## *TIP # 1: ASSESSING TRAIL CONDITIONS*

Resist the temptation to rush onto the trail, tools in hand, to try to refurbish it. After all, you need to know what the problems are before you can repair them. The following four steps will help you assess your trail's needs.

*1. Create a Trail Assessment and Repair Sheet*

Repairing a trail all by yourself is tough work, but you can use a trail assessment sheet to direct other people to perform the repair work with you. Trail assessment sheets give you a means of identifying maintenance projects, their locations, the nature of the problems, and a strategy for resolving each situation. You can even list the tools needed and assign a particular work crew and crew leader to tackle each project.

Sure, drawing up an assessment sheet may sound like a hassle, but consider the alternative: You scout a trail, discover several problems that need correcting, and then try to relay that information to your fellow trail workers without the aid of specific directions. . .

A trail assessment sheet takes the ambiguity out of maintenance work. It will take you a couple minutes to create a master and make some photocopies, but when the weekend rolls around and your group of volunteers is standing at the trailhead awaiting orders, your assessment sheets will prevent a lot of confusion. You can also consider online tools like Trailforks Trail Report or other online applications that offer similar features.

*2. Walk or Ride the Trail*

Once you've devised an assessment sheet, it's time to hit the trail in search of maintenance projects. Take a pedometer or measuring wheel (if walking), strap a computer onto your bike or use a trail directory / training app on your phone and start recording your mileage the moment you leave the trailhead.

Whenever you find a spot that needs repair, pull out an assessment sheet (or open your app), record how far the site is from the trailhead, the nature of the problem, and other information you deem necessary. You may also want to record the severity of the problem. Trail assessment is a lot like performing triage in a busy hospital. You can only tackle so many projects on a given day, so identify and fix the most critical problems first. Consider undertaking sections that pose risk to visitors first and then move on to the sites that will degrade quickly if not corrected immediately.

*Step 3: Confer With the Land Manager.*

Meet your land manager, if applicable, and discuss trail projects well in advance of scheduling a work day. Here's where your trail assessment sheets come in handy. They'll help you accurately explain the problems on the trail and how you plan on resolving them. Save copies of all your assessment sheets so that you can develop a track record of everything you have done to maintain and protect the trail. This is key if you ever need to prove your group's stewardship credentials.

*Step 4: Assign Work Crews.*

Assign a leader and work crew of two to five people to each maintenance project. With your assessment sheet in hand, the work crew should be able to answer the following questions:

- Who is on the crew and who is the leader?
- Where is the work site (in meters or km from the trailhead)?
- What tools do we need?
- What is the problem?
- How should we go about repairing the problem?

## *TIP # 2: DON'T MAKE THESE 10 MOST COMMON TRAIL BUILDING MISTAKES*

1. *Not Getting Land Manager Approval*
   We know, we know: you just want to build trails. But believe us when we tell you that nothing – not a single darned thing – more important before starting trail work than the approval of the land owner or manager. In our experience, a failure to secure permission is the single biggest cause of trail closures. When it comes to building trails, to ask for forgiveness is not better than to ask for permission.

2. *Falling for the Fall Line*
   Put simply, fall line trails are erosion nightmares. They turbo-charge natural and user-created erosion, exposing rocks and roots and generally living short lives before becoming loose, wide, ecosystem-damaging disasters. To build trails that last, use the Half Rule: trail grade, or steepness, shouldn't exceed half the grade, or steepness, of the hillside; and the 10 Percent Rule: overall trail grade should be 10 percent or less.

3. *Guessing the Grade*
   Nobody, no matter how masterful their eye, can guess trail grades right every time. Trust us, we know. Sure, it's fun to try, but use a clinometer to confirm the grade whenever you're laying out trail – it's worth a regiment of self-powered, Fantasia-style Pulaskis, because no amount of trailwork can fix a trail built on an unsustainable grade. If you don't have a clinometer, we highly recommend an investment in this indispensable tool.

4. *Going Against the Flow*
   Not even race courses – which are sometimes designed with erratic flow to throw off a racer's rhythm – should make this trailbuilding faux pas. All trailbuilders should make "smooth transitions" their mantra. Bad flow, especially fast sections leading into sharp turns, is a primary cause of user conflict. When you are building, think flow – it's the key to an enjoyable trail.

5. *Half Bench is Half Baked*
   The only time you should ever skimp on a fully bench cut trail is (1) when the sideslope is so steep – 80 percent or greater – that the backslope exceeds six feet in height, or (2) when your trail design forces you to build close to the downhill side of a large tree. In both cases, a proper crib wall should be built to support your partial bench, and, as in all trails, the tread should maintain a five to seven percent outslope.

6. *The West Virginia Climbing Turn*
   Our friends in West Virginia affectionately gave this name to some of their steep, fall line turns, and while they've gotten away with it in a few locations because of the soil and user types, most fall line turns will erode badly. If you want your climbing turns to endure, build them on side slopes with no steeper than a seven to 10 percent grade.

7. *Building Houses of Straw – Build it right. Keep the wolves as bay*
   Remember the little piggy who built his house with straw? He got chowed by a wolf. Using shoddy materials when building trail structures leaves you and others similarly vulnerable by reducing the structure's safety and longevity. This opens the door to things like pain, guilt and even lawyers.

8. *Finishing a Line Before Its Time*
   We heartily support on-the-trail training, but some new trail builders are so eager to keep building more! new! better! trails that they don't devote enough time or care to each new trail section. Resist the temptation to move forward. Don't finish a line before its time, and always patch past mistakes.

9. *Building a Pathway to Grandma's House*
   This is what we call some trail builders' obsession with lining trail with logs. A properly constructed trail shouldn't need them. In fact, lining a trail with logs can trap water and increase erosion.

10. *Ignoring Old Wounds*
    As mountain bikers we may think our scars are cool, but scars on the land left by closed trails are damaging wounds that need to heal. Always reclaim eroded areas with check dams – natural obstacles like logs or rocks that divert the flow of water and soil – and reclaim all closed trails with transplanted native vegetation that conceals the old corridor. Shine the spotlight on the great trails you've built, not the ugly scars that have been left behind.

## TIP # 3: *CLOSING AND RECLAIMING DAMAGED TRAILS*

Has a local trail become a maintenance nightmare? Is the route severely damaged despite regular trail work? Sometimes the best solution for eroded trails isn't aggressive maintenance. Instead, we often recommend closing the trail and replacing it with a new, sustainable, re-route. Designing and building a re-route may be time-consuming and hard work, but in the long run closing a poorly functioning trail is better for the environment. A critical aspect of any re-route project is closing and reclaiming the old route. Here are eight elements to include in your restoration work.

*Create an Outstanding New Route*
A key component of any trail closure plan is creating a fun and sustainable alternative. You must provide a new trail that is more appealing than the old route. Otherwise, some visitors will continue to use the original trail.

*Design a Smooth Intersection*
Create a natural, seamless transition onto the new section. Trail users shouldn't be able to recognize where the re-route begins.

*Educate Trail Users*
Most conflict surrounding trail closures can be avoided if people understand why a route must be closed. All your hard work will be wasted if trail users continue to use the old route. Make sure to spread the word about what you are doing and why. Post signs to let people know what changes will be taking place. Ask for public feedback and recruit volunteers for the trail work. Once work is complete, consider posting maps showing the new trail and explaining why the old trail is closed. Be positive and focus on the benefits of the re-route.

*Break up the Old Tread*
Completely break up, or scarify, the compacted soil in the old trail tread to allow the seeds and roots of new plants to penetrate. Don't skimp on this key step. Use Pulaski's, pick-mattocks, or even a rototiller.

*Control Erosion*
It is essential to stop water flowing down the route. Check dams are easy-to-build structures, typically made of logs , rocks or straw bales fixed across the trail to trap soil. Be sure check dams are tall to trap

the soil, and well secured so that they won't wash away. A wide range of manufactured erosion control materials are available that are designed to absorb and retain water while providing an ideal micro-climate for the growth of vegetation. These include straw wattles, erosion control blankets and commercial mulches that combine fibre, seed, fertilizer and bonding agents. If the trail you're closing is especially rocky and little soil remains on the surface, try using burlap bags filled with dirt as your check dams. Cut an "X" into the top of a moist bag and transplant a local shrub.

*Transplant Vegetation*
Starting plants on the old trail is the best way to restore the landscape. Disturbed soil often provides an opportunity for invasive plant species to take hold. Combat these invasive by planting only native species. Transplant shrubs and small trees from your re-route construction. Use proper transplanting techniques, fertilizer and a portable drip irrigation system to reduce transplant shock.

*Disguise the Corridor*
The best way to keep people off the closed trail is to make it look like it was never there. Your goal is to eliminate the visual corridor, including the airspace above the old trail tread. Drag logs and branches across the tread. Plant dead-fall in the ground vertically to block the corridor at eye level. Rake leaves and other organic matter over the tread as the final step to complete the disguise and aid new plants.

*Block the Corridor*
As a last resort you can block the beginning and end of the trail with a fence and signs. The fence will look out of place, and could draw more attention to the closure, which may cause controversy. Answer expected questions by posting signage explaining the closure on, or near, the fence. When the trail has been closed for a while the fence can be removed.

*Retiring Race Courses*
In addition to the advice we've provided above, here are some other considerations for retiring race courses. If the trail was used for a high-profile race such as a World Cup or NORBA National, many people will still want to ride it, placing extra demand on your work. You'll have to spend extra time blocking and disguising the corridor – especially sections that can be seen from other trails or public areas. Spectator-trampled areas can be fixed with the same techniques used on the trail. Open spaces like ski slopes will demand extra attention. Modern hydroseeding products and techniques should be considered on severely damaged race courses.

## TIP # 4: Set-up your local trail association

There are dozens of (informal) mountain bike groups and trail crews across Europe but if there isn't one near you, or if you have plans or issues in your local area, it could make sense to start your own. If you've identified a site for trail development, if your jumps are being threatened by the bulldozers, or if "no cycling" signs have started appearing on your favourite local routes, it could be time to club together and get organised. The following tips might help you get started.

*1. Get to know your landowner*
Unless you're turning your back garden into a pump track, chances are you don't own the land you're riding on. So it's worth figuring out who you're dealing with. It might be very straightforward – they might have left you a grumpy note with a phone number – or it might involve a bit of detective work, but it's all owned or managed by someone.

Once you've identified them, you don't have to make yourself known straight away. You can take time to gather resources, do some research, and come up with a proposal. But sooner or later, you will need to introduce yourself, and you could save a lot of wasted effort by doing this sooner.

*2. Building or badgering?*
This might be self-evident, but the shape of your group will vary a lot depending on whether you're trying to actively build trails, or simply influence things favourably for countryside users with knobbly tyres. Some groups do both, but it can save you a lot of time and hassle if you narrow your focus.

If you're purely a building group, you'll probably need stuff like tools and insurance. An advocacy-focused group will approach things a bit differently, finding forums to attend, consultations to respond to, or other user groups to team up with. Like football, it's a game of two halves.

*3. Reach out*
There is power in numbers, and chances are there are a few like-minded supportive folk out there who can help you realise your dream. Talk to your fellow riders, outline your plans and get networking. Social media is a great place to make contacts but don't forget the old school ways too – a quick chat on the trail might be more fruitful than spamming a load of Facebook groups.

It also helps to think outside the box. You won't just need folk to go to meetings or wield spades. People with web and social media skills, photographers and designers are all useful contacts to have. Don't just look inwards either. There are lots of helpful pro-cycling people in the halls of officialdom, so you might want to chat to the cycling team at your local council, your Rights of Way officer, youth groups, and even representatives of other countryside users. And don't forget your local bike shops either – some of them might give you the brush-off, but many will welcome anything that benefits riders.

*4. Make it official*
You might not need to become a formally constituted group, but there are several circumstances in which it could help. If you want to manage your own resources, seek out funding, or work independently of a landowner, you'll probably need to become more than just a name. There are a range of options, with the simplest being a club, society or foundation, depending on the country where you live. In most cases, it just involves a few of you getting together, setting out your rules and aims in writing, and putting your signatures at the bottom. Using this you'll then be able to open a group bank account, apply for funding, or start taking donations. In some countries, you need to go to a notary and register your bylaws.

*5. Fighting funds*
So your group has come together, you've made a plan, and you've talked it over with the powers that be. Maybe now you need tools, insurance and PPE. Or you want to publicise what you're doing.

If you're feeling flush you could buy this stuff yourself, but it should also be possible to raise the funds by putting the word out. Local riders, bike shops, and businesses could all help out. If you've set up a group (see step 4 above) you can open a bank account in its name, which should give donors confidence that their money isn't going to end up in your beer fund. Online, PayPal lets you create a simple donation button which is free to use.

You can also search for local or regional funding grant and write an application. This can be a long process and you have to meet a lot of criteria but if you've got a big idea that needs major funding, they're worth looking at.

Crowd funding is also a possibility. The amount of work that goes into a successful crowd-funding campaign can be almost a full time job by itself, but again, if you need thousands rather than hundreds, it could fit the bill.

Finally don't forget that assistance doesn't need to be financial. If someone can loan you tools, donate materials, pay for your web hosting or print costs, or just contribute their time and expertise, that could be worth a lot even without money changing hands.

*6. Keep on pushing*
Sometimes things come together quickly, but often trail advocacy and development is a long, slow process. Be persistent, try to stay on good terms with everyone, and chances are you'll be able to make a positive difference.
*(source: Antony DeHeveningham, Bristol Trails Group)*