

Salty Dog: It's Time to Winterize Your Bike

The active cyclist, such as we have many in the Club, is probably asking herself or himself, "How do I cope with the change of seasons?" There are two extremes that one might consider, not to mention some compromises between. The extremes are: 1 -- Just keep on riding, and 2 -- Just hang the bike on a hook in the garage and get the skis out of storage. The term "winterize your bike" can mean keeping it on the road in winter, or it can mean parking it for the winter.

Either of these approaches could use some serious thought, preparation, time and ... ugh ... labor. (Winter cycling tends to be labor intensive. Your local bike shop will be happy to do the work for you, but you will need to pay them to do it.) The present article will not try to summarize all the skills needed to ride in winter, but it will give some tips for both putting the bike away and for keeping it on the road. Those choices are not that different, in some respects.

Let's begin with the first principles: What resources can we draw upon?

The RBC is a fantastic club with riders of all types including those who ride recreationally all winter in all conditions. More than that, within our membership, we have professional and semi-professional mechanics; and we have all-weather commuters, those who simply cannot take a day off, because they don't have cars. They are the true experts. Ask around and before long -- with much less than six degrees of separation -- you will find one of these knowledgeable, tough and courageous persons who can advise you about the details. If you come up blank with this exercise, send me an e-mail and I will try to hook you up with The Experts. I'm not one, because, for example, I don't commute day-after-day, but I know some who do.

Also, there is the Internet. Two sites that I like are <http://icebike.com/> which bills itself as the "Home of the Winter Cyclist," and <http://www.blayleys.com/articles/WinterTips/wintertips.htm>. The former site is maintained by a bunch of lunatics who do stuff that you will never dream of doing, but you can riff off their expertise to ride in the suburbs just fine. Shopping advice on the site, for example advice about lights, seems to be out-of-date, so I don't think the site has been maintained for several years. The latter is a site maintained by Pamela Blalock, who commutes year 'round in the Boston area and who knows more than most people about how to survive cold, snow, ice and salt. Her site also covers lights, clothing, hydration, nutrition, and winter skills, things not discussed in this article. (One quick point about winter clothing, though: Consider putting some kind of voluminous bag on your bike so you can take off your gloves or outer layer and have some place to put them. Wrapping your sweater around the handlebar is a prelude to locking the front wheel and doing a face plant.)

Because of road conditions, riding in winter can involve some serious stuff, since falls on ice and snow are more common than falls on bare pavement, and, believe it or not, falls are the most-frequent cause of cycling injuries, not as is commonly assumed, being hit from behind by a vehicle powered by an internal-combustion engine.

Crucial in winter, as in all times of the year, is keeping the rubber side down. A quality set of studded tires like the ones made by Nokian, the same company that makes tires for cars, will go a long way to making that happen, and they will last several seasons, helping to make slightly more palatable the outrageous prices that manufacturers ask for them. Do some research to insure that the tires that you buy will fit your frame, and if you use fenders, that they will fit under your fenders. If you can commit to not riding on ice, which commitment will be difficult to sustain, since ice is often hidden under snow or makes its non-appearance as black ice, you could still avail yourself of a set of wider tires with thicker tread that can be run at a lower pressure.

Since wheels take a pounding in winter, an inexpensive set of factory wheels with wide rims, correctly-tensioned and stress relieved, will allow you to put the studded tires on and leave them on. If you can only afford one studded tire, put it on the front, because an icy patch under the front tire will almost always result in a spill, whereas in the rear, well, you might still make it through.

With shorter days, lights are a legal and practical requirement. According to the New York State Legislature, cyclists must have a white front light and a red rear light, and those lights must be turned on in all the same conditions that motorized traffic must have lights turned on. A helmet light is useful, for illuminating corners and for making roadside repairs, but it does not substitute for the lights fixed to the bike, as required by law.

Clean your bike after every ride and lube the chain much more often than in the summer. It does no good to just slather chain lube onto a dirty chain. That just washes abrasive road grit into the bearings -- half of the bearings in a bicycle are in the chain -- and so does more harm than good. Use a master link such as the one supplied with SRAM chains or the one sold by Wippermann. (Make sure you use a nine-speed link on a nine-speed chain, a ten-speed link on a ten-speed chain, and so on. A spare link and a small chain tool are good items for your on-the-bike kit.) Remove the chain and go through a thorough cleaning process, for example, with kerosene. Replace the chain and lube it with an MTB-type chain lube with a heavy viscosity. Wax-based lubes won't hold up in the wet conditions of winter, so if you use them, you will be cleaning and lubing almost every day.

Reference: <http://sheldonbrown.com/brandt/chain-care.html>

If you are going to put the bike away and ski during the season when sensible persons ski, and if your last ride was on a sunny warm autumn day, you can hang your bike on a hook, and it will probably be okay in the spring. It might be good to remove the tires, since they will go flat over the winter and may be stressed where they hang against the wall.

But if you pushed the envelope, season-wise, it would be bike-wise to take care of some basics before parking the beast. If you ride until spring, you can do these maintenance chores once a month, one a week or once a day, depending on a number of factors such as how much your components cost, how much you can afford to sacrifice in component cost versus labor, how often you ride and in what conditions, and how much you value reliability. If you ride every day, and if you don't do your maintenance chores, I guarantee that your bike will be a worthless mass of rust by spring.

Bearings are vulnerable to water, road grit and salt, and they are present in derailleurs, chains, shift levers, bottom brackets and headsets. In bikes without fenders and mud flaps, the bottom bracket bearings and the headset bearings are in direct line of the spray kicked up by the front wheel. (The chain and derailleurs are almost in direct line. Derailleurs depend on fairly delicate steel springs to work properly, and the steel rusts quickly in salty conditions.) The cup-and-cone bearings used by our distance ancestors in the Paleolithic Era are easy to tear down, clean, re-lubricate and reassemble. They can be made to last a very long time. In spite of the adverts, there is no such thing as a “sealed bearing,” even if you bought it directly from NASA.

Classic full fenders with a generous front flap that comes down almost the road will not only help to keep your feet dryer and warmer, but they will also help protect your components. To increase coverage, some hard-core riders put a rear fender on the front as well as on the back. Loctite your fenders in place and carry the tools and spare bolts that you need to reinstall the fenders should they loosen in use. Carry a set of tire levers, because your heavy tires may not come off the rim like your silky summer race tires. Be sure you have a wrench for your nipped hubs, if you don't have QR hubs. Also, carry at least one tube and a patch kit and a tire boot.

If you ride several thousand miles a year, and if you have only one nice bike that you want to keep in service for a decade or more, consider the wisdom of tearing it down completely and rebuilding it once a year. Pull out the stem, clean all the interfaces, lubricate all the interfaces with a “waterproof” grease, and reassemble. While the stem is out, service the headset. If none of this makes any sense to you, take your nice bike to a professional mechanic and let her take care of it. You will be supporting a cottage industry in so doing. That's a good thing in the age of globalization.

Steel frames are susceptible to rust, although most cyclists worry too much about rust in all but the exotic, thin-walled tubing of high-end frames. There rust is a legitimate worry. The normal failure mode of steel is to crack, then to creak and complain for a few days or weeks and then to let go. The normal failure mode of most other materials is to simply let go. Therefore, rust, although scary, is not the death trap that it's made out to be. Here is a soothing example from 1916 that is still rideable: <http://sheldonbrown.com/ranger.html> . While you have your steel frame disassembled for service of bb and headset, coat the interior with J.P. Weigle's Frame Saver (rust inhibitor), T-9 Rust Protectant Spray by Boeshield or, for the penny-conscious amongst you, plain old 90-weight gear oil. Just giving the inside of your steel frame a good soaking of gear oil will help to inhibit rust.

Threads in steel parts are stress risers and rust havens. Consider inspecting the threads of front brake bolts and the threads of the pedals for corrosion and cracks. Cranks tend to break at the pedal eye or anywhere the outline is not smooth, for example, vanity embossing. Brakes, cranks and pedals are components that we would rather not fail catastrophically.

Reference: <http://www.sheldonbrown.com/brandt/breaking-cranks.html>

Then there's this: Who needs derailleurs? The fixed gear crowd has discovered the simplified maintenance of a bike with only one gear, an always-perfect chain line and no freehub pawls to lock up. However, don't be a hero and ride your fixie without a front brake, just because you can. Someday, when you least expect it ... a Great Dane will jump out into the road, right in front of you.

Freewheel and freehub maintenance is beyond the scope of this article, but if you are able to tear down your hub, consider lighter weight grease for the escapement mechanism, so that what should be free will remain free. There is an extensive set of photos and a written description about freehub servicing on the icebike.com site.

Whatever you do, keep the bike as clean as you can. Stresses are exacerbated by dirt. Carbon, aluminum, steel, "stainless" steel, plastic, rubber and titanium are all susceptible to the stresses of winter cycling, unless you live in Bermuda.

Although perhaps not so friendly to the environment, the inexpensive and ubiquitous WD-40 is a good way to get the grime off your bike. Some WD-40, an old towel and ten minutes of your time after each winter ride will do wonders for the longevity and function of your bike. Use it on the frame, derailleurs, spoke nipples and rim ferrules, and on any moving part or spring that is exposed, but don't use it in places that need grease, because WD-40 is a solvent, and it will wash the grease out of the bearings.

Loosen binder bolts in derailleurs, stem, and seat-post and clean them with solvent, re-lube, reassemble. Don't forget to check your pedals and cleats. The cleats are easy to forget, until it's too late, because: Out-of-Sight, Out-of-Mind.

For cleaning the chain, a three-gallon can of kerosene will last for years, and kero is an inexpensive substitute for WD-40. Use coffee cans to clean the chain; don't dunk the dirty chain into the supply can, or you will quickly contaminate the supply with gunk. Be conscientious about how you dispose of solvent.

WD-40 and kero are essentially solvents, not lubes, but they do have the effect of a light lube. Therefore, they are good for the pedal-and-cleat interface and bad for the braking surfaces, tires and other rubber parts. Watch where you spray that stuff!

Reference: <http://www.WD-40.com/uses-tips/>

Spraying the bike with a garden hose should be done with care, if at all, because the water will probably find its way into the bearings.

Steve Wowkowych, twelve-month cyclist, and Andy Stewart, professional mechanic, helped me with this article, but I bear all the blame for any error.

Bob "Home Safe and Warm" Cooper