

***Another Great Cycling
Option in Pennsylvania***

GRAVEL



Introduction

Gravel riding. Also known as “mixed-surface,” it’s a term for one of the fastest growing forms of cycling. Most everyone involved in outdoor recreation has heard of it, but not everyone understands what’s behind the sport that just keeps growing in popularity.

Poised somewhere between road cycling and mountain biking, “gravel” describes a cycling discipline that takes its name from the unpaved dirt and gravel roads that are featured in most routes. It’s generally safer than road cycling, less technical than mountain biking, and more adventure-driven than rail-trails.

You’ve probably heard of “gravel grinding,” but gravel’s appeal has little to do with grinding (a term coined early on before bikes were designed to move efficiently across different surfaces). **Gravel is about adventuring through beautiful areas, often with an easy-going group of like-minded explorers, and sometimes even from one’s own front door.**

In 2018, a *Bicycle Retailer* article attributed the bicycle industry’s growth to gravel and e-bikes, the article touting “First quarter wholesale bike sales up 2.4% thanks to e-bikes and gravel bikes.”¹ Use and interest has grown in the years since.

Gravel offers another great cycling option in Pennsylvania – one that complements the state’s investment in trails and public lands and introduces new opportunities. The Pennsylvania Environmental Council (PEC) is seeking to create a dialogue about gravel riding and, ultimately, to build agency and partner support for this fast-growing form of cycling.

PEC hopes to advance the statewide understanding of gravel riding and will host a convening on April 28, 2022 to further the conversation. To prepare for this discussion, we researched trends within the discipline and interviewed gravel experts throughout the U.S. to learn more. Those interviewed included ride organizers, tourism promoters, industry representatives, and route creators. We asked about demographics, trends, benefits, and challenges to gravel as a discipline.

The following information is based on those findings and our research in general. PEC recognizes opportunities to craft a gravel narrative unique to Pennsylvania, leverage mixed-surface cycling to further protect public lands, provide more and better information for riders of all skill levels, and more.

Why People Choose Gravel:

Culture, Scenery, Adventure, Versatility, Approachable Challenges, Convenience, & Safety

People gravitate to gravel because it's fun, exploratory, relaxed (yet challenging), and is typically safer than taking to paved roads. Here's more about what people love about gravel:

CULTURE

Gravel culture is often centered on camaraderie and togetherness more so than racing or competition. There's a non-competitive nature to group rides in which people are not made to feel they are holding others up. This laid-back atmosphere bleeds into events, where there is an emphasis on quality aid stations and good food. **Real food like tacos and donuts replaces gels and energy bars.** Nourishment and community-building continue with the after parties, reinforcing that this is about something more than competition. When we talked with Mark Stevenson, originator of the Trans Iowa event and one of the "founding fathers" of gravel, he said: "I'm most proud of the fact that we didn't look down on anybody who showed up. We never told anyone they couldn't ride, accepting everyone regardless of their cycling history. There was no jockeying, no sizing up."

SCENERY & ADVENTURE

There is an exploratory aspect to gravel riding. People ride from town to town, through natural areas and public lands, using trails and connecting roads along the way. This is different from being confined to a specific trail or trail system, which is the case with other forms of cycling. Gravel can feel freeing and empowering. Not only are you riding on your own power, but you are finding your own way as well. Moving across different surfaces and communities feels like a journey, an exploration through some of the most scenic landscapes. **Gravel routes put people in beautiful places like state forests, farmland, and beloved rail-trails.**

VERSATILITY

Gravel bikes can offer "the perfect middle ground" when exploring an area. They are relatively efficient on pavement yet capable of traversing varying terrains (as compared to road bikes). Bikes designed to climb a long dirt forest road, hit some chunky doubletrack, and then cruise down into a river valley and onto a paved municipal road are appreciated for their adaptability. That said, there's no need to have a gravel-specific bike to enjoy mixed surface riding. A hardtail mountain bike, commuter with knobby tires, or hybrid bike will do.

APPROACHABLE CHALLENGES

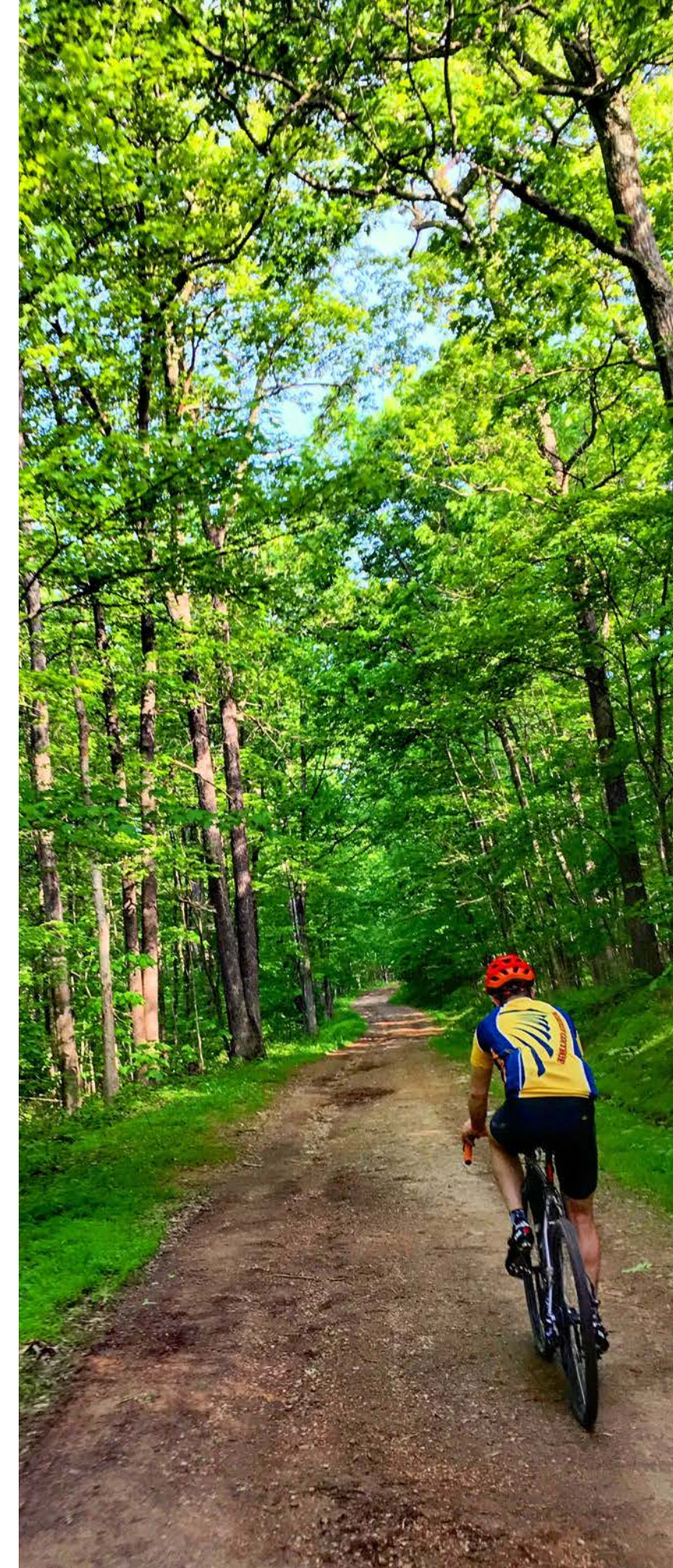
Building the endurance for climbing and learning the feel of riding over unpaved surfaces can pose challenges to new gravel riders. Learning new technologies and getting used to navigating unsigned routes can be challenging as well. The challenges are, however, approachable. Gravel tends to be easier and less technical than mountain biking yet can offer a "step up" in terms of challenge to rail-trail users.

CONVENIENCE

The mixed-surface nature of gravel riding means that in some places people can bike right from their front door. They don't need to drive to their cycling destination, meaning there's a time savings benefit and the rides are emissions free.

SAFETY

Road cycling isn't for everyone. There are inherent risks, and a lot of cyclists have discovered gravel as a safer alternative. Mike Riemer of Salsa Cycles points out, "Riding on pavement too often feels dangerous." It only takes one scary moment for someone to reconsider biking on busy roadways. David Landis, creator of the 560-mile TransVirginia Bike Route, created the route to get people off such roads. **"If you ride a lot, you're going to have an encounter with a car,"** he says. Creating routes that rely on unpaved and low-volume roads creates a relatively safe (and wildly popular) cycling option. Safety is one of the reasons people have been clamoring for gravel.



Gravel Cycling A Win for Rural Communities

An Untold Story of Tourism

With so many cyclists turning to gravel – and traveling for rides and events – rural communities are already benefiting.

- In Grinnell, Iowa, the former Trans Iowa ride was so well received that the community honored the out-of-town event organizer, Mark Stevenson, with its tourism award two years in a row. A pizza shop on the same route told Mark the eve of the event was their busiest night of the year. Regions are becoming recognized for their gravel riding opportunities. This represents an untapped resource which Mark describes as “an untold story of tourism.”
- Emporia, Kansas is the home of Unbound, one of the best known gravel events, which attracts upwards of 2,500 participants each June. The 2019 race was estimated to generate \$5.5 million in a single weekend.² The impact is so significant that a Gravel Cycling Hall of Fame may be constructed there. (A virtual hall already exists.)
- Here in Pennsylvania, the unPAved event is so successful that the Lewisburg Downtown Partnership moved its long-standing fall festival to occur on the same weekend as the ride. The Susquehanna River Valley Visitors Bureau measures the annual economic impact of unPAved at \$750,000 (although the event organizers measure it at closer to \$2 million).

UNBOUND



2,500 Participants



\$5.5 M Generated

unPAved

\$750,000–
\$2 Million
Generated

The impact generally extends beyond race day. People travel for social and training rides, bring their families along, and often return after being introduced to an area. Beyond travel activities, bike shops and manufacturers have become part of the gravel boom. Sweetwater Bikes, in Ambridge, PA, carries eight different models of gravel bikes. The owners also offer group rides and created the Penn’s Woods Passage cross-state route. Regarding gravel’s impact on the bicycle industry, Mike Riemer of Salsa Cycles says, **“The industry-wide impact is enormous.”**



Tourism Savvy

Tourism promotion agencies as well as state heritage areas have recognized gravel as a visitor attraction opportunity. Often, tourism-driven routes tend to be shorter than those created by individual cyclists, leaving plenty of time off the saddle for other visitor experiences and making them more approachable for all skill and experience levels.

In Vermont, the Northeast Kingdom Gravel website, developed with a USDA Rural Business Development Grant, markets “1,000 miles through farms and forests.” The routes are presented 10, 20, and 40 miles at a time, with nearly all the curated routes less than 40 miles in length.

Northwest Arkansas has built a reputation for its vast network of mountain bike and gravel trails. Experience Fayetteville markets four routes ranging from 26-43 miles. According to Joe Jacobs, Chairperson of the Governor’s Advisory Council on Cycling, other Arkansas cities have taken note of growth in the northwest corner. **“Fayetteville became the second largest city in the state, and it happened on the back of outdoor recreation.”**

Another key gravel development, one with statewide significance, is the Arkansas High Country Route. The Arkansas Division of State Parks and Arkansas Parks and Recreation Foundation collaborated with Adventure Cycling Association to create two routes: the 671-mile North Route and the 500-mile South Route. The state’s investment in the range of \$200,000 seems a sound one that “lit a fuse.” Jacobs relayed the story of the Delta Heritage Trail – an incomplete and “languishing” rail-trail of 80 miles (when complete). Its support by the state and local private foundations, as well as its location along a proposed 200-mile gravel route, has led to renewed trail completion efforts. “We have money for that now,” he says.

Opportunities & Barriers



Identifying the Barriers

For all its inclusive culture and relaxed vibe, barriers to entry for people do exist. They include but are not limited to:

- **Socioeconomic/technological.** Enabling technologies such as navigation apps, bike computers, and satellite trackers make gravel both safer and more accessible. “You don’t need a signed route. You just need a device that will tell you where to turn,” said one interviewee. These devices, while great for cycling, are not easily affordable for everyone, nor are the bikes or traveling to routes. Additionally, some people either aren’t tech savvy or desire more than turn-by-turn directions.
- **Financial support.** It seems the momentum and sponsorship backing for gravel is directed toward rides and races, without as many resources available for education, route creation, and marketing resources. This proves to be a challenge for individuals and entities who are doing the very work of trying to reduce barriers by making routes and information readily available. Websites are great and useful, but sponsors may be more inclined to fund events.
- **Resource loss.** The loss of gravel and dirt roads (giving way to municipal paving) is a challenge to the promotion of gravel riding. While nearly all gravel routes include some paved roads, cyclists do tend to look for routes with a higher percentage of unpaved roads and trails.
- **Safety.** Some people simply don’t feel safe or comfortable visiting remote areas, including (but not limited to) women, urbanites, and members of the LGBTQ+ community. Something we heard in our research was that riding out in the middle of nowhere “is not for everyone.” Steps could be taken to lessen feelings of discomfort.
- **Inclusion.** Newer and casual riders may have trouble finding groups and riding partners who keep a similar pace. Rose Barcklow and Laura Karpinski, who manage the Gravel Bike Adventures website, say that a lot of people have expressed to them that community rides can end up moving at a fast clip.
- **Racing focus.** Casual riders can become alienated when gravel takes a hardcore or racing focus. Barcklow feels that gravel riding is being taken over by the racing community. “It’s always ‘epic,’” a message that “pulls it away from the average person.” By contrast, Gravel Bike Adventures caters to the average cyclist. Their routes are primarily curated by women and aim to provide helpful, contextual information – just enough details to help people feel more comfortable trying new routes.

Exploring the Opportunities

Support rural economies. small businesses, and the bicycle industry. Gravel is good for business and for the rural communities where most of the routes exist. It leverages existing infrastructure – the unpaved roads, rail-trails, and more – and brings people into communities that might not otherwise see the foot traffic. Already, the PA Route 6 Alliance and the Endless Mountains Heritage Region are collaborating to develop routes. The Penn’s Wood Passage makes an 836-mile loop around the state. Public lands and unpaved roads from the PA Wilds to the Allegheny Front and beyond provide opportunities to attract cyclists who might not otherwise visit. The carrying capacity of the roadways also allows for extending the cycling season. When singletrack trail conditions are too muddy or too technical, gravel provides a suitable alternative. Essentially, people can bike during the spring thaw without damaging trails.

Create public land stewardship by getting people into more of Pennsylvania’s parks, forests and open spaces. The varied nature of gravel riding means routes could go through state and national forests, game lands, and local parks all in the same ride. State parks often serve as hubs or starting points for routes into the surrounding forests. Riders ultimately will gain an appreciation for all these types of public lands and will be invested in their conservation.

More people passionate about cycling through public lands means more people who will care about protecting them.

Support Pennsylvania’s investment in rail-trails. Gravel routes put people onto low traffic roads and even onto some of PA’s favorite rail-trails. Route creators include rail-trails when they are convenient, compelling, and keep people off roadways. Mark Stevenson of the Trans Iowa observed that rail-trails can provide great scenery, history, and vantage points. “When it’s really cool you include (rail-trails),” he says. From a rider’s perspective, the nearly level trails provide a relaxing break from climbs and descents. This all adds up to continued and growing support for rail-trails, helping to protect and leverage Pennsylvania’s long-term investment in trails. **Like in Arkansas, where the emergence of gravel spurred a renewed commitment to finishing the Delta Heritage Trail, opportunities may exist to take a fresh look at incomplete rail-trails in Pennsylvania.**

Developing user-friendly resources. Already, some of Pennsylvania’s heritage areas are exploring or providing gravel routes and resources. Tourism organizations inherently understand the art of handholding. (Providing good, helpful information is an important part of hospitality.) How can Pennsylvania provide more user-friendly gravel resources for audiences of all levels? Both beginner/intermediate and expert-level cyclists will benefit from more and better information beyond the Ride with GPS default. The tourism and business communities have become actively involved in Arkansas, Virginia, Vermont, and other areas. Seeing the same in Pennsylvania would result in more such resources.

Protecting gravel and dirt roads. Collaborating with heritage and conservation partners to protect gravel and dirt roads could be a useful strategy – one that is good for preservation, climate resilience, and gravel cycling. Last year in Virginia, the state’s Department of Historic Resources declared Loudoun County’s 18th and 19th century unpaved roads eligible for historic landmark destination. As part of an effort to protect the roads (which Preservation Virginia added to a list of the commonwealth’s most endangered sites), the county also launched a digital map of the roads. A similar pairing that recognizes the shared interest of preservationists and the outdoor recreation community in Pennsylvania could result in permanently protected rural roadways. In addition, gravel and other porous surfaces are more environmentally friendly.

Rewriting the narrative. The bike industry is all over gravel. Tourism promoters are developing product (i.e., routes). Race teams and professional athletes are riding. There are more “gravel grinder” events than we can count. Gravel has gained a massive following. How we tell the story matters. TransVirginia Route creator David Landis says that having a compelling narrative is vital. “Without it, you don’t have a hook or a brand,” he advises. Pennsylvania can do its part in rewriting the gravel narrative. If there are concerns about gravel becoming race-y or if the average cyclist finds the idea of “grinding” to be off-putting, we can promote a Keystone gravel culture that is neither of those. A blog post titled “Gravel is as old as cycling!”³ addresses the grinding terminology: “As riding off pavement became popular, people were looking for a catchy phrase to describe this ‘new’ sport. The alliteration ‘gravel grinding’ became popular, but many riders resisted the new term: Our goal was to float over the gravel rather than grind through it. As tires became wider, ‘grinding’ fell by the wayside, and riding on unpaved surfaces became simply ‘gravel riding.’” Pennsylvania can invite an ever-widening cadre of cyclists to ride, not race or grind, through its most scenic areas.

Racing happens, of course. Mike Riemer of Salsa Cycles says that there is always racing at the front of a ride. It’s “the pointy end of the spear.” But he characterized the early gravel rides he took part in as bicycle community rides: “You would see people not in a hurry.” Pennsylvania can preserve this relaxed, friendly culture and promote that as the priority here. We can celebrate and lift up rides of modest mileage just as much as the longer treks. This culture is prevalent with the state’s largest ride, unPAved, where the finishing prizes are the same for every course length. Organizer Dave Pryor says, “Everyone’s having their day, and however you have that day is great.”

Another way to rewrite the narrative relates to de-emphasizing the surface. While non-paved surfaces are key in providing low-volume, low-speed roadways, the spirit of gravel is in the adventure and sense of community, not the dirt or dust people ride over. Emphasizing the “why,” not the “how” could be advantageous simply because Pennsylvania doesn’t have as vast an unpaved road network in some of its regions as some other states. The “Gravel is as old as cycling” blog post claims gravel is a “return to the roots of cycling, when every ride was an adventure...” Let’s tell this story. It’s the scenery and where the roads take you, not the surface, that count the most.



Gravel Myths

Myth: “I need a special bike to ride gravel.”

People may think they need a bike that’s designed and marketed for gravel to venture out. In reality, a mountain bike or a hybrid with wide tires can get the job done for non-competitive gravel adventures. Group rides on mixed surfaces (a.k.a., gravel) started well before gravel bikes existed. There is no need for a specialized bike.

Myth: “It’s all hype: gravel bikes are JUST the same as [insert type of bike here].”

While people don’t have to have a gravel bike, the models are designed to facilitate comfortable and enjoyable mixed-surface biking. The result? Less gravel “grinding” and an enhanced ability to ride over a variety of surfaces. unPAved founder Dave Pryor said about the versatility of gravel bikes, “These are the bikes we should have been riding all along.”

Myth: “It’s just a bunch of skinny white guys – mustache and tattoos highly likely.”

This is literally what someone wrote when we reached out to a group of national trail experts looking for demographic information. True, men are the primary demographic for gravel riding, but rides and events are becoming increasingly more gender balanced and women and non-binary riders are showing up in other spaces as well. The Women Gravel Cyclists Facebook group amassed nearly 12,000 members in its first two years, and the Girls Gone Gravel page is liked by 2,200 people.

Myth: “I need to go really far to do it right.”

Some people who ride gravel have great endurance, riding for days or weeks on end. Others bang out a hundred miles in a day. But it’s just as easy to find routes that are 25, 30, or 40 miles. Tourism bodies that “get” gravel are now marketing shorter distance routes, ensuring that people have time to both ride and explore surrounding areas.

Myth: “All you have to do is hop onto Strava or Ride with GPS and you’ll find everything you need.”

While there are a ton of routes accessible on both platforms and this is sufficient for a lot of cyclists, some people are looking for support and resources. The opportunity exists to provide narrative and other helpful information (restrooms, big climbs, places to resupply, etc.) to audiences that are hungry for more details, support, and reassurance.

Myth: “It’s all about competitive racing anymore.”

A few of the experts we interviewed expressed their concerns about competitive race culture infiltrating an otherwise friendly, laid-back form of cycling. A few of the experts we interviewed expressed their worries about this. Despite this shift, there are plenty of ways to enjoy gravel riding in the spirit with which it is intended. Non-competitive events and rides exist – a lot of them! People create D-I-Y routes of all distances, and groups like the Ohio Gravel Grinders and Rust Belt Gravel Grinders offer more camaraderie than competition.



1. PEC PUBLIC LANDS RIDES

40-60 mile routes in public lands across the state as well as an in-person event in Moshannon State Forest.

2. PAPER TRAIL CAFÉ & GRAVEL TRAVEL

Wissahickon Park, Philadelphia

Bike shop, cafe, weekly community rides, and all-inclusive gravel tours.

3. ROTHROCK GRIT

Rothrock State Forest

Hosted by Happy Valley Women's Cycling and holds equal numbers of spots for men and women for gender parity at their event.

4. SWEETWATER BIKES

Ambridge

Carries 8 brands of gravel bikes, hosts several events in western PA including the Whiskey Rebellion, and created the Penn's Woods Passage route.

5. NITTANY MOUNTAIN WORKS

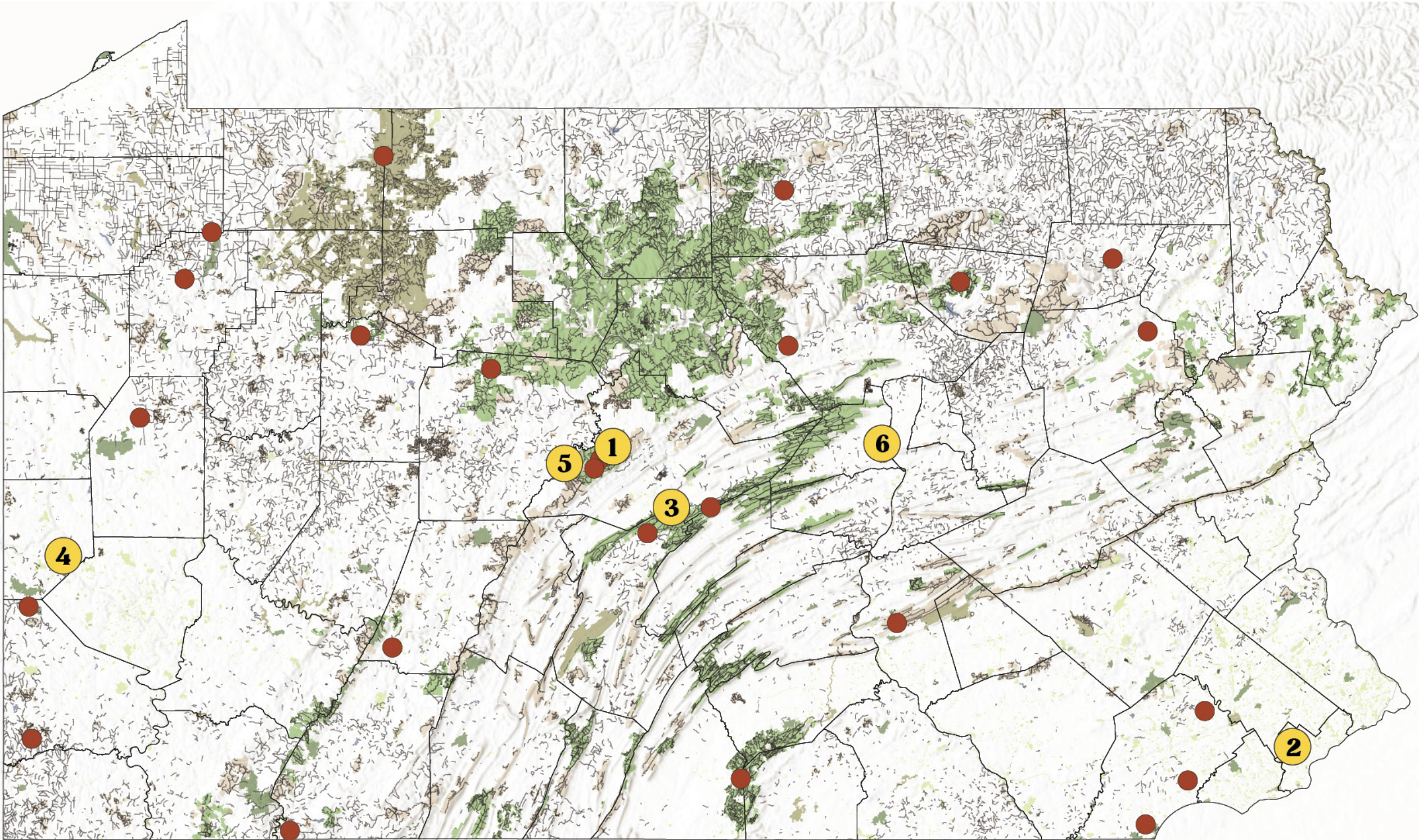
Philipsburg

100% solar-powered manufacturer that makes bags for bikes and more in Philipsburg, PA.

6. unPAved OF THE SUSQUEHANNA RIVER VALLEY

Lewisburg & Bald Eagle State Forest

"We knew we could do a great grassroots gravel event in our sleep; we wanted to put on a national level event. It took us three years to plan it." -Dave Pryor



- Federal Land
- State Forest
- State Park
- State Game Land
- Local Park

Gravel or Dirt Road
data aggregated from Penn State University, Allegheny National Forest, DCNR, PA Game Commission

Gravel Event
based on our knowledge and not a comprehensive list

1 These are just a few of the gravel-related resources in PA -- there are many more!



Endnotes

1 “First quarter wholesale bike sales up 2.4% thanks to e-bikes and gravel bikes,” *Bicycle Retailer*, April 17, 2018

2 “Roots in the Dirt: How Gravel Racing has Thrived in Smaller Destinations,” *Sports Travel Magazine*, June 1, 2021

3 “Gravel is as old as cycling!,” Jan Heine, René HERSE, Jan. 15, 2022

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Dave Pryor, **unPAved**

Mike Riemer, **Salsa Cycles**

Mark Stevenson, **Trans Iowa Race**

Photo Credits

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pennsylvania environmental council



2022 Gravel Summit - Tussey Mountain Ski Area - Boalsburg, PA
April 28 - Organized by the Pennsylvania Environmental Council

