



Cycling GUIDE

Benefits of Biking

There's no doubt that more Americans could be enjoying the benefits of biking. And these benefits are geared toward both individual health and environmental sustainability.

People for Bikes is an organization that aims to make biking better for everyone by promoting its benefits and creating a united voice for cycling.

The group works with cities and other organizations to encourage cost-effective investments in cycling that will benefit communities across the country.

Here are just a few of the reasons People for Bikes say everyone who can cycle should cycle.

ECONOMIC BENEFITS

- In 2014, automobile congestion caused 6.9 billion hours of travel delay as well as 3.1 billion gallons of wasted fuel. This equates to a cost of more than \$160 billion, according to the 2015 Urban Mobility Scorecard.

- According to a special report published by CEOs For Cities, houses located in areas with above-average walk and bike-ability are worth up to \$35,000 more than similar houses in other areas.

- According to the Center for Neighborhood Technology, the average American household spends three months' pay per year on transportation.

HEALTH BENEFITS

- 30 minutes of cycling (or

moderate exercise) per day is associated with improved mental health in men (Journal of Occupational Health) and lowers the risk of breast cancer in women (European Journal of Epidemiology).

- According to the Journal of Physical Activity and Health, the countries with the highest levels of cycling also have the lowest obesity rates.

- An adult cyclist typically has a level of fitness comparable to someone 10 years younger and takes 15 percent fewer sick days per year from work.

ENVIRONMENTAL BENEFITS

- Cars are used for more than 75 percent of trips less than one mile away, according to Pedestrian Transportation.

- Half of U.S. school children are dropped off at school by car. If even 20 percent of those living within two miles of school were to bike or walk instead, it would save 4.3 million driving miles per day, which would prevent 356,000 tons of CO₂ and 21,500 tons of other pollutants from being emitted over the course of a year, according to a report produced jointly by the Centers for Disease Control and Safe Routes to School.



Beginner's Guide

So you've decided to give cycling a try — a great first step. Maybe you are determined to make an environmental impact and cycle to work, or you want to cycle for sport.

Whatever your reason, there are a few things you should know.

SAFETY

Be sure to keep your eyes on the road. This makes it easier to avoid broken glass, loose gravel and potholes.

Also beware of wet leaves. When your tires make contact with slippery surfaces, be sure to coast. Accelerating or hitting your brakes can cause your wheels to slide, which could lead to an accident.

Always watch for cars coming and going, especially out near driveways and side roads. If a car is not signaling, never assume it is going to stop.

ETIQUETTE

Like everything else in life, there is a polite and courteous way of doing things on your bike, especially if you are cycling in a group.

Never ride more than two abreast, and always be spatially aware of the cyclists both in front of you and



beside you. No one likes to feel crowded.

MOVE AROUND

If you alternate between sitting and standing positions, you will use all your muscle groups. Start easy and don't

try to do too much right away.

Don't push yourself too far; begin with low-mileage goals around 5 miles per ride and add to that each week.

REMEMBER, IT'S OK IF:

- You go your own speed. If

you are with others, don't feel like you need to keep pace with the group, especially if you're in this for leisure. What's the rush?

- You need to get off and walk. Knowing your limits is important. You don't want to

push yourself too far and get injured the process.

- There are bad days. We all have them. If you find yourself struggling more than normal or fatiguing quickly, cut the ride short or take a break to stretch.

Try a Triathlon

If you are an avid cyclist, you might consider adding some swimming and running into your workout. Triathlons have become more popular in recent years, and therefore easier to find in a location near you.

Before you jump into a triathlon with both feet, here are a few things to consider.

ORGANIZATION

A triathlon has three components: swimming, cycling and running. This means there also are two transitions, which are the most unpredictable aspect of the race.

It is in these transitions that you can either speed ahead or fall behind, so it is important to do what you can to make them as smooth as possible. Never sit down during a transition. Doing so can slow you down and even lead to cramping.

Instead, practice everything you need to accomplish in each transition at home before race day. This will have you ready to go when competition time comes.

TRAINING

The first step of entering a triathlon is to choose a race. This gives you a specific goal to train toward and will keep you motivated in the weeks and months

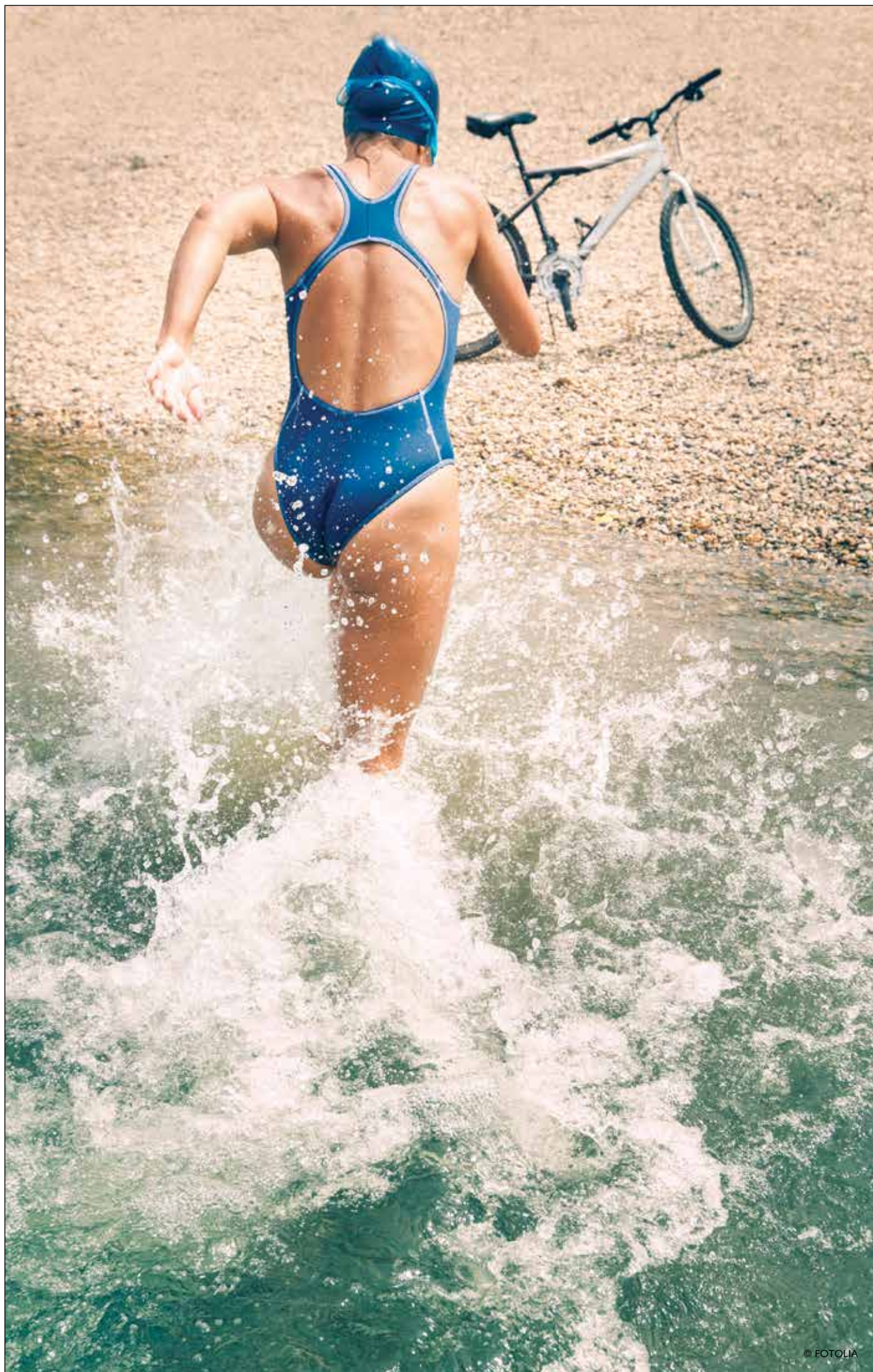
ahead.

Next, you might consider picking up a training guide from a bookstore or local library. Following a planned workout regimen can be easier than tackling it on your own. These resources will give you a crash course on each leg in a triathlon, which is great if you are not already a runner or swimmer.

INVESTMENT

Not only will a triathlon require a physical investment from you, but it will be mentally and financially taxing, as well. Triathlon gear can get expensive very quickly. It is easy to get caught up in needing a \$300 wet suit, not to mention quality shoes, jerseys, goggles and bike kits.

Remember to work with what you have and upgrade as needed. You can run your first triathlon with a lot less gear than you might initially think. Check with your local cycling shop for used equipment or gear that could help put you on the road to triathlon success.



Nutrition for Competition

Proper nutrition is crucial for attaining your performance goal on a long cycling trip.

A healthy diet is linked to better concentration, attention span and memory — all of which are central in performing physical activity.

COMMON MISTAKES

One of the most common mistakes athletes make when beginning their training season is to restrict their calories. Why would you restrict your fuel when your physical exertion increases?

Be aware of how much you are exerting yourself, and increase your caloric intake accordingly. This is not a free-reign to binge on soda and donuts. You want calories that will work for you and with you, so stick with a balance of carbohydrates, proteins and healthy fats.

HYDRATION

The average person should be following the 8x8 rule for consuming water: eight, 8-ounce glasses per day. However, when you engage in physical activity regularly, you should be consuming much more.

We lose water every day through natural processes, such as when we sweat, breathe or urinate. Physical activity enhances the output of these processes, so the average 8x8 rule should be increased. Look for water enhanced with electrolytes for

added nutrients.

BEWARE OF ENERGY DRINKS AND BARS

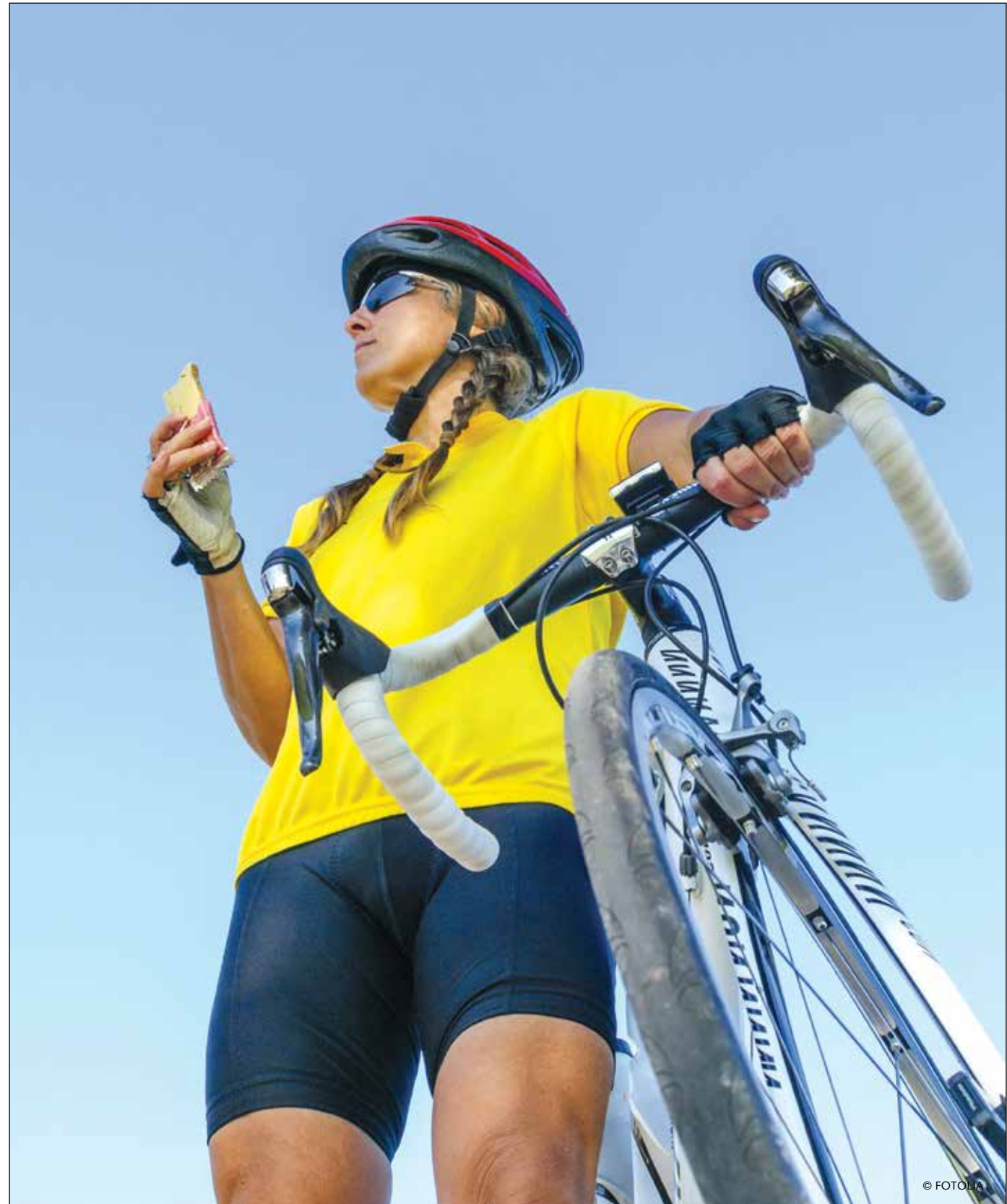
While many of these products advertise a boost in energy, most are high in sugars and caffeine, which come with many damaging side effects, such as irregular heartbeat, headaches and nausea, if consumed in excess.

This is not to discount fast-absorbing proteins, which typically are purchased in powder form. The most common of these is whey protein, which can be consumed post-workout to supply your muscles with the amino acids they need to repair and recover. Check in with your local supplements company to find the right option for you.

TIMING

When you eat is just as important as what you eat. Consuming food and water at regular intervals throughout the day has been shown to impact your overall health and well-being. If you are an athlete, however — training for competition or just regularly engaging in physical exercise — fueling your body at the right time will not only influence your performance but how well you recover.

Consuming large amounts of water and carbohydrate-rich foods before exercise helps to



increase glycogen in muscles as well as provide a mental boost. The 45 minutes after

exercise is considered to be the “window of opportunity” for nutrition recovery, and is the

perfect time to resupply your body with fast-absorbing proteins.

Cycling Equipment

There is plenty of fancy gear to help you trick out your ride and upgrade your performance, but what if you're just starting out? What do you need to get going?

Obviously the two basic essentials are a bike and a helmet, but what else? This guide will provide you with the necessary accessories for safe riding.

THE ESSENTIALS

Bike, helmet. It's just that simple, and you're off to a great start.

BASIC REPAIR KIT:

- Spare tube or tire patch kit
- Tire levers
- Pump
- Cycling multi-tool with Allen wrenches

Now you can handle any minor repair. Make sure you familiarize yourself with each of these items and how to properly use them. They are no good to you without practice.

FOR SAFETY'S SAKE

- Water. (Either a bottle with a cage that attaches to your bike or a hydration pack will work just fine.)
- Snacks. (Proper nutrition before, during and after physical activity is essential.)

- Sunscreen
 - Eye protection. (Either sunglasses or glasses with clear lenses.)
 - Lock
- All of these things will allow

for a safer and easier ride.

FOR COMFORT'S SAKE

- Padded shorts
- Tops or jerseys made with water-wicking technology

- Gloves
- Watch
- Cycling shoes
- Cash. (You never know.)
- Map, if you are unfamiliar with the area

There is much more available for cycling enthusiasts, but this is a basic checklist. You will develop a preference for cycling gear as you gain experience. Have fun and ride safe.



Bucket List Races

Whether you vie for a coveted spot or are just interested in cheering others on, here are six one-of-a-kind cycling experiences.

IDITAROD TRAIL INVITATIONAL

Where: Anchorage to Nome, Alaska
When: February

Participation in this 1,000-mile race is by invitation only across Alaskan trails that remain predominantly uninhabited. It remains the world's longest winter ultra-marathon by fat bike, foot and ski.

SEA OTTER CYCLING CLASSIC

Where: Monterey, Calif.
When: April

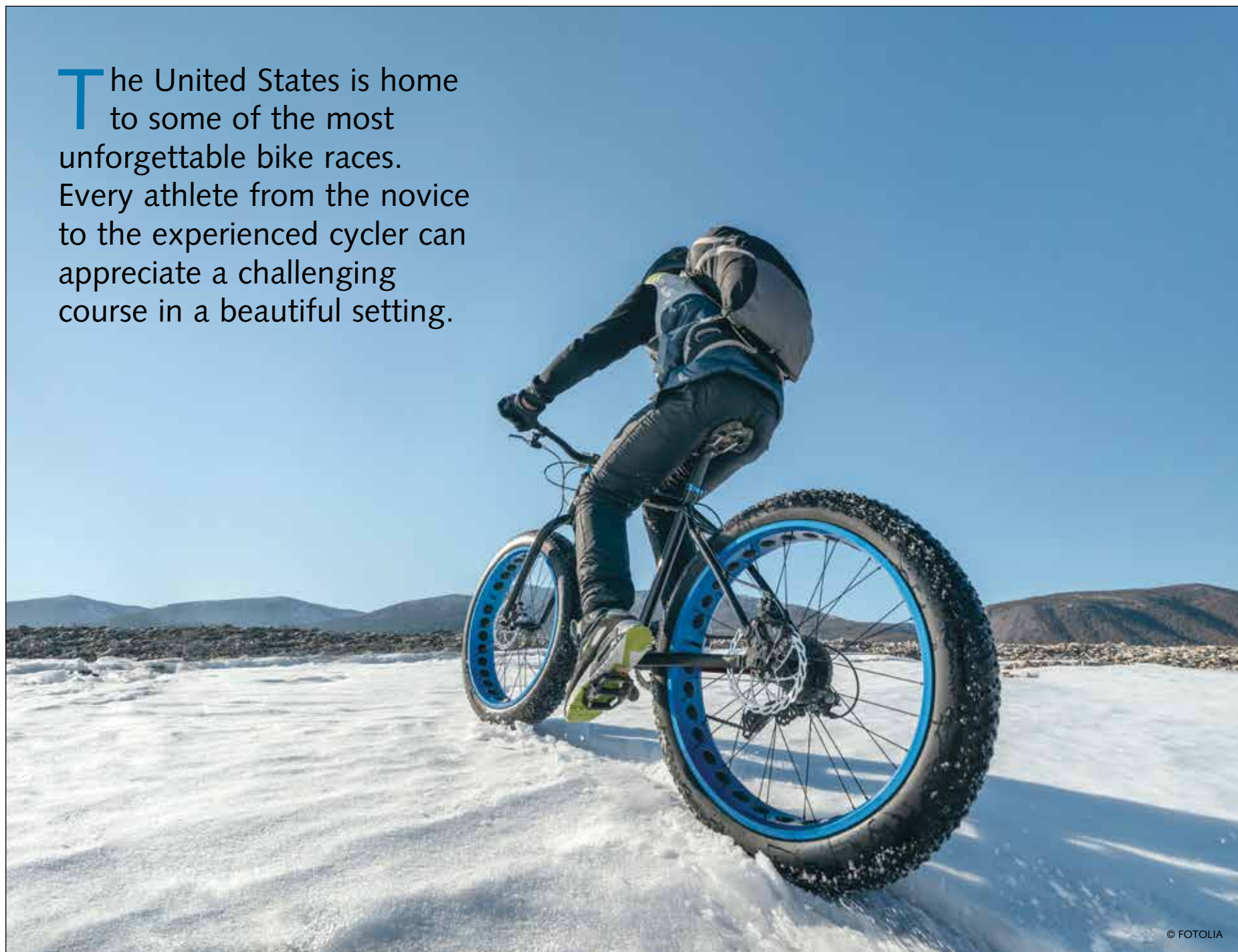
This is a weekend-long event featuring not only Gran Fondos and tours but festival fun for the whole family. It also operates as one of the largest cycling exhibitions in the world. More than 65,000 participants flock to Monterey every year to cheer on the more than 10,000 competitors.

RACE ACROSS AMERICA

Where: Oceanside, Calif. to Annapolis, Md.
When: June

This race covers 3,000 miles, 12 states and more than 170,000 feet of vertical terrain. Not to mention you only have 12 days to finish.

The United States is home to some of the most unforgettable bike races. Every athlete from the novice to the experienced cyclist can appreciate a challenging course in a beautiful setting.



May the odds be ever in your favor.

TOUR DIVIDE

Where: Banff, Alberta to Antelope Wells, N.M.
When: June

While this race doesn't

begin in the U.S., it finishes here, so it shouldn't be eliminated from our race bucket list.

The Tour Divide is an "ultra cycling challenge" to bike solo and unsupported for the length of the Great Divide Mountain Bike Route. There

is no registration fee and no prize for winning — just bragging rights and immense pride.

MOUNT WASHINGTON HILL CLIMB

Where: Mount Washington
When: August

The Mt. Washington AutoRoad Bicycle Hillclimb is known to be one of the toughest in the world at 7.6 miles in length, with an average grade of 12 percent, extended sections at 18 percent, and a 50-yard finish at a 22 percent grade. Climb that.

Bucket List Rides

Competition is great and all, but if you're just in it for the scenery, check out these stunning, picturesque rides, no race registration required. After all, the United States is well known for its beautiful landscapes. Why not enjoy them by bike?

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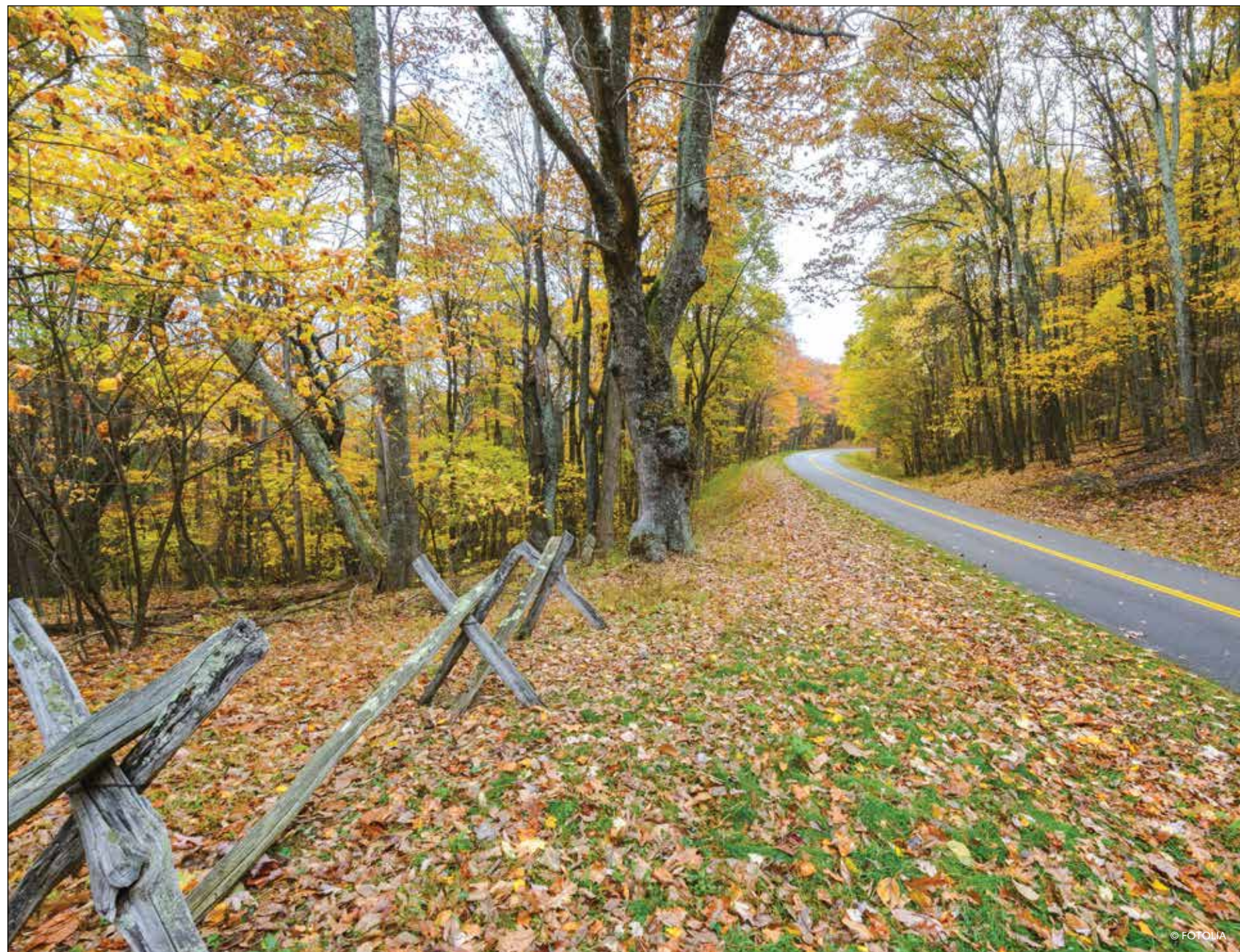
Where: Miami to Key West
When to go: Early spring

Two-sided tropical ocean panoramas go on for hours. You also have a chance of spotting turtles and dolphins as you cross 42 bridges. If you're determined enough, the 160-mile stretch can be accomplished in one day. Beware of snakes and alligators, which are drawn to the toasty pavement.

GOING-TO-THE-SUN ROAD

Where: Glacier National Park, Mont.
When to go: Summer

What's in a name? Everything. This gorgeous alpine route takes you through the heart of Glacier National Park. It is the only road in the U.S. designated both a National Historic Landmark and a National Civil



Engineering Landmark, making it a perfect vacation ride to soak up some history.

MOUNT EVANS

Where: Idaho Springs, CO
When: Summer

This is your chance to ride

on the highest paved road in North America at 14,240 feet of elevation. This 28-mile route is only open in three months in the summer, but is worth the effort to ride through the tall pine forests and past clear-as-glass lakes. Pack warm, as it is normally

always snowy at the top.

BLUE RIDGE PARKWAY

Where: North Carolina and Virginia
When to go: Late spring through the fall

The Blue Ridge Parkway

allows for 469 miles of riding through some of the country's most stunning national parks and protected forests. Cycling in the fall will allow you to enjoy the changing of the colors — a setting with beauty only Mother Nature can provide.