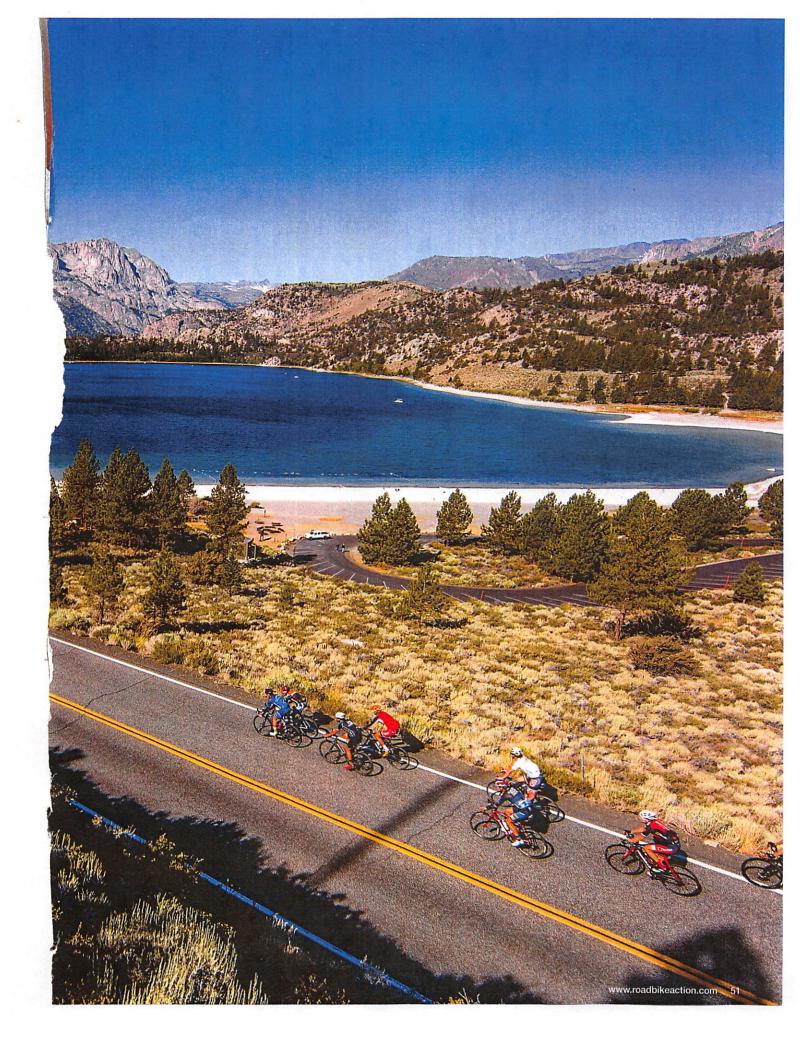
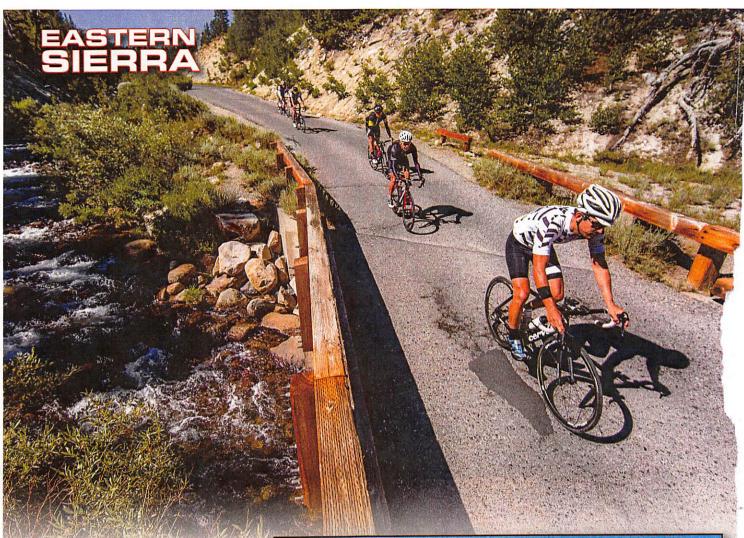
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How to put a three-day climbing camp to good use

By Neil Shirley
Photos: OPP Creative

Iong a 60-mile stretch of Highway 395 (that connects Los Angeles with Reno, Nevada) between the towns Lone Pine and Bishop, California, the Owens Valley sits deep in the shadows of two monstrous mountain ranges—the jagged, granite Sierra Nevada to the west and the stark White Mountains to the east. Along this stretch, dozens of roads begin their circuitous routes at Highway 395, then disappear deep into the mountains on either side of the highway, with a number of them ranking as some of the most difficult climbs in the U.S. and straight-up outclassing many of the fabled European ascents.

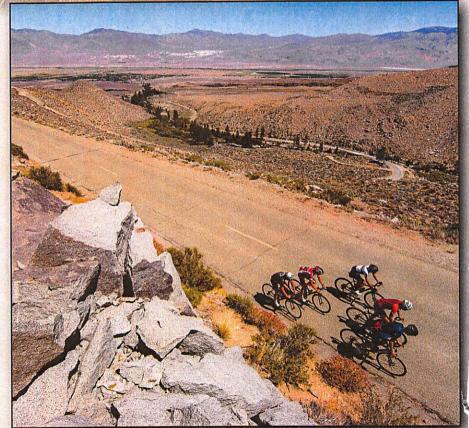




DESTINATION MAMMOTH LAKES

Once coming out of the Owens Valley, on the east side you get to the town of Mammoth Lakes, a hot spot during the summer for mountain bikers and a haven for skiers in the winter. Mammoth, which sits at an elevation of 7880 feet, also lends itself quite well to the skinny-tire crowd, most recently the Mammoth Gran Fondo, which we've rated as one of the top fondos in the country. There is also no shortage of climbs further north, along with ultra-climbing events like the Death Ride that nets 15,000 feet in elevation gain over 129 miles.

Spending a few days riding some of the biggest and most scenic climbs found in the U.S. is something that's long been on my to-do list, so I decided it was time to make it happen. Using Mammoth Lakes as a home base, a half-dozen friends and I set out for three full days of riding that took us as far north as Tioga Pass into Yosemite and as far south as the Ancient Bristlecone Pine Forest in the White Mountains, which lands itself on the list of top-10



hardest climbs in the U.S.

What came as a surprise to me the first time I did the Mammoth Gran Fondo was that even with so many mountainous options, there are also some relatively mellow options as well, such as the Fondo route that has a somewhat-mild 6000 feet of vertical gain over the 100 miles. Just north of Mammoth Lakes you'll soon head to the June Lake loop that provides a sampling of the area's diverse scenery while keeping the distance and elevation reasonable. For our trip, though, the flatter roads would simply be used to get us from one climb to the next, since the experience we had in mind was maximizing the amount of climbing we could get in for each mile ridden.

CHIMBING EVEREST IN THREE DAYS

The lot of us arrived the day before the start of our adventure so we could get settled into our condo and make sure we were all on the same page for what the next three days would look like. The goal was to average 10,000 feet of climbing each day, which would give us the equivalent in vertical gain to climbing Mount Everest. Once factoring in the effects of altitude, and our desire to engage in coherent conversation with each other later in the

evening, it seemed like an ambitious goal, but goals aren't supposed to be easily attainable, right?

DAY ONE: FIRST THINGS FIRST

With freshness of body and mind still on a high, we decided it would be best to start the adventure off with the longest ride of the three days. Yosemite would be the ultimate objective for the day and double as our turnaround point. To get there, we had to ride the 12-mile ascent of Tioga Pass that holds the key as Yosemite's eastern doorway.

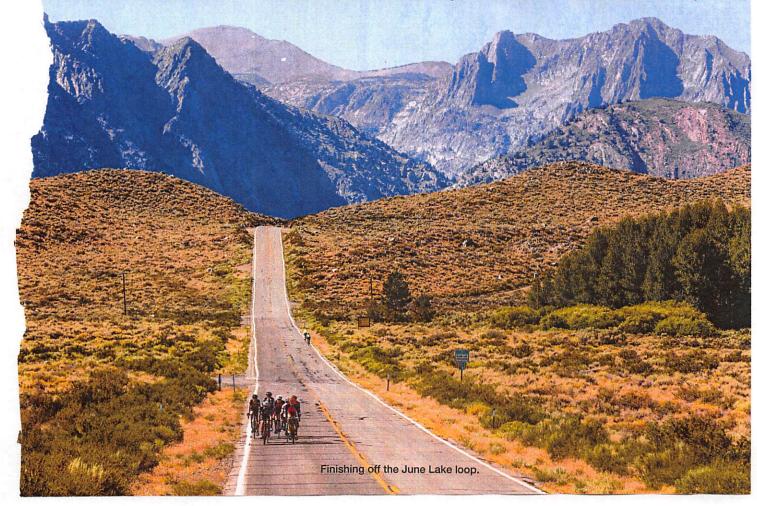
"This wasn't the outright toughest climb we'd be riding during the trip, but it definitely left its mark."

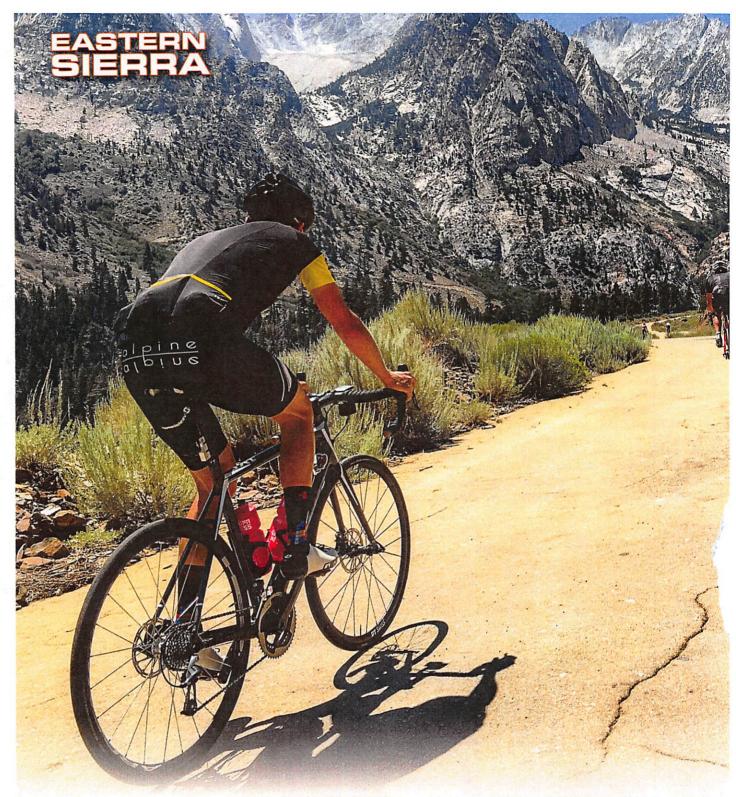
However, no trip to Mammoth can really start without first riding up to Twin Lakes, which is located a short distance above the town. It's a bit of a grind, especially when the legs aren't exactly warmed up yet, but once there, the views are some of the best around. After embracing the scenic vista, we flipped it and headed back down to Highway 395 via Mammoth Scenic Drive and began

pedaling north. Riding on the highway for a stretch didn't sound all that pleasant initially, but once out there, we realized traffic was light and an 8-footwide shoulder allows you to safely ride double-abreast.

We veered off the highway just a handful of miles later to ride the June Lake loop option. This was my first time going around the lake, and from now on it will be a mandatory addition. Seeing the crystal-blue water surrounded by massive 12,000-foot-tall granite peaks definitely made the brief deviation worthwhile. Five miles after finishing the loop we were at the base of Tioga Pass. which we would spend the next hour climbing, taking us to just shy of 10,000 feet elevation. With an average gradient of 5 percent over 12 miles, the 3100foot climb isn't the outright toughest climb we'd be riding during the trip, but it definitely left its mark.

Unfortunately, because it was a Friday on a holiday weekend, the amount of traffic passing us took the serenity out of the climb. At least on the way down traffic was not a worry, as we were hitting speeds upwards of 60 mph on the long straightaways. By the time we hit the bottom and enjoyed a refresh of drink and food at the iconic Whoa Nellie Deli gas station, we headed back to Mammoth, albeit with some already





tired legs in the group.

Later, I found out that if you want to check riding into Yosemite via Tioga Pass off your bucket list without having to deal with motorhomes, then being at the ready around mid-May when the road is plowed of snow yet still closed to vehicular traffic is the hot ticket. There is typically a couple days' window when you can own the road.

Miles: 101

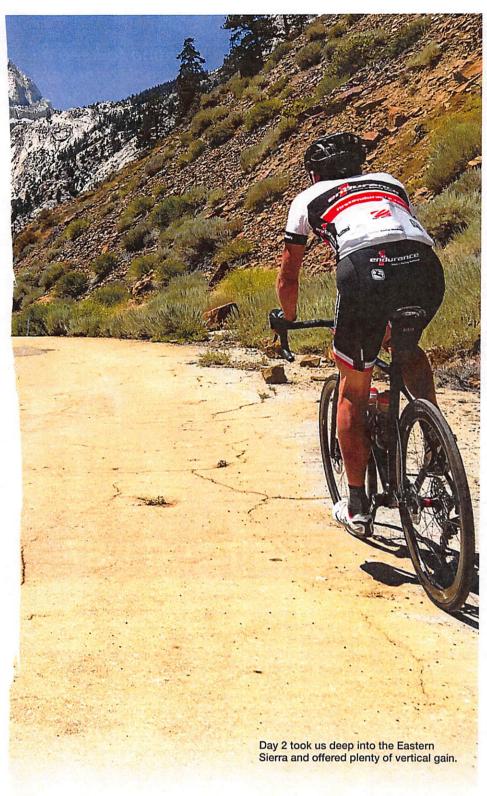
Elevation gain: 8,353 feet

DAY TWO: PIE IN THE SKY

After just one day of altitude, the freshness of body and mind was already well behind us and wouldn't be found again for the rest of the week. Still, this was the day I was most looking forward to because of the absolutely gorgeous terrain I knew we'd be enjoying. So we could get in the climbs we wanted without adding unnecessarily big miles to an already challenging day, we decided to drive 18 miles south on Highway 395 to

the town of Tom's Place.

On tap first was the Rock Creek climb, which goes straight uphill for 10 miles from Tom's Place and dead-ends at the popular hiking spot of Mosquito Flats. Owing to the scenery, this is one of my outright favorite climbs of the area, and now—with fresh pavement laid down within the past year, plus the addition of a dedicated bike lane—it's an absolute joy to ride. Other than the gradient pitching up in the first two



miles, the climb holds a steady 6-percent grade and nets a 3000-foot vertical gain. Within the final two miles you pass the picture-perfect Rock Creek Lake on your left and the Pie in the Sky Café, where visitors can enjoy some cobbler and ice cream.

We rode Sherwin Grade on Highway 395 back to Bishop and, fortunately, the highway has an enormous shoulder. From the bottom of the grade, and the northernmost point of Owens Valley, we headed due west and into the canyon of Pine Creek Road that climbs for eight miles at 7-percent gradient straight into the heart of the Sierra Nevada range. As we reached the top, sheer granite walls jet up to 13,000 feet surrounding us on three sides, and ultimately the road ends into what used to be the world's largest tungsten mine.

After a fast descent back down Pine Creek, we made our way through the valley and crossed over to the east side of Highway 395 and into the Owens River Gorge. An old access road closed to traffic snaked its way along the river for a few miles before starting the long ascent back up towards Mammoth. Because Lower Rock Creek Road was closed (due to a fire), we took a chance on a new route, though none of us were quite sure what the end result would be.

"Even though we would only be doing two climbs the entire day, when one of them accounts for 6000 feet of vertical climbing in one glancing blow, it ensures there will be no rest for the weary."

Our worry was the final two-mile stretch from where the pavement ended until the point where we could connect back with Highway 395. It turned out to be pretty much as bad as our worstcase scenario, with sand so deep that it was nearly impossible to ride some sections. Yet, that's also what made this section one of the most fun experiences of the day. Fighting to keep all momentum going forward while trying not to go anaerobic was quite a challenge. Eventually, everyone made it through the dirt section without a single crash. It was a great way to finish off day number two.

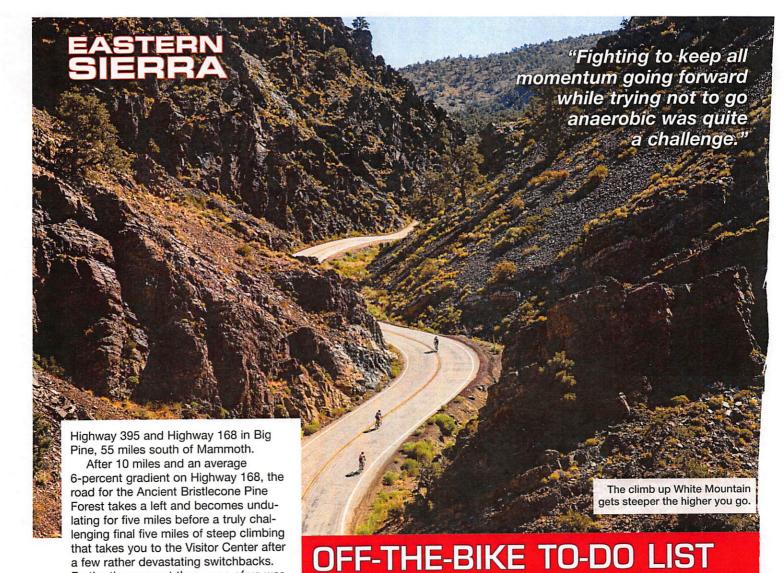
Miles: 85

Elevation gain: 9,900 feet

DAY THREE: THE BEST FOR LAST

The final day would be the lightest in terms of mileage, but it would be the heaviest in climbing. Even though we would only be doing two climbs the entire day, when one of them accounts for 6000 feet of vertical climbing in one glancing blow, it ensures there will be no rest for the weary. This would be a three-coffee morning for me. Our eyelids were heavy and our legs were even heavier. But, we would be crossing off another bucket-list climb and one of the top-10 hardest in the country, so there was that at least.

We made the drive south down to Big Pine, where we would be spending the day climbing Ancient Bristlecone Pine Forest on White Mountain before heading over to the Sierra Nevada side of the valley for a climbing encore on Glacier Lodge. The ascent begins just two miles after the intersection of



DEVILS POSTPILE

Seeing Devils Postpile up close is well worth the shuttle ride (necessary between June and September) and short hike. The impressive 60-foot-high vertical columns of basalt formed from a lake of lava that cooled very slowly. The top was then revealed and polished by the passage of several glaciers. Continuing to hike past Devils Postpile will lead you to Rainbow Falls. Be sure to check in at the Ranger Station for an activity book kids can fill out to earn a Junior Ranger patch.

www.nps.gov/depo

MAMMOTH MOUNTAIN GONDOLA

The Scenic Gondola Ride up Mammoth Mountain offers breathtaking views on the way up to the top of the mountain at 11,053 feet, where you'll have a 360-degree view of the Sierra Nevada and San Joaquin River Valley. At the top, there is a cafe and an interpretive center with information on the history and geology of the region.

Kids 12 and under ride free. www.mammothmountain.com

HOT TUBS

Hot Creek Geologic Site is located just 15 minutes south of Mammoth Lakes, where water heated by a magma chamber three miles below the surface mixes with the cold mountain springs in turquoise pools and streams. Unfortunately, the water temperature can change quickly, so there is no longer swimming or soaking allowed in the creek, but if you really fancy a soak, check out Hilltop Tub. To get there, take Highway 395 to Benton Crossing Road and turn left at the green church, then pass two cattle guards. At the bottom of the hill, turn left onto a dirt road that you'll follow for 300 yards to a parking area. You'll enjoy an amazing view and warm waters for a relaxing post-ride soak.

www.visitmammoth.com www.mammothlakescrib.com www.mammothgranfondo.com

After a long, long descent and a water/food stop back at the car, we headed to the other side of the Owens Valley and into the Sierra Nevada for our final climb of the day—and our trip. On paper, Glacier Lodge didn't seem like it would be too bad, with a length of 9.5 miles and just over 3500 feet of gain, but with tired leas, it turned out to be much more difficult than anticipated. In the last two miles the grade relaxed, and the high-desert terrain of the valley gave way to pine trees and granite peaks. At the top, we took a dip in the icy stream water for a well-deserved refresh before the plunge back down to the car.

By the time we got there, one of us was delirious from the nearly 11,000-foot

altitude, others were simply running

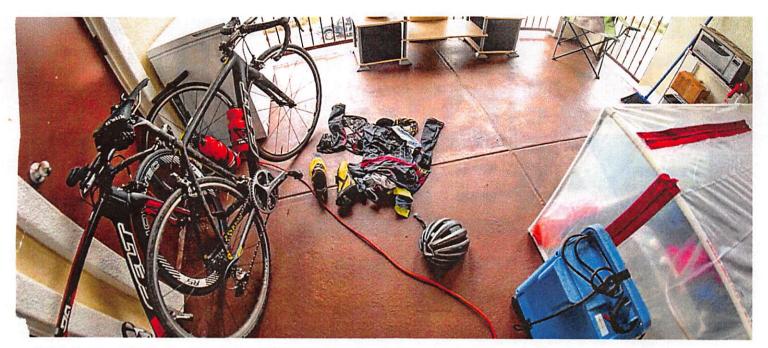
thoughts of a cold beer.

on fumes, while one was motivated by

Over the three days we came in just shy of our 30,000-foot climbing goal, riding some of the most challenging and scenic terrain the U.S. has to offer. It was hard, but I truly can't wait to do it all over again.

Miles: 69

Elevation gain: 10,550 feet



DO-IT-YOURSELF ALTITUDE

All the benefits with much less cost

By Jon Hornbeck

When people talk about altitude training, the first thing that comes to mind is trekking up into the mountains and digging in for a prolonged training session in the clouds. Of course, that is one very productive approach, but one that's not necessarily convenient or economical. Take it from a former pro who neither had the time nor the expense account to move into a quaint Airbnb in Mammoth Lakes; there is another equally effective way to "train" at altitude without actually being in a high-altitude locale.

This is where you use an altitude tent at a lower elevation. I have always believed in the train-low/sleep-high program. I have done both (train low/sleep high and train high/sleep high), but from personal experience. I believe train low/ sleep high to be the most beneficial. When you train high and sleep high, you can only push yourself to a certain degree, with the limited oxygen being the main factor. You never come close to putting out the same power up high as you do down low. However, if you're using a tent, you get the benefit of training to your max potential down low but also getting the altitude benefit by sleeping high.

There are plenty of options if you go this way. Some may have heard of top WorldTour pros converting their whole bedroom to a set altitude. This is by far the most upscale way, but also comes at a very pricey setup. To have your bedroom be set at 10,000 feet in altitude, you must basically be running your machine all day to convert the

oxygen into a more hypoxic state.

Another route is to buy an altitude tent. With this option you get a package that is specifically designed to accomplish what a move to the mountains would do, only without the move. The only downside to this option is that it can still run you a decent price tag.

The third option, which is best for anyone racing on a Continental budget, is to make the tent yourself. You can outsource a machine on the fairly cheaper side, especially if it is used, and then build your own tent.

I got help with mine from Doc Edwards, and I relied on it for the past three years while I was racing. It's fairly simple; all you need is some PVC piping, painter's plastic and lots of packing tape (see photo). With those supplies in hand, I built a small rectangle box big enough to put a small camping mattress in, wrapped the plastic around it and sealed it off everywhere with tape. For entry/exit, I got a double-sided zipper and put it on the top to act as my door. I would have my machine with a plastic tube run into the tent and I was set. I would build a new tent for each season, and it was always under \$50.

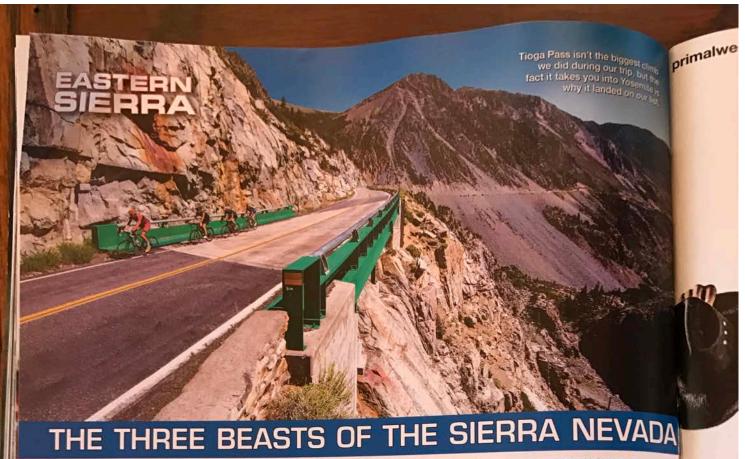
The oxygen machine (or altitude generator) cost me around the \$500 mark. To better explain what that is, I'll let Doc Edwards explain: "Basically, Jon is referring to the system that I created myself. The machine is called a hypoxic, or altitude, generator, which is basically the type of machine that you might see with older people who

need oxygen. This is the same exact machine, but reverse-engineered to make it produce hypoxic air instead of hyper-oxygenated air. For most people, the trick is to get one of these old machines, open it up, reverse-engineer the thing, and you have a hypoxic generator for a couple of hundred bucks versus spending \$6000 for the unit from Hypoxico."

One big factor with sleeping in your tent, though, is your outside temperature. Obviously, it is hard to sleep at altitude, and if it's not on the cool side outside, you are going to be very hot inside. I would always use a fan, but you're just blowing around the air inside. Since I live in Southern California, I would typically only be able to get away with this in the months leading up to the racing season, which typically would be March. Once it started to get above 70 degrees at night, I wouldn't be able to use it anymore. You can turn your AC up really high, but after many weeks of this, you're looking at an expensive electrical bill. During the season I would usually go up to Mammoth Lakes to do extended trips at altitude, as it was too hot at home to sleep in the tent.

Higher Peak Altitude Training Complete system package: \$2,449 www.higherpeak.com

Hypoxico Altitude Training Complete system package: \$6,450 www.hypoxico.com



If not all the climbs we rode offer enough of a challenge, don't despair. The vast expanse of the Owens Valley also happens to be home to three of the nastiest climbs in America. How nasty? All three of these climbs hold a special place among the top-10 hardest climbs in North America. Here's a short review of each.

ONION VALLEY

Length: 13.1 miles Elevation gain: 5,169 feet Average gradient: 7,8% Services: None

Onion Valley Road begins just outside of the town of Independence, and at over 13 miles long, it gives no relief until reaching the top, where the road ends into the Onion Valley trailhead. It's both steeper and longer than just about any of the fabled European climbs. Coming into it with respect for its difficulty is the only way to truly enjoy it, and, of course, some very easy gears.

In her book, Claire Beaumont describes Onion Valley this way: "The road swings through a series of switchbacks, watched over by the sharp peaks of Mount Independence and Kearsarge. The airless, shrubless slopes on either side of the road close in, as this section kicks up to a crushing 11-percent gradient. At this point you'll rue the day you ever thought of toppling this beast. As the road flattens a little in

the final stretch towards the summit, those feelings will begin to dissipate."

HORSESHOE MEADOWS

Length: 19.2 miles
Elevation gain: 6,490 feet
Average gradient: 6.5%
Services: Water is available at the
top in the campground

Horseshoe Meadows has more mileage and vertical gain than Onion Valley, just with a slightly more forgiving 6.5-percent gradient over the 19.2 miles. That's slightly deceiving, though, since a 1-kilometer descent near the top skews the average into making it seem easier than it really is. From Highway 395, just south of Independence, you can't help but notice the ominous-looking switchbacks scarred into the mountain. As you begin, the switchbacks are all you see in the very long run-up to the actual meat of the climb.

It doesn't take long before you can look out on massive views of the Owens Valley, and trust me, it's better to look out there than looking up to check your progress. After what literally seems like an eternity, you reach the first summit and get a minute of respite on a short descent before the final mile to the real summit. The outright length and lack of traffic make Horseshoe my favorite climb of the three listed.

WHITE MOUNTAIN TO ANCIENT BRISTLECONE FOREST

Length: 20.1 miles
Elevation gain: 6,376 feet
Average gradient: 6.3%
Services: The Visitor Center has
water and soda

The Ancient Bristlecone Pine Forest gets its name from the Great Basin bristlecone pine trees that grow on the climb at an altitude between 9800-11,000 feet and, in some cases, are thousands of years old. To get up to that point, there's a whole lot of pedaling that must be done first. Heading into the stark White Mountains on Highway 168, the climb stays a rather steady 6.3 percent for just shy of 10 miles. At that point you can continue on the highway and descend towards Nevada, or turn north on White Mountain Road and continue another 9.5 miles at just over 6-percent gradient

Don't be deceived with the seemingly gentle gradient of the climb's second half, because it's anything but gentle. The final five miles produces pitches and switchbacks that will break your heart, then your legs. There's no respite in the final miles until just a few hundred meters before reaching the Visitor Center. That's where the pavement ends, but there's more climbing to be had if you're not opposed to some dirt riding.