inside. Bark paddles into the first wave on his shortboard and makes a nice top turn. “This is so sick,” he says, paddling back out to our lonely lineup.

Boehne is all style. His tan skin and hair work together to highlight his white smile. “This is what we’re after,” he says as the waves come in. He takes off, gets over his board, lowers his center of gravity in a compact stance, and coils up to hit the lip. But the wave dissipates, and he carves on his forehand back to the white pile, snapping off the top on the rebound. He returns to our lineup of three as Bark takes off on the next wave. “A little overhead on sets and no one around,” says Boehne. “I don’t think anyone in the world would complain about that.” **O**

JOE CARBERRY IS THE FOUNDING EDITOR OF SUP MAGAZINE AND A COLUMNIST FOR SPORTS ILLUSTRATED. THIS IS HIS FIRST OUTSIDE FEATURE.

THE BEST MEMORIES ARE RARELY PLANNED



They usually come from the little, unexpected wows. Like discovering a hidden, local bistro. Or meeting the family behind the winery during our tasting. Or even a crazy photo op at the perfect moment. That's where memories are made. And that's what we do best.

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#THEWORLDCALLS



Searvogel inside
his sag wagon in
September



HELLO,

HELLO,

I MUST

BE

GOING

FUELED BY POP-TARTS AND FAST FOOD, 52-YEAR-OLD SOFTWARE ENGINEER KURT SEARVOGEL IS OUT TO BREAK THE RECORD FOR THE GREATEST DISTANCE PEDALED IN A YEAR. WHAT MOTIVATES A MAN TO RIDE MORE THAN 200 MILES A DAY—EVERY DAY, RAIN OR SHINE, HOT OR COLD, SUNRISE TO SUNSET? **TOM VANDERBILT** SADDLES UP TO FIND OUT.

Photographs by **ALEX TEHRANI**

"IS THE GRILL STILL OPEN?" ASKS KURT "TARZAN" SEARVOGEL, SITTING DOWN AT A TABLE LATE ONE RAIN-LASHED JULY NIGHT IN MIKE'S PORT PUB AND GRILL IN JACKSONPORT, A SMALL HAMLET IN THE SCENIC PENINSULAR THUMB OF DOOR COUNTY, WISCONSIN.

The waitress affirms. Searvogel, who has already downed a heaping open-faced rib-eye sandwich with French fries, requests an order of fish tacos, another round of fries, and what I take to be his third beer. "Carb load," he says impishly. Too late we notice, in a corner of the menu, Mike's Belly Bustin' Challenge. Eat three regular burgers, get a T-shirt and your photo on the wall.

No challenge for Searvogel—more like an appetizer. But the 52-year-old software engineer, who grew up a few hours away in Waupun but now calls Little Rock, Arkansas, home, has more urgent claims to lionization than a place among the Packers calendars in this amiable tavern.

Searvogel is trying to set the record for the most miles ridden in a year on a bike, a rather obscure, now revived mark that has held since 1939, when an amateur British cyclist named Tommy Godwin notched more than 75,000 miles—all on English roads—from New Year's Day to New Year's Eve.

Since January 10, when Searvogel set out on a 300K randonné in Florida, he has ridden over 200 miles a day. Rain or shine, hot or cold, whether he is feeling it or not, he has been out on the roads of various American states. Apart from some free tires and cases of energy drink given to him by his few sponsors, his effort is self-funded.

But he is not alone in his pursuit. A 41-year-old Englishman named Steven "Teethgrinder" Abraham was the first to announce an attempt, and a late dark-horse entry, an Australian appropriately named Miles Smith, joined the quest in April. The Ultra-Marathon Cycling Association, the group that runs the infamous Race Across America (RAAM), has dubbed this modern attempt on Godwin's record the HAM'R, for Highest Annual Mileage Record, and will certify the

results. As testament to its difficulty, Abraham was struck by an errant moped driver in March, breaking his leg; Smith suffered a collapsed lung in May. Since the modern competition need not hew to a strict calendar year, both men have launched new, "concurrent" 12-month campaigns—meaning, in essence, two clocks are running for each man, one that ends a year after his original start and a second that ends a year after he resumed riding post-injury.

Even by the standards of ultracycling, with its 24-, 48-, and even 72-hour endurance events, the notion of spending nearly half the day, every day, on a bike confounds the imagination. When Searvogel is not riding, he is eating (replenishing some of the 8,000 or so daily calories he burns). When he's not eating, he is either sleeping (about six hours a night), fixing his bike, uploading his rides to Strava, or plotting the next day with Alicia Snyder, his 53-year-old girlfriend and crew chief (actually, his entire crew). Snyder unflaggingly pilots the Dodge Pleasure Way RV that serves as mobile aid station and occasional home and monitors Searvogel's progress via SPOT tracker. As you read this, there is a good chance Searvogel is on his bike.

In endurance sports, miles are an endlessly elastic currency. A weekend cyclist might be challenged by a medio fondo ride (60 miles or so). For others, a century, or 100 miles, stands as a benchmark. While there is no exact definition, ultracyclists like to think of 200 miles as a good conversational opener: it's where you go from there that gets interesting.

But what does it mean to ride 75,000 miles in one year? The most arresting way to characterize it is that it's like riding around the earth three times. But how many of us have ridden around the earth even once? Another way to put it is that it's like biking across the

U.S. not once, which for most would be a life-defining achievement, but more than 20 times in a year. Hell, the average American of Searvogel's age *drives* only about 19,000 miles annually. By the end of 2015, Searvogel will have biked more miles than most cyclists do in their lives.

IN A HEAVY predawn rain on New Year's Day, 1939, with the temperature just above freezing, 27-year-old cyclist Thomas Edward Godwin pushed off from Hemel Hempstead, a town northwest of London.

For the next year, looking to outpace the 1937 year record of 62,657 miles—set by an Australian rider named Ossie Nicholson—Tommy Godwin would be a familiar, if fleeting, sight on English roads. As Godfrey Barlow notes in his 2012 book *Unsurpassed*, "On many a night when the wind was howling and the snow driving across the roads, Tommy was a solitary figure in sweater and woolen tights, pedaling along some lonely country road." During one 200-mile day, the conditions were so treacherous, he fell off his bike some 20 times. He lost a day's riding to have four teeth pulled, then sacrificed another recovering. With two other English cyclists after the same record, he could spare little time off the saddle.

Godwin, as Barlow recounts, had begun riding a heavy shop bike as a boy, doing odd delivery jobs to help support his family. At 14, he entered an amateur race—on that very bike—and won, following it with a string of national time-trial records. (A strict teetotaler, Godwin raced for the Vegetarian Cycling and Athletic Club.)

He began to think about the year record, which had evolved from a contest launched in 1911 by the English magazine *Cycling* to see who could complete the most centuries

in a year. Over the next few decades, any number of riders from various countries took aim. They were, needless to say, a hardy lot. Walter Greaves, a prickly character (also vegetarian, and communist to boot), returned the record to England in 1936 after suffering frostbite on his ear and losing 13 days to blood poisoning when he was struck by a car in July. Despite this—and despite having only three gears and half of his left arm (the result of a childhood accident)—he managed to make up the miles by New Year's Eve. The next day three more riders, including the Australian Nicholson, set out to beat his time.

Two years later, as Godwin hurtled toward Nicholson's record on a four-g geared Raleigh Record Ace—high-tech for its era, though with a frame roughly twice as heavy as today's top bikes—a new challenge loomed. On September 3, Germany declared war on England. Riding through nightly blackouts, Godwin pedaled into Trafalgar Square on New Year's Eve with 75,065 miles under his belt.

The wartime interruption seemed to put an end to the year record as a public sensation. It faded from view, remembered by only a few, mostly English, cycling boffins. It was not until 1972 that a UK rider named Ken Webb claimed to have beaten Godwin's record by 5,600 miles, earning a spot in the Guinness Book of World Records. But his attempt was “almost definitely a fraud,” says Dave Barter, author of the forthcoming book *The Year: Reawakening the Legend of Cycling's Hardest Endurance Record*. Webb's mileage figures did not add up, his statements to the press were contradictory, and his rides were seldom verified. There was one final, rather glaring, inconsistency: for much of the year, Webb held a full-time job. Guinness returned the record to Godwin.

THE MORNING after our meal at Mike's, Searvogel and I are riding toward the fishing village of Gills Rock, pushing into a cold rain shower driven by a moderate headwind. I have pulled ahead of Searvogel, who is hunched over on the aerobars of his Cervélo P2 time-trial bike, and my six-foot-two frame is providing him with a momentary—and no doubt novel—draft.

Searvogel is as haunted by the wind as any sailor. He tracks it obsessively on the website WindFinder.com, charting his course around prevailing patterns. Like a game of



In Little Rock, Arkansas

geophysical chess, it is about not simply that day's winds but also the next. “You've got to know what's going to happen tomorrow,” he told me. “If you ride yourself into a corner, the next day's going to be hell. It's probably about 5:30 or 6 P.M. before we know where we'll be tomorrow.”

But Searvogel knew this morning's inconvenience would only be temporary. “You always want to hit the easy button,” he says. A mileage record is a mileage record: there is no added distinction for feet climbed, watts

burned, state lines crossed. Once we reached land's end in Door County, we would turn around and catch a great big southerly express train of atmospheric disturbance projected for later that morning that would take us all the way down near Madison. “Tomorrow's probably going to be a 250-mile day,” were his last words the night before, which rang in my ears like a threat.

As we hit the first few climbs, I find that I am dropping him. “You might want to ease up a bit,” he tells me. “It's going to be a long day.”

I am probably riding hard to try and impress him, but I am also riding like someone who goes strong for six or seven hours and then flops onto the couch, not someone facing another double century the next morning.

As one might expect for a software engineer, Searvogel has rigorously calibrated every aspect of his ride. He studies his handlebar-mounted Garmin more intently than a Tour de France rider, making sure his heart rate rarely gets into the three digits. His record quest began with an exhaustive spreadsheet, which he has had to adjust on the fly. "My original projection was that I would get faster as I went along," he says. "I was already fast, and I'm getting slower." He says his body is breaking down. "You don't have enough time for your muscles to recover." Still, he is able to maintain an aggressive 17-mile-per-hour pace, faster than his rivals.

Simply finding 220 miles of good cycling roads can be a challenge, even in Wisconsin. Searvogel stays away from cities, less for the traffic than the traffic lights. (Stopping is a no-no.) "Lots of days are experimental days," he says. "Once you figure it out, you can go from 17 miles per hour to 18 or 19 miles per hour. My rides are getting faster and faster in Wisconsin, because I know which roads to take." While Snyder protests, he will ride on state highways, despite the prospect of heavy trucks thundering past a few feet away. "You can make speed," he says, "because every state road has a certain grade that they're built to."

When the winds are unforgiving, he retreats to safe harbors, like an 18-mile stretch on Door County's eastern side that, adjacent to a bluff, is "sort of protected."

Earlier in the year, before it began to get hot, he was riding in Little Rock, Arkansas, when floods hit the city, cutting him off from all but a few roads. "I was basically riding a five-mile stretch, back and forth, all day long," he says. "One day I did it 24 times."

Like Godwin, Searvogel began working on a bike at a young age, as a paperboy in Wau-pun. "You're getting up at 5 A.M. when it's minus 20," he says. After competing as an all-American wrestler at nearby Ripon College and serving a stint in the National Guard, he spent his twenties and thirties "completely focused" on his company, Applied Computer Solutions, which produces software for auto dealers to help streamline the sales process. "It's not a glory business," he says, "but I wanted to do something that makes money." He had sublimated his competitive urge into business. "I'd always been an athlete," he says, "and I completely forgot about it."

Eventually, like so many men approaching middle age, he felt the pull of fitness. As a self-admitted 240-pound "Clydesdale" in his early forties, with three kids and a job, he began reascending the ladder: a sprint triathlon, a mountain-bike race. In 2005, he attended a cycling camp run by Lon Halde-man, one of the founders of RAAM. The world of ultracycling beckoned, and he unleashed a string of achievements, culminating in a

record-setting 2014 ride in RAAM itself: he and a partner, Joel Southern, rode coast-to-coast in six days, ten hours, and eight minutes. Searvogel's approach to business and sports is summed up, he says, in an article by the former pro basketball player M. L. Carr, who advised, "Find your seam and take your shot." In other words, identify your niche and exploit it. "I'm an OK triathlete, and I was an all-American in duathlon," he says, "but in ultracycling, in 12-hour cycling, there's maybe three or four people who can beat me."

That competitiveness made the HAM'R a natural target when Searvogel learned of it last year through the intensely narrow channels of ultracycling. Still, as with RAAM, he was initially reluctant to compete—"I kept telling myself, You're too smart to do that kind of thing"—and the whole project came together at the last moment, as he and his wife prepared to divorce. "I decided to do this two months before it started," he says.

A FEW YEARS ago, says Ultra-Marathon Cycling Association (UMCA) president Paul Carpenter, the organization started hearing more and more from members interested in chasing records. Steven Abraham, a warehouse operator in Milton Keynes, England, wanted to tackle the biggest of them all. "I had heard about Godwin when I was 15," he told me by phone. "It's always been in the back of me mind what Tommy Godwin did." At least twice, Abraham had ridden 28,000 miles in 12 months. Godwin's record loomed



1911: ENGLAND'S CYCLING MAGAZINE LAUNCHES A CONTEST TO SEE WHO CAN COMPLETE THE MOST CENTURIES IN A YEAR.



1936: WALTER GREAVES—A COMMUNIST, TEETOTALER, AND AMPUTEE—RIDES 45,383 MILES.



1937: AUSTRALIAN OSSIE NICHOLSON BRIEFLY BRINGS THE YEAR RECORD DOWN UNDER, COMPLETING 62,657 MILES.



1938: ENGLISHWOMAN BILLIE DOVEY SETS THE WOMEN'S RECORD AT 29,603.7 MILES.



as a possibly achievable goal. There was just one problem: Who would certify such a ride?

In 2014, the UMCA stepped in. “We felt like this would be a great thing for us to be involved in,” says Carpenter, “to try and grow the sport.” While even some ultracyclists might consider the attempt “pure insanity,” as Carpenter puts it, others might think, “If they can do this, surely I can get my butt out for a 200-miler,” he says.

When the year record was embraced by the UMCA, there was just one problem for Abraham. As in Godwin’s day, word of the new challenge, like blood in the water, began to attract other competitors. One of those, of course, was Searvogel. United in riding close to 200 miles a day (casting wary glances over their shoulder as they nightly check the HAM’R leaderboard), the two men are joined by mutual respect. “Steve’s a good guy, and he’s putting everything he can into this,” says Searvogel. “Anybody who can get up and do this every day is fucking amazing.”

They are also about as distinct as you can imagine. Where Searvogel is blunt and brash, Abraham is understated. While Abraham has a number of sponsors (from Brooks to Garmin to Raleigh), he generally rides alone. Searvogel is paying for his effort himself (he estimates the cost at about a dollar per mile) but has the invaluable assistance of Snyder. Abraham switches among three identical Raleighs (which he traded for a trike when he was injured); Searvogel uses a carbon-fiber race bike with an aero setup

RIDING 75,000 MILES IS LIKE BIKING ACROSS THE U.S. NOT ONCE, WHICH FOR MOST WOULD BE A LIFE-DEFINING ACHIEVEMENT, BUT MORE THAN 20 TIMES IN A YEAR. HELL, THE AVERAGE AMERICAN OF SEARVOGEL’S AGE DRIVES ONLY ABOUT 19,000 MILES ANNUALLY.

and, when his neck or shoulder are hurting, a recumbent. This is controversial

to some but within the rules.

While England’s winter this year was not as bad as Godwin’s was, it was still an English winter; Searvogel, meanwhile, has ridden in the migratory embrace of largely moderate weather. By dint of geography, Abraham faces more hills (as of this writing, his elevation total was 1.2 million feet, per Strava, a third higher than Searvogel’s) and a denser road network. As he puts it, “You can ride 100 miles in Arizona without stopping—try doing that in England.”

These differences have sparked fighting words in the comments sections of the Strava logs of both men. “Some people are arguing that Kurt’s miles aren’t as valid because they’re all flat and they’re all tailwind,” says Carpenter. “But again, our focus was the mileage record—rules apply to everyone equally. Steve’s free to take that approach

as well.” And indeed, Abraham does when he can. “You don’t want to make it harder on yourself,” he tells me.

As the cyclists battle it out on the roads, a larger question looms, which is how both riders stack up against Godwin. The key differences, notes the cycling author Barter, come down to weather and technology. Godwin rode during a famously nasty winter, the coldest in nearly five decades, with very little forecasting technology. (Friends would try to steer him to areas with less snow.) Route planning is now easier, and unlike Godwin, riders do not have to stop and have their mileage verified via signed postcards. “This makes a big difference,” says Barter, “when ten to twenty are required and each takes five minutes.” But of Godwin’s heavy Raleigh Record Ace, Barter says, “I’d race that bike today if I had one. It was that good.”

When I ask Abraham if he thought he would have company on his quest, he laughs. “No, I thought it would be just me!” But he seems rather tickled by what he has kicked off. “It’s the first year, and we already have three

FROM LEFT: NO CREDIT; BARBARA FORD/TOMMYGODWIN.COM



1938: THE NEW HUDSON BICYCLE COMPANY PROMOTES THE EVER GROWING COMPETITION IN A *CYCLIST* MAGAZINE AD.



1939: TOMMY GODWIN RIDES 75,065 MILES, STILL THE RECORD TODAY.



1972: KEN WEBB CLAIMS AN 80,647-MILE YEAR AND MAKES IT INTO THE GUINNESS BOOK OF WORLD RECORDS BEFORE BEING DISCREDITED.





On the
road
again

SEARVOGEL'S DIET IS LIKE A GONZO VERSION OF THE DOCUMENTARY *SUPER SIZE ME*: McDONALD'S SAUSAGE BISCUITS FOR BREAKFAST, HARDEE'S BURGERS FOR (THE FIRST) DINNER, DONUTS IN BETWEEN, WASHED DOWN WITH CANS OF MOUNTAIN DEW KICKSTART.

people having a go. I wouldn't be surprised if more people came on." Carpenter is already envisioning a new attempt on the women's record, held by an English secretary named Billie Dovey who rode 29,603 miles the year before Godwin. The Rudge Whitworth Keep Fit Girl, as she was billed in the press (after her bike sponsor), was fueled by copious amounts of Cadbury's chocolate. She lived to be 100—a century ride.

WHEN I FIRST met Searvogel, he didn't match my image of a record-setting distance cyclist. For one, his past as a wrestler means he is as muscular in upper body as legs. (The nickname Tarzan comes from a penchant

Spizz (one of his few sponsors), Searvogel's diet is like a gonzo version of the documentary *Super Size Me*: McDonald's sausage biscuits for breakfast, Hardee's burgers for (the first) dinner, donuts in between, washed down with cans of Mountain Dew Kickstart. "It's all about calories," protests Searvogel. "Actually, it's about being happy. You eat what makes you happy. You've got nothing else—why be miserable with what you're eating?"

Surely all this exertion, fueled by the cornucopia of the American drive-through lifestyle, can't be good for you. I put the question to Michael Joyner, a physician at the Mayo Clinic who specializes in exercise physiology, particularly "human limits" (the title of his website). Joyner doesn't have a problem with Searvogel's diet: a calorie is a calorie, he believes (at least in the short term), and he's

always wanted to do a study with endurance athletes to prove it. What's more, he points out, many people have persisted at these levels of exertion all day, every day, throughout history: it's called work.

But as long as a rider is not constantly pushing the red zone in terms of heart rate, Joyner says the biggest risks are from injury, overuse, and illnesses that can be worsened by intense physical effort. What these cyclists are doing "sounds incredible, and it is incredible," says Joyner. "But if you do the math behind it—the fuel, the caloric consumption—and make a few assumptions about the individual's maximum oxygen consumption, the fact is that humans can work at about 40 percent of their maximum all day. As long as they don't get dehydrated, they're good to go."

Which is not to say the road has been clear of obstacles. Searvogel has been hit by cars twice, both times at the intersection of a bike path and a road. Earlier in the year, he was felled by an intestinal illness—he got two IVs, and the next day, in a symbolic gesture, rode one mile. A few weeks after we met, he was having trouble breathing; X-rays revealed an elevated hemidiaphragm, and a later exam uncovered "undiagnosed asthma," he says, possibly a side effect of roadside inhalation. So he added Allegra and inhalers to his jersey pockets. He passed 50,000 miles on day 241, likely the same day Godwin had.

Then, on September 23, as Searvogel was riding back in Arkansas, things got more worrisome. He went into atrial fibrillation, his heart racing an alarming 170 beats per minute. He ended up at the hospital, where he was told that he was dehydrated and, as he wrote on Facebook, "my thyroid is wack." That week, as part of a 211-mile day, he cycled over to see a cardiologist, who gave him the go-ahead to keep riding. "Don't give up!" Snyder says the doctor told him.

So Searvogel kept cranking out 200-mile days, even as a battery of medical tests loomed. "Everyone keeps saying it's downhill from here," Snyder, a rock climber, told me. "If we are downclimbing, that's the most dangerous part."

EARLY THAT FIRST afternoon in July, Searvogel, perhaps boosted by having someone to ride with, was Energizer-bunny strong. Meanwhile, I had already eclipsed my longest ride ever and still had 100 miles to go. Staring into the endless pastures of America's Dairyland, riding the endless alphabet soup of Wisconsin's county roads (A, V, E), which were arrayed with the geometric rigor of the Jeffersonian grid, I felt like I was beginning to suffer from some form of calenture, an old delirium reported by sailors who perceived

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the sea as fields of grass—and jumped in. Out of desperation, I uncharacteristically donned earbuds. When Talking Heads' "Road to Nowhere" popped up on a playlist, it seemed like an omen.

In the town of Kewauscum, my water bottles and spirit depleted, I pulled into a gas station for an emergency Coke. Searvogel, as he usually did, rode laps on the nearby blocks. "Time is miles," is a constant refrain.

The clerk chirpily asked if I was "enjoying my ride today." I grimaced.

"Where are you traveling from?"

"Jacksonport," I replied. "In Door County."

A cloud of incomprehension crossed her face. Still, I was holding my own, at least until we hit Kettle Moraine, where the elevation took a cruel turn. Eventually, Snyder arrived on the side of the highway with a bulging bag of Hardee's, which I gladly huffed. I faced a choice: ride 50 more miles unsupported, or climb into the Dodge, capping the day at 224 miles. Knowing I had a similar ride the next day, I hit the sag wagon. Searvogel pedaled toward the sinking sun.

An hour later, as I hobbled to the hot tub in the Comfort Inn Suites in Johnson Creek, I got a text from Snyder: "I'm going to hunt Kurt down to give him his night gear." An hour or so after that, the three of us were in his hotel room, eating pizza and drinking beer. I wondered aloud if spending so much time on the bike was affecting his bone density.

"Do you have any trouble walking?" I wanted to know.

He looked vaguely irritated. "I'll go run right now," he said. "I've got my running shoes." I opted instead for another beer.

ON ONE OF Searvogel's Strava ride logs, someone posted a simple question: "How is it possible to ride almost 350 km each day?"

I was wondering that myself as we pedaled away from the hotel on the second morning. My left knee had a dull ache, and despite fist-size dollops of chamois cream, I was a bit sore down south. We faced another monstrous ride—this time mostly without tailwind.

When I asked Joynier, he suggested that the bodily aches and pains, while not insubstantial, were, in the end, dwarfed by the mental toll. The challenges of boredom, motivation, and other intangibles start to stack up at the extreme limits. "The physiology is straightforward," he says. "It's these other, multifactorial things that really become definitive. Your margin for error isn't a bunch of additive errors, it's multiplicative errors."

I had a glimpse of this toward the end of my second day. At around mile 175, I was tired,

partially as a result of losing my draft when Searvogel switched to a recumbent in the afternoon. But other things were beginning to break down. My eyes were stinging from sunblock—I almost let my wheel hit Searvogel's—and I suddenly could not stop hacking. "When you started coughing, I knew you were done," Searvogel told me later. Why? "You're not breathing right. You've gotten



Alicia Snyder



Steven Abraham

in too much stuff that you're not used to."

So as long as the engine is kept tuned, the physical part is manageable. What it really comes down to is the thing that cannot be measured in the metrics of sports physiology: having the mental fortitude to sit in the saddle for 13 hours, and to wake up early the next day and do it again. Carpenter, who, in addition to his work with UMCA, chairs the kinesiology department at California State University, East Bay, notes that any number of ultracyclists are physically capable of a record attempt, but he is unsure how many could handle the motivational part, not to mention the sheer logistics. "Clearly, to do this you need to be driven and focused and to some degree self-absorbed," he says. "You need to shut out all distractions." I had gotten a sense of this talking to Abraham, who told me, flatly but poignantly, "I'm on me own. I live on me own. If I wasn't doing this, I'd probably be on me own. I'm quite happy on me own." Searvogel, at one point, joked that he liked that I "didn't talk a lot on the bike."

That night, back at Mike's in Jacksonport, well into our second order of fried cheese curds and our third beers, I ask Searvogel what he thinks about all day, out there on the roads. He shrugs. "I've got a Garmin. You do mental calculations to keep yourself going—if I do this many laps..." He grows contemplative. There are, he says, "lots of things to think about. Things going on in my life."

One of those would be his divorce, which

I learn about only after a few days with him. He describes it, as people frequently do, as "amicable." His ex-wife, it happens, runs the company that is still paying him while he is riding. That these major life issues come up only after we've talked about tire pressure and lactate-threshold zones speaks to the single-minded nature of the quest: to shut out the world and keep the

rubber on the road. Life is complicated, life is what keeps you off the bike; one of Searvogel's few interruptions came earlier in the year when he had to report to a court-mandated, pro forma counseling session with his wife about their three children, two of whom are college aged.

Suddenly, a man ambles up to the booth. "Hey brother, safe travels, I hope you get your record. You got a Facebook page? Awesome." He shakes Searvogel's hand. "I'm Clancy. They call me Big Irish."

When Searvogel first considered the record attempt he balked, and he still has moments of doubt. "You're burning a year of your life for this. Why? Because I want to? It's fun? I don't know." There is the simple fact that once you have done the hardest endurance ride in the U.S., the RAAM, what is left? Searvogel is occasionally struck by the pathos of life passing him by, even as he tries to ride his way into history. "I'll see things and think, *I should be doing that with my kids*. I want to go kayaking"

Toward the end of our ride that day, we passed road markings for the Door County triathlon, which was being held that weekend. "Did you see the signs for that tri?" he said. "I should be doing that damn tri. I wonder if I can still sign up for it?"

CONTRIBUTING EDITOR TOM VANDERBILT (@TOMVANDERBILT) WROTE ABOUT TRIPADVISOR IN APRIL.



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OVERBOO

Kangaroo mob
at the Royal
Canberra Golf
Club



Di



Australia is home to 24 million people and roughly 60 million kangaroos. The cuddly looking creatures are still a beloved national icon, but they're also the scourge of ranchers, frequent roadkill, a favorite

on restaurant menus, and now the target of government-sponsored sharpshooters. **PAUL KVINTA** hops Down Under for a rugged tour of one of the world's most surprising human-animal conflicts.

Photographs by
DAVID MAURICE SMITH





We spot 40 kangaroos in the distance and creep toward them. “Act like they do,” Don Fletcher whispers. “Put your head down, like you’re grazing. Don’t move straight at them.” Fletcher goes full kangaroo, drooping his head, hunching his shoulders, dangling his hands from his chest and zigzagging slowly forward. He does everything but bounce and eat grass.

I follow his lead. The tactic lands us not only in the center of the mob, but 30 feet from a big male putting the moves on a feisty female. Above us, constellations glitter in the night sky. A nearby lake glows in the moonlight. In the world of wildlife biology, this is a perfect moment.

Then a car horn honks, and the moment vanishes.

Fletcher and I are standing not in the sweeping Australian Outback, with its red-rock mystery and timeless vistas. We’re at the traffic circle where Fairbairn and Lime-stone Avenues meet, in front of the Australian War Memorial, in the middle of the city of Canberra. Traffic zooms by. Car stereos blare. Someone’s dog barks. To passersby, we’re a couple of downtown vagrants off our meds, pretending to be kangaroos on the memorial’s manicured lawn.

The big male loses interest in the female and wanders off. “It’s not mating season anyway,” Fletcher says, breaking character and returning to an upright position. “I don’t know what the hell he was up to.” He checks his watch, and we climb back into his truck. It’s 10 P.M. “Let’s go.”

We’re prowling the dark streets of Australia’s capital city in search of kangaroos, and Fletcher knows the hot spots. He works for the Australian Capital Territory, the autonomous province comprised of Canberra and vast amounts of surrounding parkland. (Think of Washington, D.C., encircled by

640 square miles of wilderness.) As one of the ACT’s senior ecologists, Fletcher is tasked with helping keep Canberra’s nature reserves healthy. If kangaroos weren’t overrunning these public lands and spilling into city streets, ecosystem health wouldn’t be an issue. But they are, and Fletcher wants to show me how acute the situation is. The war memorial backs up to Mount Ainslie Nature Reserve, and when Fletcher turns onto the street separating the two, there they are—three more kangaroos, frozen in our headlights. Two others pop out of nearby bushes. They stare at us. Then they hop off to the war memorial. More follow, one after another, a bouncy column of refugees fleeing the forest. “The grass has been devoured on Mount Ainslie,” Fletcher says. “They’re looking for better forage.”

Each year, Fletcher has the unenviable task of calculating how many of these kangaroos to kill. The magic number for this year’s city-wide cull is 2,466, from an ACT population of more than 50,000. This is a thankless job, and some Australians have dedicated themselves to never letting Fletcher forget that. This morning I spoke separately to three animal-rights activists, and each referred to Fletcher as Josef Mengele, the notorious Nazi physician who chose victims for the gas chamber. A week earlier, 51 prominent Aussies, including Nobel Prize-winning author J.M. Coetzee, published a letter condemning the science behind the cull. And just a few days ago, someone registered not-so-subtle anti-cull sentiment by stuffing the bloody carcass of a baby kangaroo—known as a joey—inside Fletcher’s home mailbox.

“They think I personally shoot all the kangaroos!” he says, driving. “How the fuck am I going to shoot 2,500 kangaroos?” Fletcher has a certain manic energy. At 63, he’s fit and cuts a fairly dashing figure, with intense eyes and salt-and-pepper hair. He likes kangaroos, he insists. In fact, he calls them essential to conserving the Australian landscape. Grazing kangaroos create multiple levels of ground vegetation that serve as microhabitats for many plant species. If you removed kangaroos, grass would grow uniformly and other plant species would disappear. On the other hand, too many kangaroos obliterate ground vegetation and threaten smaller

animal species that need healthy grass. This is the case on Canberra’s reserves. Armies of kangaroos have pushed more than a dozen threatened species to the brink. It’s a pretty uncharismatic bunch—the earless dragon, the striped legless lizard, the golden sun moth. Still, a “conservation cull” of a few kangaroos will save these ecosystems, Fletcher says, a fact that escapes the activists targeting him. “I see that joey in my mailbox as a rude e-mail, not a threat,” he says. “Threats from activists? Give me a break.”

We find kangaroos lurking everywhere. At one suburban park, several graze at the edge of a basketball court. At another, a few munch grass near a soccer goal. On the campus of Dickson College, we watch 30 of them gobble up the lawn. This particular mob—the actual term for a group of roos—had to negotiate several city blocks to get here from Mount Majura Nature Reserve, where the grass has been reduced to nubs. Running such a gauntlet reflects their desperation, Fletcher says. Ecologists call it predation-sensitive foraging, when animals living in habitats that can’t support them take more risks to find food. In the wild, hungry kangaroos increase their range despite the danger of encountering predators like dingoes. In this case, the city itself becomes predator—the pavement, the lights, the cars, the dogs. The risks are innumerable.

We watch the Dickson mob in our headlights. For now these kangaroos are lucky. They’ve found dinner and, unlike many of their brethren across the city at this very moment, are not being shot in the head by Fletcher’s colleagues.

I ARRIVED IN Canberra five weeks into the cull, and craziness was erupting all over. Polls suggested that 83 percent of Canberra residents supported the cull, but a very vocal minority did not. Anti-cullers were risking \$5,500 fines to disrupt government shooters, who worked at night when the roos were foraging. Wielding air horns and spotlights, the protesters were running toward gunfire, raising hell, and praying that the shooters would cease fire. On one reserve, a protester had hidden remotely operated speakers that blared the U.S. cavalry charge and “Taps” at regular intervals all night. On another, activists had allegedly destroyed a fence, resulting in the escape and injury of a farmer’s horses from a neighboring paddock.

In today’s Australia, the question of what kangaroos are—pest, resource, untouchable native wildlife—has become extremely contentious. The nation is home to 24 million people and an estimated 60 million kangaroos, and the relationship between man and hopping beast might be the most fraught,

love-hate bond between any two species on the planet. No creature is more closely associated with one nation and its people. Kangaroos adorn Australia's coat of arms, its Olympic flag, its sports teams, and the jets of its national airline. Australians love kangaroos. Except when they hate them, which is not infrequently. Speak to a rancher in rural Queensland and a city dweller in Canberra and you'll hear the same incompatible rhetoric you might hear about wolves in the American West.

Oddly enough, I understood how kangaroos could arouse such conflicting emotions. I'm not Australian, but the animal and I go way back, for better and worse. One night, in 1987, I was camping with friends in the state of Victoria when we hit and killed a kangaroo with our truck on an isolated road. Somberly, we examined the body, only to have the head of a joey pop out of the pouch, look around, and wonder what the hell was going on. We brought it to our campsite, where it proceeded to burrow beneath my friend's sweatshirt and snooze. The next day we delivered it to park rangers. I was smitten. And then, a week later, I was abruptly unsmitten. I was doing my business in the woods, squatting, underwear around my ankles, when a large, blurry object came crashing through the bush straight at me. I wasn't wearing my glasses. Terrified, I tried to run but immediately face-planted. Sprawled on the ground, smeared in my own feces, I watched the kangaroo bounce away. I hated that fucker.

Still, most Americans would probably be shocked to learn that Australia kills three million kangaroos annually. This slaughter is possible for several reasons. First, none of the four harvested kangaroo species—eastern greys, western greys, reds, and wallaroos—are threatened in any way. Secondly, the animal is perfectly adapted to Australia's wildly fluctuating climate, so during multi-season droughts they survive by, among other things, ceasing reproduction altogether. Then, when conditions improve, roo numbers can expand rapidly, and populations are no longer managed by traditional predators like dingoes and Aboriginal hunters. The vast majority are culled as part of a commercial meat-hunting industry tied to the entrenched notion that kangaroos are pests that compete with livestock for grass. Farmers hire marksmen to thin wild kangaroos from their pastures, and the meat is exported to more than 55 countries or sold to Australian grocery stores and restaurants. (Foodies are increasingly extolling a taste that falls somewhere between venison and buffalo.) Kangaroos are not farmed, which means that, after commercial fishing, this cull is the largest for-profit slaughter of free-



Don Fletcher with a tranquilized kangaroo during a sterilization campaign

ranging wildlife in the world. But whether killing for meat production or to protect biodiversity, nearly all of it takes place in Australia's vast, unpopulated interior. Eighty-five percent of Australians live on the coast, while most kangaroos live inland, surrounded by a sparse human population with little interest in their cuddly charms. Last June, a town in rural Queensland began culling after kangaroos laid siege to the local elementary school and parents concluded that they might attack their children. There were no protests to speak of.

Feelings about the kangaroo slaughter in Canberra are more complicated. Located between Sydney and Melbourne, Canberra is the nation's only large inland city. Nowhere else does a highly educated, urban popu-

lation of 169,000 people (390,000 if you include the entire ACT) interact daily with thousands of kangaroos. Seventy percent of the ACT is undeveloped public land, and the extensive nature reserves are prime habitat for a roo population explosion. The animals are everywhere. In 2009, Fletcher was finding kangaroo densities of 510 per square kilometer on some reserves, more than five times the desirable amount for healthy grassland ecosystems. The ACT leads the nation in car-kangaroo collisions, with an estimated 2,000 incidents each year. There are even 90 roos living on the Royal Canberra Golf Course, where, though very rare, harrowing human-kangaroo incidents do occur. In one case, a golfer jogged back to the fourth tee box to retrieve a forgotten driver head cover,

only to have a startled roo chase him flat-out for 200 yards. His foursome buddies had to brandish their irons to stop the charging marsupial, but not before the terrified man vomited all over the fairway. Now the club hires a veterinarian to stalk the course with a dart gun, tranquilize the male roos, and perform in-the-field vasectomies.

In short, Australia's capital is ground zero for kangaroo mayhem. While Fletcher's cull of 2,466 is peanuts compared with the millions that are quietly killed every year in Australia's boondocks, in Canberra people notice. And they've got something to say about it.

CAROLYN Drew and I are sitting in her parked car at the edge of the Pinnacle Nature Reserve in northwest Canberra when we hear a gunshot. We rush to investigate, squeezing through a barbed-wire fence and trekking across a field, dodging rocks and fallen branches in the moonlight. After a while, Drew, a spokeswoman for Animal Liberation ACT, stops and scans the shadowy landscape of this 341-acre reserve. She has no clue where the shooter is. He could be on a neighboring reserve. Or he could be in a suburban backyard with a bottle of Jack Daniel's and his redneck cousins. "Shine your flashlight in the air, wave it around," she says. Shooters aren't allowed to fire if anyone else is on the reserve, and our lights are meant to signal our presence. It feels like a fairly impotent tactic, but we do it. Then we hike back to her car.

It turns out that two nights previously, when I was out stalking kangaroos with Fletcher, his men were here at Pinnacle stalking Drew. She had followed the sound of six gunshots to their source and flashed lights on the shooting crew. The crew gave chase, and Drew hid for three hours behind a gum tree. "There were no shots after that," she tells me now as we walk. "We stopped them!" Drew is lucky she didn't get nabbed. She's a squat, plodding woman, and at 60 she resembles a garden-club president more than the standard-bearer for Animal Liberation. But she's fueled by fierce conviction. She monitors Pinnacle every night during the cull. Her colleagues watch other reserves. Hunting the hunters seems like a needle-in-a-haystack strategy, given nearly 5,000 acres on nine reserves and only a handful of activists. Still, no kangaroo deserves to die, Drew insists, so she's here every night, as a witness if nothing else. "Kangaroos are sentient beings with

feelings, hopes, and dreams," she says. "Do you know how they kill them?"

I do. I had discussed this with Fletcher, who insisted that the cull adheres to strict animal-welfare standards. The ACT's shooters (only one or two work each night, with support crew) must be proven marksmen, and kangaroos must be dispatched with head shots. Surviving pouch joeys are bludgeoned to death with a blow to the head. I'm pretty sure no amount of focus grouping could



Just a few days ago, someone registered not-so-subtle ANTI-CULL SENTIMENT by stuffing the bloody carcass of a baby kangaroo inside ecologist Don Fletcher's home mailbox.



make this sound less brutal than it is. "This might be discomfoting to humans, but we're only concerned with the joeys," Fletcher had told me. "A sharp blow to the head is recognized as the most humane approach."

After 20 minutes on the reserve, Drew and I reach her car and climb in. June is the start of winter in Australia, and it's below freezing out here. We huddle under blankets and wait for more shots. Drew doesn't mind this nightly hardship. At one point earlier in her life, she lived in a tent in the forest with her husband, two dogs, and three donkeys. She gave birth to her son in that tent. She spent her days meditating and communing with the forest animals. "Hunters would come, and we felt what the animals felt," she says. "We were sensitized to their perspective."

Drew became radicalized about kangaroos in 2008, when the Australian military conducted a cull at the decommissioned Belconnen Naval Transmission Station in north Canberra. There were 650 roos living on one square kilometer of grassland, and officials determined that they were wreaking ecological havoc. Over several days, wranglers herded them into a corral with 12-foot-high fencing, tranquilized them, and administered lethal injections. Unfortunately, this happened in broad daylight, and Canberra stopped on their way home from work

to watch. Like cats, kangaroos refuse to be herded. They ran into poles. They ran into each other. Joeys were ejected from pouches. "Lots of people are still suffering PTSD from seeing that," Drew says. "The fencing was covered with burlap bags, but we could see the shadows of the kangaroos. The big boys were trying to clear the fence. It was like this horrific shadow-puppet show." They culled 514 roos. Drew was arrested for throwing rocks. Even Fletcher conceded that it was an unfortunate event. "I don't think anyone associated with that cull would want to see it happen that way again," he said.

In 2009, the ACT government announced it would begin culling kangaroos for conservation purposes. A government report concluded that 20 percent of the ACT's native grassland sites were in "critical condition," with another 40 percent approaching that. Scientists reported that 19 threatened animal species on Canberra's reserves require healthy grass to survive. Drew and others didn't buy it. "Kangaroos have been around forever," she says. "They're a native species. They're going to drive other native species to extinction?" The government insisted this was possible, given that large urban kangaroo populations now lived hemmed in by roads and subdivisions. Officials also stressed that this cull had nothing to do with the commercial kangaroo-meat industry. Only four of Australia's eight states and territories have commercial culls, and the ACT is not one of those. No one would profit from the ACT cull. The bodies would be buried in an undisclosed pit.

In both 2013 and 2014, activists delayed the start of the cull for several weeks with legal challenges, alleging that the killing was inhumane and based on faulty science. They argued that the annual growth rate for kangaroo populations was around 5 percent, not the 40 percent Fletcher had posited. They said that roo numbers in the ACT were shrinking, not exploding. Urbanization is wiping them out. If the competing narratives presented in court were startling in their differences, they were downright hilarious when the court reviewed the population data submitted by both sides. For example, at Goorooyarroo Nature Reserve, the government counted 1,173 kangaroos; the anti-cullers counted 280. At Mount Majura, the government counted 1,242; the anti-cullers, 80. Ultimately, the court ruled for the government, which had the backing of pretty much the entire scientific establishment in Australia, and when the 2013 cull took place, 728 kangaroos were culled from Goorooyarroo, nearly three times the number that activists claimed lived there. The anti-cullers insist that even if the government's popula-

tion estimate was accurate—which they refuse to concede—killing 728 out of 1,173 roos would devastate the population there.

As we shiver beneath blankets in her car, Drew admits that it's hard, year after year, tramping into the bush in freezing weather at night, risking arrest, and having little to show for it. Since 2009, the government has slaughtered more than 10,000 kangaroos. (Some 1,689 would ultimately be killed in the 2015 cull.) The legal process has achieved squat. And many of her fellow activists, Drew reckons, have simply been too traumatized to return to the fight. In 2012, for instance, in a driving rain, some visiting activists from South Australia discovered the pit where shooters had buried the bodies. Who wouldn't be disturbed seeing those soggy, bullet-ridden carcasses in the mud? "Realistically, we can't make much of a dent," Drew acknowledges. "I go out every night not necessarily to stop death but to challenge the civilization project, which is squeezing the life out of animals."

THE "CIVILIZATION project" in Australia began about 50,000 years ago, when Aboriginals arrived and found not only the large and small species of macropods that exist today—kangaroos, wallabies, pademelons, and others—but a subfamily of giants called sthenurines. The largest, *Procoptodon goliah*, stood ten feet tall and weighed 550 pounds. So big was this pouched monster that it was mechanically unable to hop. Instead, it ambled about upright on the hoof-like tips of its back feet and ate tree foliage. Aboriginals feasted on the sthenurines, to the point where none were left when the first British fleet of convicts, marines, officials, and their families sailed into Sydney Cove in 1788.

These first Europeans brought sheep and cattle, but they were reluctant to eat them before herds could be established, making kangaroos essential. Kangaroo grounds were designated for hunting, and wealthy families hired their own shooters. Kangaroo was a key part of convicts' rations. "They were highly valued," says Ray Mjadwesch, an ecologist who has studied the history of kangaroo-human interaction. "People didn't hate them. It took 80 years for that hatred to set in. People had immense pride in kangaroos. They sent them live back to Britain."

Once the colonies had raised sufficient livestock herds, people killed kangaroos mostly for recreation, mimicking British fox-hunting. Well-dressed gunmen on horseback galloped across the countryside with dogs chasing kangaroos. Paintings of the time show frilly ladies picnicking while their men blast away.

By the second half of the 19th century,



Roo defender
Carolyn Drew
at the Pinnacle
Nature Reserve

farmers began complaining that kangaroos were outcompeting their livestock for grass. An article in the *Geelong Advertiser* in 1867 argued for the "wholesale destruction" of kangaroos. Farmers resorted to battues, highly organized hunts in which lines of men drove kangaroos into a huge stockade that narrowed to a smaller corral. Edward Wakefield, a colonial official, wrote about a battue he participated in on a friend's sheep farm, where dozens of horsemen armed with clubs pushed countless kangaroos for miles toward an enclosure:

Steadily we rode after them, farther and farther into the enclosed and constantly narrowing space, until the whole surface of the ground was literally covered with kangaroos, so closely packed that they could not leap. Then, at a signal which

ran rapidly along the line, all the younger and more active men charged into the mass, striking right and left with their clubs and felling a kangaroo at every blow. ... I got into the swing and slew and slew and slew, until my arm ached so I could not slay any more. By this time my dirty clothes and my horse were smeared and splattered with blood and we looked as if we had waded through a river of gore.

They killed 40,000 kangaroos and left the bodies to rot.

In 1876, Henry Bracker, a Queensland farmer, initiated a battue that in six weeks killed more than 17,000 kangaroos. Bracker became a folk hero in rural communities and inspired similar slaughters. His effort also prompted a resolution in the Queensland legislative assembly, calling kangaroos "an

evil of such magnitude ... as to demand the immediate and earnest attention of the Government." In 1877, Queensland passed the Marsupial Destruction Act, a bounty program that by 1930 resulted in the eradication of 27 million animals, mostly kangaroos. By the 1880s, all the states in eastern Australia had bounty programs.

Somehow, despite their pest status, kangaroos still remained part of the proud Australian sense of identity. In 1908, Aussies added the kangaroo to their national coat of arms. During World War I, troops smuggled kangaroos to Europe as mascots. In World War II, they featured in propaganda campaigns. TOGETHER FOR VICTORY posters showed a boxing kangaroo and an English bulldog attacking a Japanese soldier.

But in rural Australia, the slaughter continued. By the 1950s, with advances in refrigeration, a meat trade developed. Exports supplied markets for both pet food and human consumption. At the same time, budding environmental and animal-welfare movements were materializing in the U.S. and Europe. In 1974, the U.S. banned the import of kangaroo products, citing concerns over welfare and sustainability. Australia responded by instituting strict hunting quotas and a code of conduct that required, among other things, that kangaroos be dispatched with bullets to the head. The U.S. rescinded its ban in 1981, and you can now buy kangaroo leg and loin on Amazon, although some states, like California, still prohibit the import of kangaroo products.

More recently, scientists have challenged the notion that kangaroos compete with livestock for forage, citing a lack of empirical evidence. The linkage is so squishy that no numbers exist on how much damage roos may have caused over the years. Increasingly, ecologists are viewing the kangaroo not as a pest to be managed, but as a valuable product to be conserved through a sustainable-use framework, similar to wild fish stocks. In most Australian states, kangaroo-management plans are now less about property-damage mitigation and more about maintaining healthy roo populations.

Still, as Australia has evolved into an urbanized society, the country's environmental and animal-rights movements have become stronger, more vocal, and more insistent that kangaroo culling should stop altogether. The Green Party is now the third most powerful political party in the country, and

this year its branch in the state of New South Wales condemned the ACT's conservation cull. Ironically, that cull is overseen by an ACT Green, a cabinet minister named Shane Rattenbury. Rattenbury once coordinated antiwhaling campaigns for Greenpeace. Now he supervises the killing of a couple thousand roos every year in Canberra. The cull has exacerbated the split between the party's conservation and animal-welfare wings. "The conservationists look at it holistically," Rattenbury says. "We can't go back in time and undo development. We have to do what we can to conserve species. The welfare people are against killing animals." Not surprisingly, Rattenbury receives a daily barrage of Twitter hate. "It's fueled by inaccuracy," he says. "I get tweets saying, 'Stop burying joeys alive!'"

Roos rarely attack people, which is a reassuring way of saying that they sometimes do. Maybe it was bad karma, then, when Rattenbury went for a morning run in 2013 and



I meet a wallaroo named Princess Rosalinda.

EVERYWHERE, KANGAROOS LIMP AROUND WITH BANDAGES ON THEIR LEGS, TAILS, OR FEET. Most will recuperate and return to the wild. The excessively hobbled will remain as pets.



collided with a roo rounding a hedge. The animal clawed the hell out of his legs, sending him to the hospital. Rattenbury posted photos of the wounds on social media, and images of his diced-up thighs appeared in newspapers around the world.

POLITICALLY speaking, anti-cullers have few better advocates than Steve Garlick, a retired ethics professor at the University of Technology Sydney who founded Australia's Animal Justice Party in 2009. Infuriated at the Greens, Garlick determined that "the only language these people understand is taking away votes"

I drive out to visit Garlick, who lives just over the ACT border in New South Wales, amid bucolic wine country. But when I arrive, he's flying out the front door, headed on a rescue mission. Garlick runs Possum-

wood Wildlife Recovery Center, and he's just learned about a kangaroo lying motionless off a dirt road in a nearby vineyard. We pile into his station wagon and take off. We find the animal sprawled beneath a tree, 30 feet from a rusty wire fence. Garlick feels along the kangaroo's flank. "Hello, boy," he says, softly. "He could have tried to hop that fence. Maybe he fractured his pelvis." Garlick injects it with a sedative and we load it into the car.

"There's not much you can do for a fractured pelvis," he says, driving. "You can give them an antipsychotic, which reduces anxiety. We'll give him physiotherapy." Garlick and his wife, Rosemary Austen, rescue about 300 animals a year, two-thirds of them kangaroos, most of them injured by run-ins with cars and fences. Except in extreme cases, they don't euthanize animals.

On Garlick's property, two modest houses stand next to each other. One he shares with his wife. The other is shared by 60 kangaroos. They're not all inside at once. Some enjoy the veranda. Others mosey about the backyard. But they come and go through the sliding-glass back door as they please. We enter the living room and find two lounging on recliners, one on the love seat, and one rummaging through the kitchen. One bedroom is occupied by a large wombat, and another serves as a treatment room, where two injured roos lie on cushions. We carefully lower the latest rescue between these two. "There you go," Garlick reassures it. "Want some water?" He offers the roo a bowl. The roo hisses.

Out on the veranda, ten roos are chilling on La-Z-Boys and piles of hay. Garlick introduces me around. Coco has two torn Achilles tendons. Sally recently had her cataracts removed. Noah is awaiting ankle surgery. Every patient has a name. I meet a wallaroo named Princess Rosalinda. Everywhere, kangaroos limp around with bandages on their legs, tails, or feet. Most will recuperate and return to the wild. The excessively hobbled will remain as pets. A small female named Cheeky sniffs my shoes. A year ago, Garlick found her tangled in a wire fence. "She was the most dehydrated, maggot-infested thing I've ever seen," he says. "Anyone else would have euthanized her." She lost her toes and now moves awkwardly in little cloth booties.

We sit in the living room to chat. It's an unusual interview. Kangaroos amble in, sniff about, and leave. One snuggles next to Garlick. Another nibbles my notebook.

In his academic career, Garlick researched the emotional lives of kangaroos. As a result of the culling, he says, those on ACT reserves exhibit anger and hypervigilance. They play less. Many suffer PTSD. If there's an overpopulation problem, they could clearly be relocated. "We've moved 3,500 kangaroos over



Steve Garlick caring for a joey named Fred at his wildlife rehabilitation center

the years,” he says, referring to his rehabilitated patients. “We’ve got a 97 percent survival rate.” (Fletcher says this solution would only “move the problem somewhere else.”)

Garlick has a plan to end culling, and he’s attacking on multiple fronts at once—legal, economic, and political. He calls the administrative tribunal where the ACT cull was challenged “a joke.” He’s assembling a supreme court challenge. “I’ve got a pro bono barrister on this,” he says. “I can’t stop the cull happening now, but we’ll stop the next one.” He also wants to shut down the larger commercial cull. In 2009, Garlick was part of a group that persuaded Russia to ban kangaroo-meat imports after testing showed elevated levels of *E. coli*. Russia was the biggest importer, providing the industry \$180 million a year. Australian politicians lobbied successfully to reverse that decision in 2012, but in 2014 Russia reinstated the ban after encouragement from Garlick and others on the *E. coli* issue. “Our worry now is the Chinese,” he says. Australia has a new free-trade agreement with China, but kangaroo meat is not a part of that. Still, with market demand

seriously dented by Russia’s pullout, Australia is pressing China hard on the product.

The solution, ultimately, may be political. Garlick’s Animal Justice Party claims a fast-growing membership of 5,000 people, and earlier this year they celebrated their first election victory, sending a candidate to the New South Wales state legislature. Soon that legislator, Mark Pearson, will travel to China to lobby officials there against importing kangaroo. The commercial cull will end when more people like Mark Pearson get elected, Garlick says. “Our leaders walk beneath our coat of arms every day and turn a blind eye,” he says. “Horrible stuff is done under the cover of night, and they support it.” He strokes the roo sitting next to him and adds: “It’s a barbaric industry, run by thugs.”

I WANTED TO see for myself if the commercial industry is run by thugs, so I contacted David Coulton, a professional kangaroo shooter in rural Queensland who goes by Cujo. Cujo didn’t seem very thuggish over e-mail. He seemed nice. In fact, he gave me some great advice that I wish I’d taken.

Whatever I do, he warned, don’t drive the four-hour leg from Torrens Creek to Aramac after sundown. Aramac, Cujo’s hometown of 300 people, sits at the edge of the desert in the middle of nowhere. Just getting to Torrens Creek involved a four-hour flight north from Canberra to Townsville and then a three-hour drive inland. By the time I start down the road to Aramac, it’s dark.

The road is sometimes paved, sometimes not. There are no towns, no lights, no cell reception. An hour in, the kangaroos appear, first the dead ones. They’re scattered along the roadside—whole bodies, stray legs, stray tails, and random heaps of pulpy viscera. It’s nonstop roadkill. The live roos materialize out of the blackness in midhop, springing across my tunnel of vision individually and in pairs, darting one way, then the other, making me swerve, making me slow down, near miss after near miss, for miles. I grip the wheel. I focus. Except when, for a second—less than a second—I look away, reaching for my water bottle, and *thump!* I nail a wallaby, plow right over it. Dead. The little guy wasn’t two feet tall. He was innocent. I stop. Aside



▶ David "Cujo" Coulton in the cab of his truck

from the wallaby, the only damage is to my spirit. An eastern grey would have totaled my rental, so I'm lucky there. But I feel terrible.

I keep driving. The roos keep coming. In the ghostly half-light on the sides of the road, they assemble in great mobs, watching me, challenging me. I drive for two more hours, bleary-eyed, past darting roos and endless carnage. The road is death.

CUJO URGES ME not to worry about the wallaby. We're driving the next evening to one of the properties where he's in charge of thinning the kangaroos. "Every property in this shire has a shooter," he says. "A landowner may have no kangaroos one week, but he'll have tens of thousands the next, and wallabies. They'll mow down his grass."

Kangaroos are just one of Aramac's problems. A drought has gripped central Queensland for three years, turning the landscape brown. Farms are going under. Aramac once had seven full-time sheep-

shearing teams, 13 people each. Now one guy shears full-time. Then you've got dingoes eating sheep and roos stealing grass. Ecologists may say there's no evidence that kangaroos compete with livestock for grass, but don't tell folks here that. This morning a farmer, Louellen Hannay, showed me a dusty stretch of her property and said, "We used to run cattle and sheep in that paddock, but the roos have completely flogged it."

The Queensland government conducts an annual aerial kangaroo count to determine hunting quotas. This year, Aramac is allotted 800 per week. Cujo, one of four full-time shooters here, hunts sundown to sunup, every night except Sundays and Christmas. He bags 4,000 to 6,000 roos annually. Cujo tells me that officials regularly remind shooters to avoid journalists, but he sees no reason for secrecy. "I welcome media, greenies, everyone," he says as we barrel along in his white Toyota Land Cruiser, the words OUTRIGHT CRAZY emblazoned across the top of

the windshield. "I've got nothing to hide."

Indeed, Cujo is an open book. His tattoos size him up pretty well—a wild boar on his calf, two roos on his torso, and Aramac's postal code on his right biceps. He's bald, with a bushy mustache. Rather than shy away from controversy, he says the meat industry should be touting its rigorous standards. His gear is inspected regularly by the same government agency that regulates butchers and restaurants. Cujo has his own standards as well. He's allowed to kill 63 roos a night, but he typically stops at 40. "It's about sustainable harvest," he says. "I want my son to live this life." He insists that kangaroos are superior to any other animal and that the meat can all but raise you from the dead. "It's the free-range king," he says. "It's high-protein, low-fat, no-chemical, super-strength meat. You can't get cancer if you eat it."

When we arrive at the property, we lower the hinge-mounted windshield and turn on the spotlight fixed atop the cab. Motor-

ing slowly along, Cujo steers with one hand and operates the spot with the other. A small red kangaroo bounds by. Several more appear, greys, all female. We approach some acacia trees, and a small mob hops out. Cujo stops the truck. The roos freeze in our light, 25 yards away. While still seated behind the steering wheel, he shoulders his 223 Remington and peers through the scope. *Crack!* The largest roo jerks and falls. The others scatter. We drive up and find the animal with a halo of blood expanding around its head. Cujo drags it to the back of the truck, snips off its right foot with bolt cutters, runs a hook behind the Achilles tendon, then hoists the carcass onto a horizontal bar. He runs a knife from the sternum to the crotch, opening up the roo and removing the innards. He tosses those into a bush.

On his second opportunity, a big red 100 yards off, Cujo misses. He won't miss again all night. Thirty seconds later, the big boy stops and stares at us again. *Crack!* Cujo blasts the third roo on a fence line. The fourth and fifth he drops from the same mob, in rapid succession. The sixth he nails 200 yards away. He frees his two dogs, Roxie and Ugly, to find it. Sitting next to Cujo, I soon become numb to the slaughter and transfixed by the accuracy, speed, and efficiency with which he kills. The man is presiding over his own Red Wedding on House Roo.

By 10 P.M. we have eight carcasses, and Cujo announces that it's time for a "gut-up." I'm confused. Hasn't the whole evening been one big gut-up? I quickly learn that there's a second part to the butchering process. With the bolt cutters, he goes down the row of hanging roos and prunes each left foot with a quick chop. Then, with a knife, he removes the heads and tails. We leave these amputations scattered on the ground, including the eight little heads, their eyes clotted with blood and dirt staring blankly at the stars.

Cujo is just warming up. Several dead roos later, in the middle of our second gut-up, a wild boar sprints through our idle spotlight. Roxie and Ugly tear after the pig. We give chase in the truck, and moments later anguished screams pierce the night. We find the brave mutts with their jaws locked onto the pig's face, despite its four-inch tusks. The animal is black and hairy, nearly six feet long and maybe 200 pounds. Cujo grabs its back legs, shakes off the dogs, then dives onto the back of the great beast, plunging a knife into its jugular. There's more screaming, then



Target in sight: a roo lit up by Cujo's mounted spotlight



Maybe it was bad karma when a PRO-CULL CABINET MINISTER WENT FOR A MORNING RUN IN 2013 AND COLLIDED WITH A KANGAROO. Images of his diced-up thighs appeared in newspapers around the world.



silence. Cujo is soaked in blood. He guts the boar and cuts out the teeth with his bolt cutters. A trophy. "Pretty nice pig," he says.

By 3 A.M., we're back in Aramac at Cujo's "chiller," a shipping container serving as a deep freeze. A hundred roos already hang in here. We add 37 more, the largest a red weighing 90 pounds. The processor's truck comes from Brisbane once a week. Cujo used to earn 45 cents per pound, but then Queensland's nine processors consolidated. Now he earns 27 cents. I need sleep, so much so that I apparently start hallucinating, or at least Cujo tells me I'm hallucinating. I thought I was looking at 37 decapitated kangaroos dangling

upside down from hooks. But Cujo says I'm looking at money. "That's five, six hundred dollars," he says. "A good night."

THE NEXT DAY, I'm leaving Aramac when I notice something more grisly than anything I'd seen here, if that's possible: five dead dingoes hanging on a barbed-wire fence outside town. Cujo mentioned this, a means of "bush communication," he called it. In this instance, the community knew that five dingoes were eating sheep on this property, and with the appearance of each carcass, folks learned that the threat level was decreasing. That may be. But as I observe the gruesome display, I have to think that the message is really meant for the greater cosmos, from a desperate people with little sway over powerful outside forces—climatic, economic, ecological. The message is that, despite everything, WE ARE IN CONTROL.

I drive east into the morning sun, distancing myself from the blood rituals of rural Australia. As I pass miles of roadkill, I think about the fluffy stuffed kangaroo I'll buy in the airport for my seven-year-old. It will no doubt have a joey in the pouch, and maybe a bush hat or a little Australian flag. It will be bloodless and meatless, and it will chomp nobody's grass. No one will hate it. Everyone will love it, especially my kid. **O**

PAUL KVINTA WROTE ABOUT RHINO POACHING IN SOUTH AFRICA IN THE APRIL 2014 ISSUE.

up
is the

new
down

SKI-MOUNTAINEERING RACING, A.K.A. SKIMO, IS A HIGH-ALTITUDE, LUNG-BUSTING CHALLENGE IMPORTED FROM EUROPE, AND IT HAS BECOME ONE OF THE HOTTEST WINTER SPORTS IN NORTH AMERICA. WHY? BECAUSE THIS PURSUIT PROVES THAT PREMEDITATED SUFFERING CAN BE HIGHLY ADDICTIVE.

by
NICK
HEIL

Skimo competitors
at the Power of
Four race in Aspen



BY THE TIME I CATCH UP TO JENN SHELTON, AN ULTRARUNNING STAR FROM COLORADO, SHE'S ON HER BACK IN A DITCH NEXT TO THE TRAIL, COVERED IN SNOW.

She's wearing a white and purple racing onesie, a beanie, a headlamp, clear-lens glasses, and gloves. Skinny mountaineering skis are attached to her lightweight boots, the bases aimed at the night sky, her arms and legs writhing like a flipped beetle's.

"Help! Help me!"

I can't tell if she's laughing or crying, maybe both. It's three o'clock on a late March morning in 2014, and it's cold—as in scary cold, maybe 15 below. It's been snowing for days, but now a swath of bright stars sparkle overhead. I reach down and give her a hand up, anxious to keep moving, even though I'm exhausted and just want to stop. We're ten miles into the Gore-Tex Grand Traverse, a 40-mile, 7,800-vertical-foot backcountry ski race that departed from Crested Butte, Colorado, at midnight and will finish in Aspen later today.

Because the terrain is remote and dangerous, you're required to race with a partner. Shelton and I teamed up just a couple of weeks ago, when her original teammate bailed. With so little time to prepare, my training for the Grand Traverse essentially consisted of eating a couple of salads and buying heat-moldable insoles for my boots. Shelton, a top-shelf athlete who set a world record for a 100-mile trail run, is petite and jackrabbit fast on climbs, but she hasn't skied all that much and crashes often. I'm a plodder with zero records to my name, but I move fast downhill, which allows me to catch up. We've been inchworming through the dark like this for hours.

I'm chasing Shelton through the frigid high country because I have a skimo problem. "Skimo" is short for ski mountaineering, in this case ski-mountaineering racing, a masochistic winter sport that, for reasons I don't fully grasp, I've become obsessed with. I'm not the only one. Big-name runners like Shelton have also taken to the sport, and in some cases they've owned it—among them Kilian Jornet, Rob Krar, Emelie Forsberg, and Stevie Kremer, to name just a few.

The influx of high-profile runners is one reason skimo's popularity has spiked in the past couple of years. And it's not just at marquee events like the Grand Traverse. Last winter, in Summit County, Colorado—home to several ski areas, including Breckenridge and Arapahoe Basin—dozens of people rou-

tinely showed up at 7 A.M. for a Tuesday recreational series at A-Basin, some driving two hours from Front Range cities before work. A weekly race series in Brighton, Utah, has grown from a dozen or so competitors to more than 120. Last year, when registration opened for the Grand Traverse, the race hit its 200-team limit in 24 hours—at \$400 per team. "All our events have doubled or more than doubled," says Joe Risi, director of the COSMIC race series, in Colorado and New Mexico, the largest skimo series in North America. Something's happening with this sport, and it's happening fast.

UPHILL SKIING, lightweight touring, and "fitness skinning" are all part of this burgeoning branch—particularly when it's done in-bounds, which is safer and often more convenient than the backcountry. This kind of ski mountaineering has become popular enough that even general-audience media like *The New York Times*, *The Wall Street Journal*, and NPR are paying attention. "Today, people skin to reach isolated sections of a mountain," the *Times* wrote in December 2014, "to search out fresh, deep powder or for the calorie-torching workout."

I read the report with a smile. Ski touring for fun and fitness isn't exactly new; I've been doing it, along with many of my friends, for nearly two decades. Of course, I

THE CONVERGENCE OF IMPROVED EQUIPMENT, A LIVELY NEW COMMUNITY, AND POSSIBLY SOME SORT OF ADULT-ONSET COMPETITION DISORDER HAS LURED ME BACK AND IGNITED MY QUEST TO GET GOOD AT SKIMO.

live in northern New Mexico, about 30 minutes from uphill-friendly slopes, so I have to remind myself that ski touring is, in fact, unfamiliar to a lot of people who don't live in mountain towns. It's hard for me to imagine such impoverishment, but skinning up for a powder run before work still isn't part of most people's weekly routine.

Skimo, sometimes called rando racing (from *randonné*, a French term for ski touring), sits at the fanatical edge of this activity. Many people, like me, come to the sport through casual adventuring and early-morning skin-up workouts. It isn't much like

skiing, at least in the traditional downhill sense, or even mountaineering. In Europe, where the sport originated, it's sometimes called ski running, though mountain-bike racing might be a better analogy.

Almost everyone who's serious about skimo racing wears a body-hugging Lycra outfit. The events involve hoofing up tall peaks, often for several thousand vertical feet, using mohair climbing skins to grip the snow. At the top, in a hypoxic swoon, you rip off the skins, affixed to the bottom of your skis with a tacky, reusable glue, stuff them in your stretch top, and then blast downhill.

The latest skis—hyperlight and about half as wide as what you ride at a resort—perform surprisingly well once you get used to them. But they're so narrow and hard to handle that on several occasions I've unintentionally executed spectacular high-speed cartwheels in the middle of a run, sometimes cratering, sometimes landing back on my feet, hardly slowing down.

I've dabbled in races on and off for several years. Recently, the convergence of improved equipment, a lively new community, and possibly some sort of adult-onset competition disorder has lured me back and ignited my quest to get good at skimo. The race I did with Shelton in 2014 was the fourth time I'd done the Grand Traverse, though my previous one was seven years prior. Now here I am

again, standing next to my partner, who's on the ground trying to pull stretch pants over her boots. One boot has become stuck in a pant leg. It looks like a python is swallowing a piglet.

"I'm fucking freezing!" she says, thrashing.

So am I. My sweat-damp race suit has leached the last heat from my body, and I start shuddering violently, teeth clacking. My hands have frozen into claws inside my lightweight race gloves. Our situation feels desperate already, and we have a long way to go. Even fast teams can take ten hours; we'll be lucky to make it in twelve.

Upworthy

Ski mountaineering's best gear and accessories —N.H.

(1) **Dynafit's 175-gram TLT Superlite bindings** (\$550; dynafit.com) are about as minimalist as you'll find. They come with removable brakes to lighten your haul on race day, and front and heel have adjustable releases for those extra-bad biffs. (2) The synthetic **CAMP G Comp Wind Power gloves** (\$100; camp-usa.com) offer warmth with great race features, including a wind-proof overmitt that tucks away when not needed. (3) **Light and Motion's Solite 250 EX headlamp** (\$180; lightandmotion.com) is versatile and powerful, and it provides four hours of 250-lumen light, brightening any nighttime powder run or skin track. (4) **Backcountry Access's Tracker 3 avalanche transceiver** (\$335) is its smallest, lightest unit to date, and the reliable **EXT shovel** (\$50) and **Stealth 270 probe** (\$55; backcountryaccess.com) round out a race-worthy rescue kit. (5) The essential **CAMP Flash Competition Anorak** (\$120; camp-usa.com) is

built from tough, windproof fabric and deploys on the fly from a hip pouch—without removing your backpack. (6) New colors and a re-vamped leg design to fit race-boot buckles highlight **Dynafit's Radical Racing suit** (\$250; dynafit.com), which includes plenty of stow pockets for skins, food, and accessories. (7) **La Sportiva's Syborg boots** (\$749; sportiva.com) are light (800 grams), versatile footwear that won't blow your budget for the season. A lever switches from ski to walk mode with an impressive 75 degrees of articulation. (8) **Smith's PivLoc Arena sunglasses** (\$159; smithoptics.com) fit securely, resist fogging, and come with swappable clear lenses for night missions and races. (9) **Dynafit's Performance beanie** (\$30; dynafit.com) is made of brushed

polyester to provide high-output head warmth and fits easily under a helmet. (10) One of the lightest lids in the world, **CAMP's Speed 2.0 helmet** (\$120; camp-usa.com) doesn't compromise on safety, while ample vents provide a working chimney for all the heat you generate in a race. (11) **POC's Retina Big goggles** (\$155; pocsports.com) deliver a massive field of view with quality optics—just what you need when blasting race turns at the end of the day. (12) The **CAMP Alp racing harness** (\$50; camp-usa.com) offers a bulk-free way to tether a partner or protect you on exposed sections of the course. (13) The

anatomical, low-profile cut and minimalist build of **Dynafit's RC 28 backpack** (\$140; dynafit.com) doesn't sacrifice features like an external bottle holster and a ski-carry system. (14) **Pomoca's Pro Race skins** (\$150; pomoca.com) are some of the lightest and most durable on the market. (15) **Dynafit's PDG skis** (\$700; dynafit.com) get an upgrade with a new carbon-flex tip to drop weight and ease turning.





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Shelton gives up on the stretch pants, and I manage to fish my side-zip overpants out of my pack and help her into them. Then we're off again, shuffling in tandem while I gnaw on a frozen gel block. I can see a few headlamps in the distance, creeping up the headwall of the first huge mountain pass. Daybreak seems achingly far away.

Eventually, we make it, even though I've bonked so hard by the end that the only thing propelling me is Shelton's "secret fuel," which turns out to be Starbucks Via Caramel Flavored Iced Coffee mixed in a water bottle.

(The tricks of the pros!) We finish in roughly 12.5 hours, good enough for 66th out of 141 teams. I think: What if I had actually trained?

IN THE OFF-SEASON, the spring and summer of 2014, I ride my mountain bike, lift weights, even start running, which I hate but accept as a necessary evil. When fall arrives, I sign up for a bunch of races, seven in all, including the Grand Traverse and another monster, the Audi Power of Four, also in Colorado, which involves climbs on Snowmass, Buttermilk, Aspen Highlands, and

Aspen Mountain—24 miles and more than 10,000 feet. It's terrifying. Fear drives my intervals until the snow flies.

I arrive at my first race in February 2015, held at the local hill in Santa Fe, my hometown, kitted out in a flashy orange and black speed suit that makes me look like Tony the Tiger. I'm feeling confident, given my diligent work in the preceding months. The starting gun fires, and I take off with the lead group. The initial pace is shocking, nearly a sprint. We boogie up a cat track and then turn into the woods on a single-file skin track.

I'm in front! But not for long! After a minute or two, I pull off the track and double over, gasping, as twenty, maybe thirty racers fly by me. Suddenly, I'm alone, and it's all I can do to keep moving. After a little while, a lanky guy on clunky old telemark skis, dressed in baggy clothes, scoots by. I catch a waft of cannabis.

"Going up sucks!" he says. He was DFL—dead fucking last—and now I am. My goal for the season is to compete in one of the big European races, where they draw Tour de France-size crowds on the high ridges, feasting on fondue and clanging cowbells. Yet here I am, getting thumped by stoned hippies on my home turf. I'm tempted to quit the sport forever, but I don't.

VERTICAL GAIN

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	MON	TUES	WED	THURS	FRI	SAT	SUN
WEEKS 1–4	Off	1 hour; moderate effort	1 hour; moderate effort	Off	1 hour; moderate effort	1 hour; moderate effort	2–3 hours; moderate effort
WEEKS 5–8	Off	1 hour; intervals, hard effort	1 hour; intervals, hard effort	Off	1 hour; intervals, hard effort	1 hour; intervals, hard effort	3–4 hours; intervals, mod. effort
WEEKS 9–11	Off	1–1.5 hours; intervals, hard effort	1–1.5 hours; intervals, hard effort	Off	1–1.5 hours; intervals, hard effort	1–1.5 hours; intervals, hard effort	3–5 hours; longer intervals, mod. effort
WEEK 12 (TAPER)	Off	45 minutes; intervals, moderate effort	45 minutes; intervals, moderate effort	Off	45 minutes; intervals, moderate effort	Race day	Off



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IF YOU GET SERIOUS ABOUT SKIMO, ALL ROADS LEAD TO EUROPE, WHERE THE SPORT IS MORE ESTABLISHED BY SEVERAL ORDERS OF MAGNITUDE. THE ORIGINS THERE GO BACK TO ARMED-FORCES TRAINING IN THE ALPS DURING THE EARLY 1900S.

CLOCKWISE FROM TOP LEFT: Montana's Whitefish Whiteout; ultrarunner and skimo racer Mike Foote; Rob Krar; Montana racer Lauren Jarosz; pre-race course work in Crested Butte, Colorado; Kilian Jornet at the Ski Mountaineering World Cup

If you get serious about skimo, all roads lead to Europe, where the sport is more established by several orders of magnitude. The origins there go back to armed-forces training in the Alps during the early 1900s. In 1924, the winter Olympic Games in Chamonix featured an event called Military Patrol that

was a mashup of modern skimo and biathlon, involving a rigorous 30-kilometer alpine course with target shooting at the top. The oldest race of this kind still around today is Italy's Trofeo Mezzalama, created in 1933 and run every two years in Italy's Valle d'Aosta, in the shadow of the Matterhorn. The Italians take their skimo seriously, and the Mezza remains one of the burliest races anywhere.

The event is named after Ottorino Mezzalama, a decorated Italian army captain who is considered the grandfather of ski mountaineering. He was well regarded by his soldiers, but in private he was a melancholy bachelor who lived with his mother. "Who do you think will marry me?" he would lament to her. "I'm too ugly and I haven't got time: one finds a wife on Sundays, and on Sundays I am always alone and at high altitudes."

Mezzalama's great dream was to pioneer a ski route across the Alps, something he called, for reasons unknown, "the Path of the Year Two Thousand." In 1931, in his early forties, after years of touring and exploring, Mezzalama died in an avalanche. In a final dispatch, published posthumously, he wrote, "Knowing how to **continued on page 135**

CATALOG OF PAIN

A select list of North American skimo races. The calendar gets busiest in February and March.

NOVEMBER

11/22: Wolf Creek COSMIC Skimo Race, Wolf Creek Ski Resort, Colorado

11/26: Wasatch Citizen Series begins, Brighton Ski Resort, Utah

DECEMBER

12/5: Irwin Guides Griggs Orthopedics, Crested Butte Mountain Resort, Colorado

12/18–20: Grand Traverse Skimo Academy, Crested Butte, Colorado (training for the Grand Traverse in March)

JANUARY

1/9: The Heathen Challenge, Sunlight Mountain Resort, Colorado

1/16–17: Wyoming Rando Roundup, Jackson, Wyoming

1/23: Devine Incline Skimo Race, Powderhorn Mountain Resort, Colorado

1/23: The Beast Northeast Rando Race Series, Berkshire East Ski Resort, Massachusetts

1/27: The Bolt Northeast Rando Race Series, Mount Greylock, Massachusetts

FEBRUARY

2/2: SIA Uphill/Downhill Challenge, Copper Mountain, Colorado

2/6: Santa Fe Fireball, Santa Fe, New Mexico

2/7: Rio Hondo Rando Raid, Taos, New Mexico

2/12–14: U.S. Ski Mountaineering Nationals, Crested Butte Mountain Resort, Colorado

2/27: Audi Power of Four, Aspen, Colorado

MARCH

3/4–6: Wasatch Powder Keg, Brighton Ski Resort, Utah

3/5: Jay Peak Rando Race, Jay Peak, Vermont

3/12: Five Peaks, Breckenridge, Colorado

3/12–13: The Magic USSMA National Series Weekend, Magic Mountain Ski Area, Vermont

3/20: Mad River Valley Skimo Race, Sugarbush Resort, Vermont

3/25–26: Gore-Tex Grand Traverse, Crested Butte Mountain Resort, Colorado

APRIL

4/2: Cody's Challenge, Steamboat Springs, Colorado

YOUR ADVENTURE AWAITS



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SKIMO **continued from page 128**

get the most out of one's skiing capabilities at altitude and on long excursions, requires training that is by no means brief, and the closer to perfection one's technique the greater the results will be. ... Only after long usage and many crossings can all the miraculous results possible with skis be achieved."

THIS IS WHAT I'm after, Mezzalama's "miraculous results." At its core, skimo speaks to a higher purpose—moving with speed and efficiency through rugged, sometimes dangerous terrain. The races are a contrived form of real ski mountaineering, but they allow you to push closer to the edge. You get to assess how well you've prepared and whether you can keep yourself together when trouble crops up.

"I like skimo because I generally think of myself as a pretty with-it person," says a female friend who goes by the nickname Mad-dawg and did a few races with me last winter. "This sport makes me lose my shit and revert to being a grumpy five-year-old who needs hot cocoa. It's like a capability cleanse."

Steadily, painfully, I race myself into shape. I rise before dawn, grinding laps in the dark by moon- or headlight. I create short loops to practice transitions—ripping skins, folding them in one fluid motion. I pass up epic powder days in lieu of intervals on groomers. My friends shake their heads solemnly. They don't understand.

By the time I arrive for the Power of Four, held in Aspen in late February, I've dropped ten pounds in as many weeks, and I feel less self-conscious and more like a Power Ranger in my skin suit. Because the Po4 is a partner event, I've recruited another buddy, Chris, a strong skier and runner who has been my teammate for previous Grand Traverses. Some 200 racers mill around at the start, including some top Americans, Aspen locals Max Taam and John Gaston, who have been untouchable all year.

My only objective is to beat two friends who thrashed me in this event the previous winter by more than an hour—and that was on the short course. They're tough, and it's a good battle. We leapfrog much of the day, until we hit the Congo Trail, a dreaded section of windy downhill singletrack that's as icy as a bobsled run and about as wide. I biff often and gloriously. Frustrated, I try bombing it, with hockey stops at the hairpins, but collide with an aspen tree so hard that I nearly knock myself out. No technique seems to work well, and by the bottom our opponents are gone and I'm rattled and cursing like a sailor. But then all those lonely early-morning sorties kick in, and we catch them on a long climb. By the top, they're off the back and out of sight. Chris and I white-knuckle through

steep moguls to the finish line, on the brink of losing control, thinking they'll catch us at any moment, but they never do. My first miraculous result is in the can.

AT THE END of March, I team up with Jenn Shelton again for another Grand Traverse. Conditions are fast and firm, and, thank God, less frigid. The field is flooded with runners, two of whom—Scott Simmons and Paul Hamilton—are from Durango. They not only win but set a new course record.

It's an upset of considerable proportions. They're out-of-towners, and while Simmons is a serious skimo racer who has competed on the U.S. national team (yes, there is one), this is Hamilton's first Grand Traverse. Marshall Thompson and Rob Krar, winner of the Western States 100 in 2014 and 2015 (also racing his first Grand Traverse), are a close second. As for Shelton and me, we shave more than an hour off our time. Better yet, I feel great, invincible. No bonking. No bottles of instant Starbucks to help me survive.

In the spring I go to Europe, to the Trofeo Mezzalama, which takes place in early May. I'm hoping to horn myself into the race, but the Mezza requires teams of three, roped together for much of the event.

I settle for watching. The course is unlike anything I've seen in the U.S., climbing some 10,000 feet and spanning 28 miles across the crest of the Alps. A rope, crampons, and ice axes are mandatory for all teams.

Several sections require threading knife-edge ridges blasted by high winds. One icy 40-degree slope is so sketchy that organizers installed fixed lines and chainsawed steps into the face to keep racers from plunging to their deaths. Gauntlets of spectators three deep in places ring cowbells and holler, "Dai! Dai! Dai!" ("Go! Go! Go!") as teams glide past in their matching onesies. The Italians are the favorites and are currently in first.

It strikes me that this is skimo's past and future. Europeans discovered long ago that the deeper pleasures of skiing, and racing, are not confined to chairlifts and groomed runs.

I tour up to a high ridge with expansive views across the peaks, and I feel oddly indebted to Ottorino Mezzalama. Skimo has made me a better skier in every way: more fit, more skilled, more adaptable, more confident. I watch the race for a while from my high point, content this time to be a spectator, then zip back down to the base area, where I arrive at the finish just in time to see the first-place team cross the line. It's the Italians. No one seems surprised. O

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(@NICKHEIL) WROTE ABOUT THE
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dumpster. Instead, he's been reborn as a network superstar. In 2015, he appeared in five different series, including two prime-time shows for NBC in the United States, *The Island* and *Running Wild with Bear Grylls*, which were the top-rated programs in their time slots across all key demographics (and that was before Obama came on *Running Wild*). Both programs also air on Discovery. He has two new hit shows in the UK, *Bear Grylls: Mission Survive* and *Britain's Biggest Adventure*, and in October, he launched a series for China's Dragon TV called *Survivor Games* that was mentioned more than a billion times on the Chinese social-media platform Weibo in the months leading up to the first episode.

In addition to sharing massive fan bases, all the shows conform to the same basic structure: Grylls puts other people through frightening and uncomfortable scenarios to test their mettle and empower them to overcome life's obstacles. The expected action—jumping out of helicopters, racing around mountains, eating disgusting things—is a way to get them to open up about personal challenges. For every tense scene of someone dangling over a ledge, there's a heartfelt moment of reflection.

The formula has proven especially compelling on *Running Wild*, which has Grylls short-roping celebrities on two-day buddy adventures. What Grylls gets these stars to do is stunning. Kate Winslet joins him for a motorized paraglider flight around a mountain range in Wales. In the jungles of Panama, New Orleans Saints quarterback Drew Brees leaps onto the back of a crocodile that Grylls has lassoed with a nylon cord. Actress Michelle Rodriguez stews a mouse in her own urine in the Nevada desert. But even more unexpected is how consistently these guarded public figures have what seem to be candid emotional exchanges. After rappelling down a cliff, Kate Hudson starts to say something about trust but is quickly overcome and waves the camera away as she buries her face in her hands. While grilling a squirrel over a campfire, Ed Helms talks about having open-heart surgery when he was 14 and his excitement at being a dad someday soon.

"It's a brilliant format," says veteran producer Thom Beers, creator of the Discovery Channel hit *Deadliest Catch* and many other reality series. "He gets them in a survival mode, where they're worried about what they're going to do, not what they're going to say. And he's so amazingly charismatic, they feel comfortable in his hands. *Survivorman* never could have done this—you look at that guy and you might think you're his last meal." What Beers finds most impressive is the fact



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GRYLLS

that so many celebrities sign up for *Running Wild* in the first place. "He offers them something they can't get anywhere else: the chance to show the world they're a badass."

Grylls sees it a bit differently. "They come on the show because they know it's a safe place to be honest," he says. Their personalities don't come out when they're hamming it up with Jimmy Fallon. "When you're on a chat-show couch, it's all performance. And even if you're brilliant and funny, you know it's not who you *really* are when the lights are off. All of us crave authenticity."

That Grylls has become the gatekeeper of sincerity shows just how far he's come since the early scandal that almost sank *Man vs. Wild*, when he was called out for once sleeping in a lodge instead of the bush. What makes his evolution all the more interesting is that it's been precipitated by focusing the camera on the experiences of others. "It took huge pressure off me when I realized that my shows aren't about me flexing my muscles, but about what being in the wild brings out in other people," he says.

THIS IS PARTICULARLY true in the case of President Obama, whose Alaskan adventure was devoid of dangerous stunts, per Secret

Service mandate. In fact, when the White House first reached out to NBC in July, all it had in mind was a short viral video. But Grylls and other producers decided to stretch his time with the president into an entire episode, since Obama had said before how much of a fan he is. When the day arrived, the two men met on a riverbank for a planned three-hour out-and-back hike to a glacier.

"I was nervous waiting for him there," Grylls says. "I wanted to push him a little bit, get under his skin, but respectfully. It was pressure in a way that I'd never felt before. But as soon as he got there, he came over to me and said, 'I'm super excited, I'm in your hands, let's go.' And I thought, Great, let's have some fun."

Within a couple of days, NBC released a sneak-peek clip of Grylls and Obama cooking and eating a salmon that had been partially devoured by a grizzly. But what excited Grylls most were the conversations. He asked Obama the kinds of questions nobody does: What are you most afraid of? What do your kids think of you? What are the best and worst things about being president? "There were no stock answers," Grylls says. "It was all very human."

Shortly after leaving Alaska, Grylls was in a remote part of China, filming *Survivor*

Games for a month in torrential rain. Next he flew to Shanghai for two more days of filming, then rolled right into hosting a weekend survival race outside London. Backstage at the event, he was collared by Tim Davie, the CEO of BBC Worldwide. "He grabs me and goes, 'Hey, two things,'" Grylls recalls. "'One, I don't know how the hell you do it. Nobody has TV shows on four networks. And two, the game now is can you do it without burning out?'" And I thought, He's so right.

"I'm not doing eight seasons of shows next year," Grylls adds, "but at the same time, we're in the zone. I'm still really loving it." O

EXECUTIVE EDITOR MICHAEL ROBERTS (@ULTIMATEEDITOR) WROTE ABOUT KELLY SLATER IN JANUARY.

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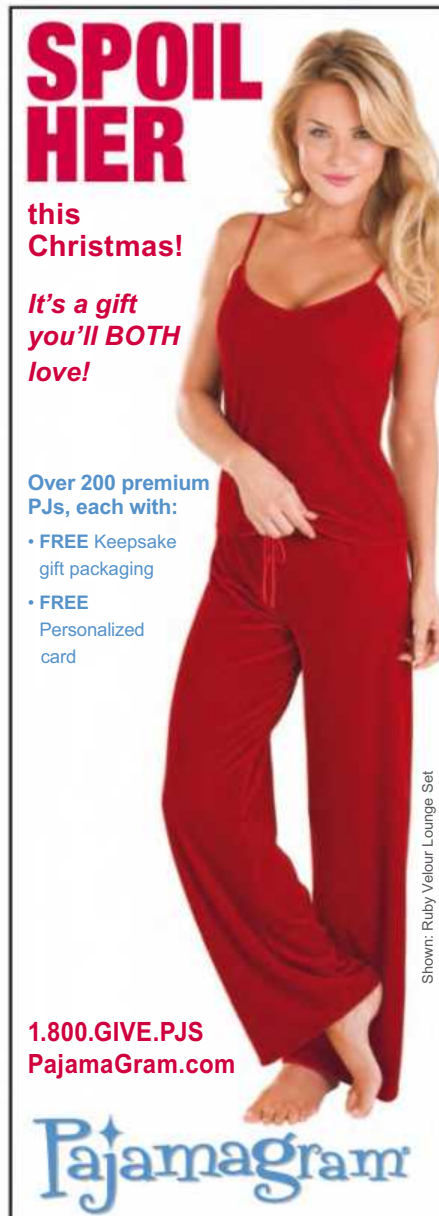
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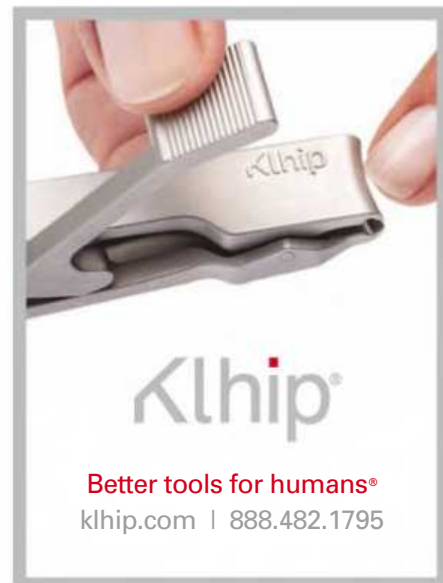
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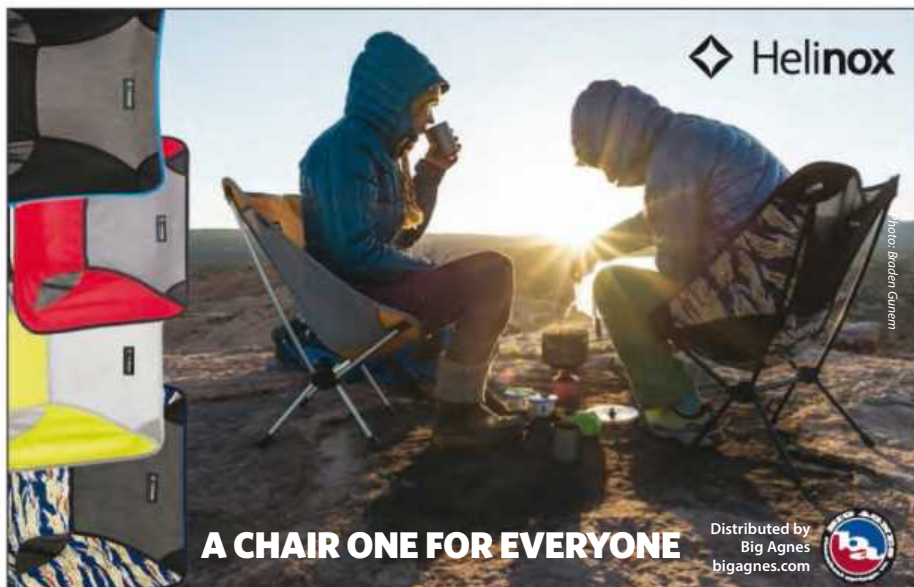
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