

Pedal, Paddle and Hike

By Trent Carbaugh

An Overview of Types of Bicycles to Ride the Towpath

If you are thinking of taking up bicycling or are already bicycling and want to start touring or just generally improve your equipment here is some information for you. Every serious bicycle traveler has their own opinions on bikes and gear, most of which are valid, so please don't take my advice as the "be all, end all." Ultimately you will find what suits you and what you plan do with a bicycle.

The Magic Machine Itself

Bicycles can simply be complex mechanical tools, or they can be deeply personalized companions for exciting adventures; it all depends on your point of view. For many children getting a bicycle is that first thrilling taste of traveling freedom leading to adulthood. On the other hand, many adults get a bicycle and get the joy of being a kid again. It seems pretty much a win either way.

There is no clear-cut definition between bicycle types and there is much overlap between all the names we arbitrarily assign to different kinds of velocipedes. So, if you are going to get a first bike or wish to improve on your existing ride, I recommend doing some research and a few test rides before you spend lots of money. What follows is a brief description of the most common kinds of bikes.

Mountain Bikes

A mountain bike is probably the most common bicycle that you will see on the towpath. There are basically three types of mountain bikes, full suspension, front suspension (also called "hardtails"), and no-suspension rigid frame bikes.

Full-suspension bikes are for jumps and fast downhill runs, probably not the best choice for the towpath. This kind of bike will have an air or hydraulic suspension fork and some kind of articulated spring or hydraulic dampened rear suspension. This kind of bike is very difficult to mount bags on and they are relatively inefficient on level although smooth terrain, fun to ride on steep downhill.

Front suspension hardtails are a fairly good choice for the towpath. The dampened fork absorbs many of the small impacts that can cause hand and wrist pain on long towpath rides. Unlike with full suspension bikes, it is easy to mount rear racks, frame bags, and handlebar bags.

Unsuspected mountain bikes, though once common, are now mostly used for bikepacking.

Hybrid Bikes

Another commonly seen bike on the towpath is a hybrid bike. This is kind of a confusing term, as "hybrids" can be almost as lightweight as road bikes or can approach the utility of touring bikes. They will almost always have flat handlebars of some sort and the frame geometry will allow for a more comfortable upright riding posture. The popularity of hybrid bikes is simple: they are pleasant to ride, relatively light, and a good one can be inexpensive. Hybrid bikes can be used for light touring, though many of them lack mounting points for bags and racks.

Touring, Gravel and Bikepacking Bikes

These three types of bikes are very similar with much design overlap between the three. If you want to pursue longer range riding and camping on a bike, one of these three is probably your best option.



Front suspension (hardtail) mountain bike – Photos by Trent Carbaugh



Bikepacking bike loaded out for camping

Touring bikes are usually built as sturdier versions of road bikes, generally with steel frames and forks. They will have lots of mounting points for racks and bags along with a less aggressive frame geometry which is more comfortable for long days in the saddle.

Gravel bikes are designed for the type of trail surface found on the towpath. They generally incorporate higher volume tires and extensive bag mounting options. Gravel bikes are intended to be fast, and many designs lean heavily into the endurance racing end of bicycling.

Bikepacking can be described as the bicycle version of ultralight backpacking. Bikepacking bikes, if set up correctly, can get you across the African veldt or traverse Iceland in the winter. Lighter versions of bikes designed for bikepacking are not a bad choice for all season towpath riding. The bikepacking idea of using less and lighter gear along with innovative packing methods have percolated into all aspects of bike touring. Bikepacking bikes are usually built along the lines of old school rigid mountain bikes with an upright riding position.

Most use high-volume low-pressure tires that supply some suspension for both rider comfort and traction but are also easier on trail surfaces.

Recumbent Bikes

A recumbent bike is a bicycle that is designed to put your body in a reclining position. The reason to do this is it takes much of the strain off the normal stress points of an upright bicycle, including wrists, neck, and lower back. There are two basic configurations of recumbent bikes, two wheels, which requires you to balance the bike, and three wheel which does not. Recumbents, not being in the mainstream of the bike world, are more expensive for both the bike itself as well as any touring gear you may need, but if you have chronic arthritis or other health problems that make riding an upright bike uncomfortable this may be an option for you. I recently acquired a tadpole trike for those very reasons. It is a beautifully well-made machine and is incredibly comfortable to ride but it doesn't seem to help with my poor old decrepit knees as much as I would like.



Road/gravel bike, note the more aggressive frame and drop bars



Hybrid bike



Touring/hybrid bike



Recumbent trike, this one folds in the middle for easier transport

There are some drawbacks to recumbents as well. Recumbents are not great at climbing hills, which really isn't a problem on the towpath but could be on unexpected detours. On the other hand, they are faster than upright bikes on the flat and downhills, sometimes shockingly so. Three-wheel trikes are not going to go through the Paw Paw Tunnel or across aqueducts that have water in the prism. Unlike upright bikes, it is difficult to push a trike anywhere. I have no experience with two-wheel recumbents, but I understand there is a steep learning curve in picking up the knack of riding one.

Road Bikes

Road bikes are built for speed and performance and are the least appropriate kind of bike for the towpath. Should you have a good road bike and want to ride in the park I would suggest putting on the biggest tires you can get to fit.

E-Bikes

Pedal assist e-bikes seem to be taking the world by storm. Personally I'm not sure if this is a good idea or not. I see more people going too fast on the towpath and not using proper trail etiquette when passing. On the other hand, I see more elderly and other folks out enjoying bike rides, which they normally wouldn't be able to do comfortably. Drawbacks to e-bikes include limited range of electric assist, which could be problematic for touring, and care needed to avoid potential battery fire. Another issue is the potential of having more bikes going past the 15-mph speed limit on the towpath.

Tires

Tire choice is sort of a pet peeve with me. I see too many riders on heavily loaded touring bikes with high pressure tires that are too narrow or mountain bikes with very aggressive tread. Both tire types damage the towpath by cutting deep ruts which cause other riders to go around the ruts on the side of the towpath, causing more damage. This is bad in wet conditions but can be even worse when the towpath dries out leaving hard ruts that can cause falls. I shall step down from my soapbox now.

The best choice for the towpath is low pressure/high volume tires with either low tread or tread specifically designed for surfaces like the towpath (there are plenty of choices among different tire makers).

Another thing that will make your life easier is to use tubeless tires. You need to have tubeless capable rims, and this is a feature to look at when purchasing a new bike as good wheels can be pricey if you buy them separately. Tubeless tires work by having a locking bead on the tire that engages a hooked rim in the wheel. Tubeless sealant is then put in through a nifty valve that attaches to the rim. You then add air, spin the wheel in multiple orientations to seal the bead, then ride. If you ride over a thorn or piece of glass the sealant runs into the hole and closes it. If you get a bigger hole, it can be filled with a plug just like a car tire. Since I changed over to tubeless five years ago I have not had a flat tire.

Ride Safely and Courteously

The National Park Service has a well thought out set of rules for the use of the C&O Canal towpath. It is wise for all users of the towpath to periodically review these rules for everyone's safety. There are also things that are not in the rules that you should strive to do as well when conditions warrant. The main thing is to be respectful of other towpath users even if they are not respectful to you. Reviewing the rules is also important as the demographic of towpath users is changing; bicyclists are now the biggest user group. This will only increase as dedicated trail systems grow across the country and folks are making longer trips by bicycle.

The C&O is unique in that it is a National Historical Park on a major river. This means that you can encounter everything from local fishermen to bike touring travelers from anywhere in the world. All of these people need to get along, and usually do. Unfortunately, there are plenty of users of the canal who don't know or understand the rules and this can cause problems. Hopefully this article will help to alleviate this discrepancy. Effectively, trail rules are guidelines; circumstances dictate what you should or should not do. Everyone should use common sense in unusual situations and always try to err on the side of safety.

Trent provided a well thought out article about trail safety and etiquette in the March, 2021 *Along the Towpath*. The article is available at www.candocanal.org/atp/2021-03.pdf. He offered references, recommendations and safety tips for hiking and biking on the canal. Whether you are new to biking or an experienced rider, you may want to review this article. For current information about biking on the C&O Canal NHP visit www.nps.gov/choh/planyourvisit/bicycle.htm.



March, 2021
Along the Towpath



C&O Canal NHP
Bicycle Use Guidance

If you don't want to, or can't, change over to tubeless for any reason you can get puncture resistant tires that work very well for things like multi-flora rose thorns or similar small punctures.

Brakes

At some point if you spend enough time out on the towpath, you are going to get wet and probably muddy. Storms have a pesky way of sneaking up on you in the Potomac River valley. This is why I recommend a bike with disk brakes as opposed to rim brakes. You'll stop much quicker especially with a loaded bike. I have had the experience of not being able to stop at all with rim brakes during a wet, cold, muddy camping trip, no fun at all!

Always make sure your brakes, no matter what type, are in good working order.

Contact Points

Contact points are the three places that your body connects to the bicycle: pedals, saddles, and handlebars. These three items are extremely important for not only comfort but control and safety. These three things are relatively easy to change and can make a big



difference. For comfort and efficiency, it is very important that these three things are adjusted correctly for your body and riding style. If you don't know how, any good bike shop can do this for you.

I hope this is helpful information, safe and happy riding!

Many thanks to Jamie Boward, owner of Mercury Endurance Cycles, in Hagerstown, Md. for letting me photograph bikes.

Captions this page:

Upper Center – Low pressure high volume tire with a tread pattern specifically designed for trails like the towpath. The large volume provides some shock cushioning, and the low pressure helps in not damaging a softer surface.

Lower Center – A narrower version of a low pressure tire with a low tread for narrower wheels that performs better on road surfaces by adding more air.

Bottom Left – A short muddy section of the towpath showing the damage caused by narrow tires. Some of the less deep ruts are the results of wider lower pressure tires. The depth of the mud can be seen in the deer tracks in the lower left side of the photograph.

Bottom Right – The beginnings of a mud hole. Though it might be a little dirty, it is always best to slow down and ride through the puddle. Fenders help.

