

## New, more-refined designs have made these pedal-assist machines significantly more appealing

As part of our bike test this year, we decided to include three electric mountain bikes, fully prepared for the protests and vitriol from our readers. Every time I've written about this [growing trend](#), it becomes clear that a contingent of people detest pedal-assist bikes—some on principle, some because they fear these bikes may lead to trail access issues, and some seemingly out of knee-jerk puritanism. The most common refrain seems to be that e-MTBs are motorized vehicles, not bikes. “Motor + Bike = Motorbike. Duh!” one reader commented on a story I wrote.

This objection, however, misses the finer distinctions: the bikes we tested are all of the pedal-assist variety, meaning there's no throttle and no motor assistance unless you pedal. “The comparison to motorcycles is just wrong,” says Sean Estes, global PR manager at Specialized. “The [Specialized Levo eMTB] produces a peak power output of 530 watts, while a KTM 250cc four-stroke motorcycle produces roughly 32,000 watts. Considering power-to-weight ratio, the Levo essentially gives every rider around 6.5 watts per kilo, on par with a Tour de France level cyclist. That's a big bump but nowhere near the same galaxy as a motorcycle.”

Everyone is entitled to their opinion, but the criticisms aren't going to stop the growth of these bikes. In the past few years, all the major brands have introduced e-bikes, which speaks to the market's potential. You can bet that companies like Giant, Scott, Trek, and Specialized aren't dumping money into development and tooling unless they believe e-bikes are here to stay.

The entry of mainstream brands has also been good for the segment, both for

the credibility these companies lend and for their engineering and design know-how. Some of the first e-MTBs that I rode had good power trains, but their trail manners were clunky and maladroit. The latest designs, however, have real mountain bike DNA, and they ride like it. This is the crux of why e-MTBs aren't going away: they are an absolute riot to ride.

Before you begin trashing me, I'm no lazy, motor-dependent, entitled American. I rarely drive my car if there's the opportunity to ride a bike. I train five to six days a week, race on road and dirt, and generally prefer endurance endeavors that make most people shake their heads (think: [AZT](#), [Dirty Kanza](#), and [Vapor Trail](#)). Still, I've had a hell of a good time on the e-bikes we've been testing.

If you ride a lot, you know it's exhilarating to smash along on dirt as fast as you can go—some extra power just makes it more bracing. The hauling capacity on these bikes is a boon: hooked up to a BOB trailer (courtesy of the awesome [Robert Axle Project](#) adapter), the Levo has helped me transport camping gear, rifle, pack, and an entire field-dressed deer some ten miles in one go.

Then there are the days when an e-bike motivates you to ride when you otherwise might not. A few months ago, a friend and I did a five-hour ride on a Saturday with 7,000 feet of climbing. Afterward, he was on the fence for the Sunday ride because he felt it was too much. I lent him an e-MTB, and we pulled off another four-hour epic together, when otherwise I would have ridden alone. We all have those days when we feel too tired or stressed to ride—add a little pedal assist, and the threshold for getting out is lower.

That doesn't even get into these bikes' potential to bridge ability gaps

(for instance, my once fit but now ailing 64-year-old father-in-law and I can ride together again), lower the hurdles for new riders (because it can be intimidating to start out), and help those with disabilities enjoy our great sport.

In other words, we decided to test these bikes this year because there are a lot of upsides. Here' s a brief rundown of the three we tried.

