

Backcountry MOUNTAIN BIKING

KNOW BEFORE YOU GO

Backcountry mountain biking allows people to enjoy the technical challenges of riding while seeing large areas of New Zealand's backcountry in a shorter time span. Every trip into the backcountry has an inherent degree of risk, which can be easily reduced through careful planning and good decision making. It doesn't take long to plan. Use this guide to help you.



SAFER PLACES, SAFER ACTIVITIES, SAFER PEOPLE



IN 1988, THREE BROTHERS, PAUL, SIMON AND IONATHAN KENNETT. SET OUT TO RIDE FROM OHAKUNE TO MARTON - VIA THE BRIDGE TO NOWHERE AND THE WHANGANUI RIVER. THEIR EPIC ADVENTURE PROVIDED A STRONG LEARNING EXPERIENCE THAT STILL RESONATES 30 YEARS LATER - IT'S PURE CHANCE THE TRIP DIDN'T END IN DISASTER.

Simon sketched out the plan and bought the food. Paul bought a super-8 camera and Jonathan bought four truck inner tubes. I think we even had a map. Sorted!

We jumped off the night train and slept a few hours under a tree at Ohakune before rising with the sun and setting off to the Mangapurua track and into the National Park. The area had long been abandoned; the track was overgrown, information about the route

"We'd never heard of anyone biking there before. "

was minimal and there were no bridges across any of the steep-sided streams. We'd never heard of anyone biking there before.

During the day, Jonathan crashed, bending his bike frame. But it was steel, so Paul just placed it carefully across a rut, and jumped on it until it was reasonably straight again, and we were back on our way.

Later Paul's derailleur broke, leaving him riding a single-speed for the next few days. It was a relief to finally reach Johnson's Clearing where we set up camp for the night. But it soon became clear that leaving Simon to arrange all the food supplies alone was a big mistake. From a pannier, Simon pulled out a one-person billy! Jonathan's heart sank. How could a three person meal possibly fit into that? Simon had been keen to keep the weight to an absolute minimum, so we were on short rations. No one had brought any spare food in case we were delayed.

The next day, the riding was rougher than ever, with lots of branches across the narrow track. First Simon and then Jonathan took tumbles off the bluffs.

"But it soon became clear that leaving Simon to arrange all the food supplies alone was a big mistake. "

Jonathan slid eight metres down the side of Battlefield Bluff, just managing to grab a solitary flax at the top of a massive drop. We slowly continued.

Finally, in the late afternoon we turned a corner and rolled onto the legendary, "Bridge to Nowhere". Awesome! Down at the river we began constructing a raft for the next day's challenge: paddling 28 kilometres down the Whanganui River. The raft was made of truck tubes on a frame of dead branches lashed together with thin cord, with the bikes piled on the back. Satisfied with our work, we had another small dinner, all the while thinking about what we would buy at the shop in Pipiriki tomorrow.

A canoeist had told Simon that Pipiriki was about six hours down river. Sweet! However, after a few hours' pleasant drifting the next morning, a DOC ranger



cruised up in his jet boat. "I've never seen anything like this before!" he exclaimed. Jonathan asked, "How long do you think it will take us to get to Pipiriki?" "At that rate, about three days. Have you got plenty of food?"

"Yes," we lied (I still don't know why). From then on we only stopped paddling to nibble on bits of pumpernickel bread and muesli bars.

"By 10 p.m., we were paddling in the dark. Tired, cold and hungry."

By 10 p.m., we were paddling in the dark. Tired, cold and hungry. We argued over the best line through the barely visible rapids. The last big rapid, still several kilometres from Pipiriki, tipped us out. That was it! Luckily we found a landing point and dragged ourselves and the raft from the river. Dinner was a single packet of Maggi soup to share. Too tired to appreciate a starry sky we were soon dead to the world.

Breakfast was one muesli bar cut very, very carefully into three. We quickly dismantled the raft, assembled bikes and with grumbling bellies followed a 4WD track to Pipiriki - where the shop was closed!

The 60 kilometres that followed were misery, especially for Jonathan who was fit for tramping, not cycling. Paul shouldered his pack, and we just kept pedaling. We had a train to catch at 3pm.

After 55 km, at the base of the last big hill, Gentle Annie, a beat up Ford F-series truck with dynamite in the back chugged up beside us. "You want a lift?"

The truck moved at a snail's pace, but made it almost to the top of the hill before breaking down. What a godsend. We made it to a store just out of Wanganui - the food was hard to eat at first, we were that hungry. But before long, with energy restored, we timetrialed it to Marton just in time to catch the train back to Wellington.

LESSONS LEARNED

TAKE SUFFICIENT SUPPLIES

> TELL SOMEONE **BEFORE YOU** GO

TAKE A REPAIR KIT

> INVOLVE **EVERYONE IN** THE PLANNING

IF IN DOUBT, **GET OFF AND** WALK





(1) PLAN YOUR RIDE

Planning a ride in the backcountry is different to visiting a bike park. If you get into trouble, the walk home can be significant. To increase the chances of a positive and enjoyable trip it's wise to consider the capabilities of everyone in the group and ensure you have the right gear, skills and expectation.



GREG MCINTYRE Owner, Heli Bike NZ

Know where you are going. Research the trail. Things you need to know prior to packing your bag and deciding if it's for you or not include: How long is the distance? How long will it take you (or how long have others taken)? How challenging is it - steep and gnarly or flat, what is the grade?

Also consider if there are any weather issues in the area. For example, in a southerly it might be cold and clear, but in a westerly it'll be warm and wet. What effect will this have on the trail? Is it exposed, is there any shelter, is

there a way out or a shortcut if needed?

Finally, what communications are available? Is it within mobile phone range, or should you take a Personal Locator Beacon?



WHO ARE YOU GOING WITH?

The first thing you need to consider is who you are going with.

- Group Size If you are planning to ride solo, you'll need to carefully consider how this changes your approach to preparing for the ride. How will you signal for help if you need it? If you're riding with others ensure they are all involved in the planning.
- Experience How experienced and fit is each person? Make sure everyone in your group is physically fit enough to enjoy the ride. The trip time can also change depending on the abilities of your group. Is the track too technical for some of the riders? Will long stretches have to be walked by some members, is there time?
- Medical Conditions Does anyone have any pre-existing medical conditions? This is a really important thing to know, partly to make sure each person can cope with the ride, and partly to know how to deal with any medical situations that may arise while you're out.
- Trip Style What does each person want from the ride? Extremely technical descents are a great challenge for some but it won't be everyone's idea of fun. Make sure you all have the same expectations and plan a ride to meet those expectations.
- Gear Does everyone have what they need? Make sure you have the appropriate clothing and equipment for the track, terrain and weather. See the Take Sufficient Supplies section for more information.

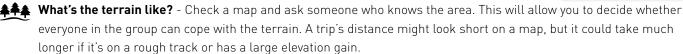
WHERE ARE YOU GOING?

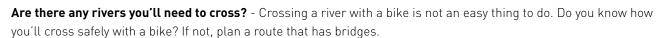
Next, consider the location. Start by getting advice from people who have been there before and looking at the map in detail. You'll also need to check what your hut or campsite provides so you know what else to bring.

- Trail guides exist for many rides around New Zealand. There are both online and offline options. The Kennett brothers have probably been there before, so check out their guides at www.kennett.co.nz. You can also check out websites such as www.trailforks.com and www.nzcycletrail.com. Understand the track grades and how you and your group relate to them
- Department of Conservation (DOC) has a wealth of knowledge about tracks and important things to know about the areas you're going. You may also need to book a hut with them if planning a multiday ride. Pop into your nearest visitor centre or see www.doc.govt.nz
- Maps. There are a range of different maps available depending on the location of your ride and personal preference varies. Try www.topomap.co.nz, www.doc.govt.nz, www.trailforks.com, www.tracks.org.nz, www.nzcycletrail.com or the local council. If you're not planning to ride an approved trail, you should check out if there is public access at www.wams.orq.nz

HOW LONG WILL IT TAKE YOU?

Ensure you leave yourself enough time. Riding in the dark if you weren't expecting to can quickly turn into an epic. Be sure to add a little more time than you think you'll need.

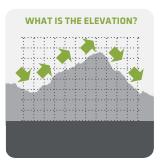




Route options - Are there alternative route options if you need to change your plans? Make a note of evacuation options as you plan and also consider where the nearest help might be. You should also consider if there are any huts or shelters along the way if you need to find refuge.

Cellphone Reception - Mobile phones have limited coverage in most outdoor locations. You need to plan for what to do if something goes wrong and how you will call for help if you need it.



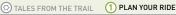
















TELL SOMEONE YOUR PLANS

Telling someone your plans is essential, no matter what or where the trip is. There's always a chance that things could go wrong. If no one knows where you are it'll be hard to find you if something goes wrong. Leaving your intentions with a trusted contact will significantly increase your chances of a safe return if you get injured or lost. And, ensure that everyone in the group knows the route. Stop and regroup often.



CHARLOTTE IRELAND Backcountry Mountainbiker

In New Zealand, urban becomes backcountry in a matter of minutes and 4G becomes no signal when you least expect it.

I always tell my partner my route choice and time to expect me home. If he is not home I usually text or email so he will eventually find my intentions. I often text if I'll be late too. However, we cannot always rely on our chosen communication methods working. Make sure your phone is fully charged before leaving and consider a power bank for longer missions.

I now also carry a SPOT Tracker, this gives me flexibility and allows people to find me should it be required.



WHO DO YOU TELL?

Tell your plans to someone you trust. A family member or a close friend is ideal for your trusted contact – you need to know they will act if you don't return from your ride when you say you will. In some areas you may be able to leave your intentions with the trail trust as well.

TOP TIP

If you change your plans, let your contact know with a quick phone call or text.

WHAT INFORMATION SHOULD YOU LEAVE?

Telling someone your plans is as simple as letting them know where you're going and when you expect to be back. You should give them the information in the diagram below. You can write this down for them, or use the helpful online intentions process on the AdventureSmart website. This can be easily accessed on your mobile phone and is automatically emailed to your trusted contact once completed. www.adventuresmart.org.nz.

If you change your plans, let your contact know with a quick phone call or text on the day where possible. For example, someone might bring a friend or decide not to go, or you might decide to take a different track. If something does go wrong, it's much better if people know exactly where to look and who they're looking for.



WHAT SHOULD YOUR TRUSTED CONTACT DO IF THEY HAVEN'T HEARD FROM YOU?

Your trusted contact needs to know exactly what to do if they don't hear from you, and when to do it. If they don't hear from you by the stated time, they need to:



(4) KNOW YOUR LIMITS



(3) BE AWARE OF THE WEATHER

Knowing what the weather is likely to do on the day means you can pack the right gear or change your plans accordingly. New Zealand's weather can change quickly so you need to be prepared for all conditions. The weather will often dramatically change the track conditions.



TOM ADAMS Meteorologist and Backcountry Mountainbiker

If you're lucky enough to live near to the backcountry, then by carefully checking the forecast you can pick the best time to go.

There's nothing more satisfying than completing an epic backcountry ride under dry, sunny conditions, and getting out of the hills just in time before the rain comes. Many trips, however, are booked long in advance, and rescheduling can be impossible. In these cases I always keep checking the forecast leading up to the trip, especially paying attention to the severe weather warnings, so I have a good idea in my head of what the weather will do over the next few days and so that I can pack accordingly or change my plans.





WHAT IS THE FORECAST?

Checking the weather in New Zealand is easy. The MetService mobile apps and www.metservice.com are a great place to start.

In the days leading up to your ride, use these planning tools:

- Severe Weather Information Metservice's Severe Weather Outlook is the first place to look for a heads-up on any severe weather expected beyond the next couple of days.
- Maps & Radars The 3-day and 5-day rain forecasts are an indication of the timing of weather features expected over the next 5 days.

The day before and on the morning of your ride, re-check the expected conditions.

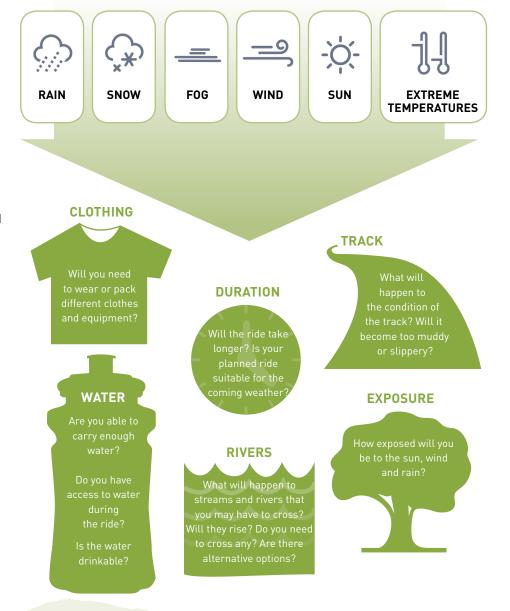
- Forecast If your route is through a National Park, be sure to check the 'Mountains & Parks' forecast in addition to current Severe Weather Information (see below). If your route is closer to 'Towns & Cities', use those forecasts - but look for any warnings or watches indicated at the top of the page.
- Severe Weather Information Current watches and warnings highlight severe weather around the country in the next 24-48 hours, but are primarily focused away from the mountains. If the weather looks serious, it would be wise to consider whether or not you should go on your ride.

WHAT IMPACT WILL THE **WEATHER HAVE ON YOUR** RIDE?

If the weather forecast does change for the worse, you need to decide if it's significant enough to alter your plans.

You may want to think about either changing the day or time of your ride, or going to a different area that is less affected. Make sure you talk it through with everyone in the group, and consider everyone's experience and comfort.

In making your decisions, consider what effects these different weather conditions will have on your ride.

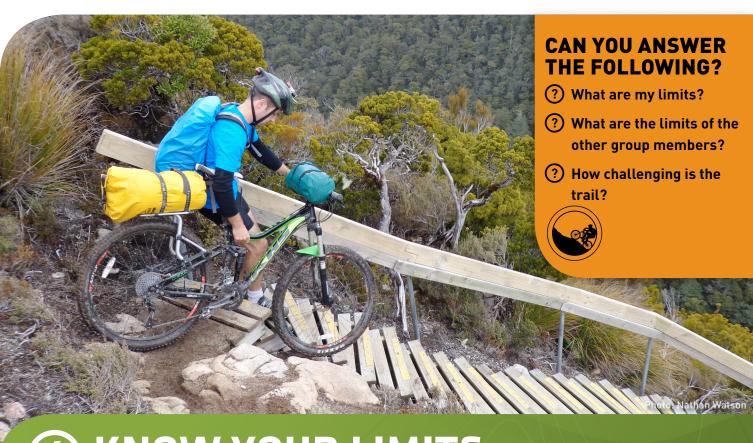


TOP TIP

The weather can change from what was forecast a few days ago. Regularly

check the forecast right up until you







Considering the limits of yourself and the group means you can pick a ride that meets everyone's expectations and fitness levels. It also means you are less likely to get into potentially dangerous situations beyond your experience and skill. Always be prepared to walk the bike, or turn around and alter your plans if things change.



ASHLEY PETERS Founder of WORD, JoyRide and Revolve

We're going on an adventure!! New Zealand is home to some of the best backcountry rides in the world, so choose the one that is right for you and your group. Think about your fitness and mountain bike skills....Consider the distance and trail grade to make sure that everyone in your group has a great experience. If this is your first backcountry trip, consider choosing a trail with a slightly easier grade than what you're used to.

When you're out on your grand adventure, take heaps of breaks. Check in with the group, bust out the camera and eat snacks...lots of snacks. Conditions change and that trail that would normally be sweet to ride, can suddenly look a bit too spicy. All good, just hop off your bike and walk. It's a long trip, and it's just not worth 'hot dogging' as my mum would say.

Enjoy the ride!



ARE YOU READY FOR THIS?

Good, fundamental skills are imperative to handling the trail.

- Start small. If you are new to trail riding, start with shorter routes and easier terrain and gradually build up to more technical and challenging trips. It's important to take it slow. It can take several months for your body and mind to become accustomed to the varied terrain as you develop skills to glide over the trail and learn about what levels of fuel and water your body needs. Going on a mountain bike skills course will help you become a better rider.
- Get advice from people with greater experience. Chat with experienced backcountry riders about how to load your bike to get the balance right, and also what additional things you'll need to take for particular routes. Your local bike shop is a good place to start.
- It's also a great idea to **ride with others** wherever possible as this will help you to learn little hints and tips from them. It also ensures that if something does go wrong others are around to help.

WHAT IF THINGS CHANGE?

Considering the abilities of the group and ensuring the trip meets everyone's expectations will mean you are less likely to get into a dangerous situation. However, circumstances can change while you're out. Be prepared, know your limits and make smart decisions.

- Take your time. Backcountry mountain biking is about enjoying the ride and loving the scenery. Don't rush it, savour it! Regularly take short breaks to refuel, hydrate and check in to see how everyone's doing.
- Stay together. Keep everyone in sight if possible. It may help to have the slower members towards the front to set the pace, and the most experienced person at the back to ensure no one is left behind on their own.
- Stay alert to your surroundings. Ask yourself, is anything changing? Are people starting to get cold, wet or overheated as the weather changes? Do you still know where you are and where you're going? That way you can take early action if you need to, like turning back, picking a different route or finding shelter.
- Avoid crossing rivers if you're not experienced, select tracks that use bridges to avoid crossing rivers. Remember, if the circumstances change you can always alter your plans by turning back, picking a different route or by finding shelter.

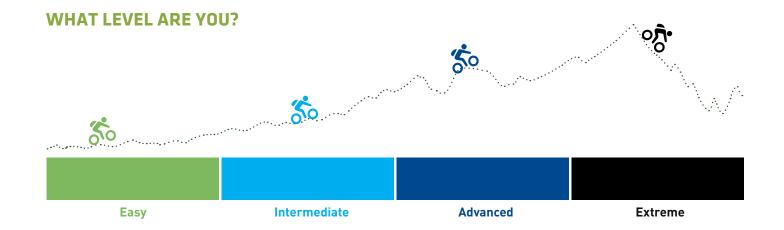


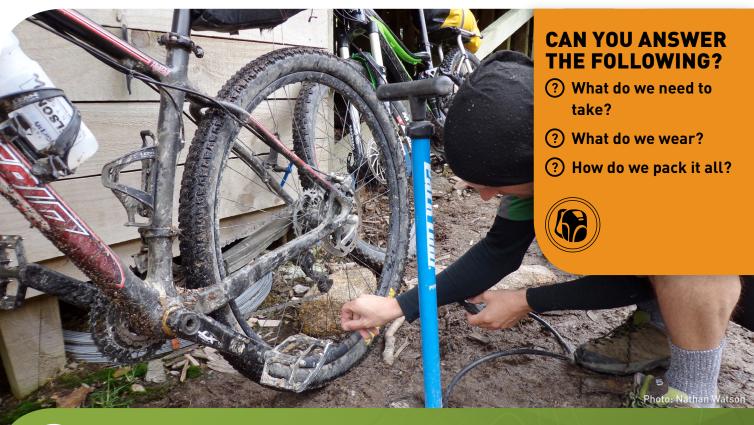
Practise riding with all your gear packed on your bike weeks before you head away.

IS EVERYONE ELSE PREPARED?

To recognise your own limits and those of others in the group, answer the following questions:

- Is this track the right level of challenge for us?
- Is our fitness level sufficient?
- What does each person want from the ride?
- Does anyone have pre-existing medical conditions?
- Do we have what we need?





TAKE SUFFICIENT SUPPLIES

Any backcountry trip requires some thoughtful planning around what to take, and what you can leave behind. There is a big difference between riding in a mountain bike park or local trail and back country riding. The biggest difference is obviously the distance and potential isolation from help. This means that each rider must bring sufficient supplies as well as tools and equipment to survive any emergency.



PHIL ROSSITER Chairman of Mokihinui-Lyell Backcountry Trust

Preparing for a ride in the backcountry can be as rewarding as the ride itself. No matter how experienced you are, things can, and do, go wrong. Having supplies, equipment and contingencies in place for those infrequent yet significant occurrences when things go "off-script" can ensure many more adventures follow.

Think carefully about what could go wrong and ensure you have an effective recovery plan in place. Making mechanical repairs, treating injuries or sustaining yourself if you get held up are all potentialities that deserve a solid 'Plan B'. Coordinate with members in your group so you can share repair tools and avoid carrying unnecessary weight. For remote backcountry rides, always carry a form of emergency communication.



Figure out where you'll pack everything. Minimise what's on your back and evenly distribute it on your bike frame. The range of bike-bags available in New Zealand has increased dramatically and making use of these excellent products can be a game-changer.

Finally, practice riding with your set up and get used to how your bike handles when loaded differently. If using handlebar bags, check your sight line to ensure you maintain control of your front wheel placement.

WHAT DO YOU TAKE?

EQUIPMENT

You definitely want to have these essential things with you on your ride:

- A helmet which is comfortable and no more than a few years old.
- A tool kit containing the items listed below.
- Lights. You might be planning on getting back before dark, but if you don't, lights will be essential. Know how long they will last.
- A small survival kit which includes a survival bag, a whistle and a lighter.
- A communication device. Mobile phones can have limited coverage in most outdoor locations. If you are going into a remote area - especially if you're going solo - take a personal locator beacon or satellite messenger device.
- Triple check any bags or panniers that you will use on the trip. Bring spare straps for them as well.
- Waterproof everything.

ADDITIONAL ITEMS

Depending on the weather, location and duration of your ride, consider taking:

- Sunscreen and sunglasses
- A map and compass and/or GPS
- Toilet paper and trowel
- A bush saw

IF YOU'RE HEADING OUT **OVERNIGHT, YOU'LL ALSO NEED:**

- A bivvy bag or lightweight tent
- Sleeping mat and sleeping bag
- Hut ticket (remember to book)
- Cooking and eating equipment



Learn how to fix your bike in the field if you need to.

FIRST AID KIT

Mountain bikers are more likely to experience soft tissue injuries, grazes, cuts and fractures, so pack a couple of things to treat these such as:

- Tape
- Gauze
- Non-stick pads
- SAM splint
- Wound dressing
- Steri-strips
- Bandages
- Antiseptic wipes/powder
- Personal medication required by individuals within group (inhaler, EpiPen, insulin etc.)
- Painkillers and anti-inflammatories
- Antihistamines

TOP TIP

Look for signs of wear, or points that might rub when the bike is bouncing around.

HAVE YOUR BIKE CHECKED BY A MECHANIC

There are more than enough opportunities for damage on a long trip, don't start out with problems!

You will also need to know how to change a tyre and patch a tube, as well as other field repairs you may need to do. There are plenty of people who are more than happy to teach you how. Start by asking at your local bike shop.

Your repair kit should contain, at the very minimum, the following items

REPAIR KIT

- Spare brake pads
- Spare tube
- Puncture repair kit
- Tyre boot
- Chain link
- Tape (small amount rolled around pump)
- Zip ties
- Replacement derailleur hanger

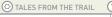
TOOLS

- Multi-tool (with correct sized Allen) wrenches and chain rivet tool)
- Tyre levers
- Pump

ADDITIONAL ITEMS

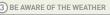
- Leatherman style multi-tool
- Spare 5mm bolts
- Tyre plugs/needle and thread











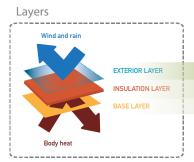


WHAT DO YOU WEAR?

Here are the key things to consider when deciding what to wear and pack for your ride:

- Wear the right fabrics. Clothing retains the heat your body produces, to varying degrees. Certain fabrics such as polyester, polypropylene and merino wool wick moisture away from the body and retain warmth. Avoid cotton clothing. Cotton doesn't wick away moisture and when it gets wet it ceases to insulate you. Wet cotton clothing dramatically increases cooling and can significantly increase your chances of hypothermia.
- Keep your core warm. There
 are parts of you that are more
 important to keep warm. Focus on
 your chest, head, feet and hands.
 Always have a hat, thermal top,
 gloves and warm socks on your
 body or in your pack, even on a fine
 day.
- Wear and pack layers. Light layers are the key to having options when you're out. You can take one off if you're too hot and it won't be too heavy to carry, and you can put another one on if you're cold.

- Always take wind and rain protection. New Zealand's weather is very changeable. The weather at the start of your ride might have changed completely by the halfway point. Make sure you take wind and rain protection and extra layers you can put on if it gets cold.
- Wear good bike shorts. You'll be sitting on your seat for a good deal of the trip. Good bike shorts make a big difference to your level of enjoyment. Highly recommended, verging on essential.



 Check your cleats. If you're riding with clipless pedals, make sure that the cleats on your shoes are tight, in good condition and that they attach and detach well to the pedal.

External layer

Wind and waterproof

Insulation layer

- Breathable
- Warm when wet
- Light weight
- Insulating

Base layer

- Not irritating on skin
- Wicks away moisture





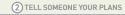
SCOTT EMMENS Event Organiser, Kiwi Brevet

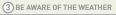
Whenever I head into the hills my 'don't leave home without' piece of clothing is a Primaloft (or other synthetic fill) jacket or vest. If it's cold at night and my sleeping bag isn't cutting it I can sleep in my jacket or vest, or if it's freezing in the morning I can start riding in it without worrying about it getting damp from perspiration as I climb up the first hill of the day. This wonder fill (see what I did there?) is warm even when wet, dries in no time and weighs very little for the warmth given. The garments are windproof, pack up small and are like being wrapped up in a duvet.

My other must-haves are a good set of waterproofs, top and bottoms. Super light is not super durable and in New Zealand durability is key. I'm also a fan of plastic bags for stuffing dry feet and socks into wet shoes when nipping out of the tent in the middle of the night to look at the moon, or for those frosty mornings when your shoes are still wet.









WHAT DO YOU EAT AND DRINK?

Planning good nutrition and fuelling for your adventure is very important. Running out of food and energy can lead to simple mistakes being made that might have bigger consequences. **Always take more than you think you'll need**. Take at least 2 litres of water with you. Consider where you can refill and add electrolytes for longer rides.





ANTON COOPER Commonwealth Games gold medallist and U23 World Champion

When heading out into the backcountry it's essential you have enough food, water and supplies to make it through regardless of what situation you may find yourself in. As a general rule of thumb you should expect to consume about 50% more calories than you would use if you were sitting at your office desk all day. Dehydrated food is a great start, along with a compact pot, cooker and gas canister package. Finding fresh water along your route is not always guaranteed and I always carry a small filtration head for a drink bottle for when I'm



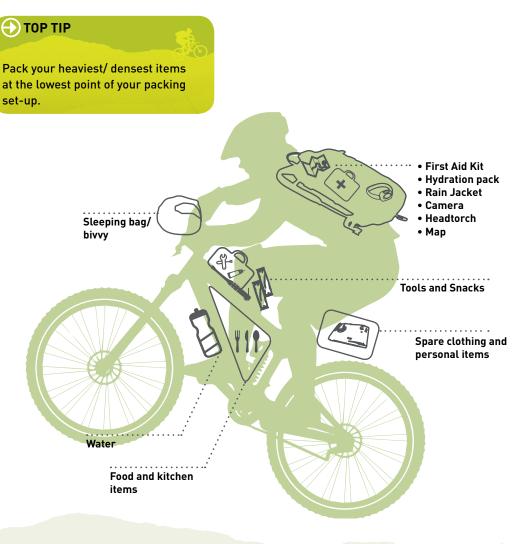
getting desperate. Try to plan ahead where you will be able to fill up so you're not putting yourself at risk. I will also often use electrolyte tablets to replace what I'm sweating out, especially on those hot summer days. Staying hydrated will keep you thinking clearly and your body functioning properly, something all too many people fail to keep on top of when riding!

HOW DO YOU PACK IT ALL?

A bike gives you an alternative option to carrying everything on your back. You want to remove as much weight as possible from your back and shift this to your bike.

Packing can be challenging, especially for an overnight trip. It's a little different than packing a backpack for a tramp. Not only do you have a bike to ride on, but you also don't want to add too much weight and bulk to the bike as you'll find it hard to pedal and keep your balance.

There are various different options for carrying gear on your bike, head to your local bike shop and chat to the experts for more details on what's available.





HAVE A GREAT RIDE, BUT MAKE IT HOME

This resource is intended to help people gain enjoyment and be challenged safely in the outdoors. However, individuals must take responsibility for their own safety to ensure safe participation in the outdoors.

Please share with your family, friends and mountain biking groups to help them plan their trip and make it home.

#MakeItHomeNZ



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We value your feedback and we would love to hear what you think of this resource. Please contact us at info@mountainsafety.org.nz

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