

Luggage

Carrying things by bicycle is easier than it is on foot. That's because you've always got a great set of luggage wheels: the bike's. Whether it's a picnic, a school bag or the weekly grocery shop, you can move it quickly and easily by bike.

As your hands are on the handlebars, carrying anything in them is not an option. Nor is hanging bags from the ends of the handlebars, which compromises the steering and creates the risk of a bag catching in the front wheel. Your options are: on your back; on the bike; or in a trailer. That's the order for weight and volume, too. Light loads can easily go on your back, but big things really have to go in a trailer. In between, there's the bike.

On your back

Carrying a load on your back can make it really ache. On a bike you're bent over rather than upright, which isn't a good posture for carrying loads. It means your hands and backside have more weight bearing down on them. It also makes you hotter, so you sweat more. Most of the time you're better off letting the bike be the beast of burden.

There are exceptions. If you're riding a mountain bike over rough terrain, any dead weight on the bike will deaden the handling. If the weight moves with you on your back then you can still move the bike around nimbly beneath you. A hydration pack – like a rucksack but also containing a water bladder with a long tube – does away with the need for water bottles on the bike too. As such, it's standard kit for technically demanding off-road rides. Some hydration packs accommodate only the water bladder and enough room for a few tools; others are big enough (20 litres of luggage space) for several days away, if you pack light.

Features to look for in hydration packs include waist and sternum straps to keep the load close to your body, and – if it's a bigger bag – compression straps to cinch down a loose load. Expect to pay from £25 upwards.

The other cyclists who carry loads on their back are cycle couriers. That's because they're on and off their bikes all day, making lots of stops. The load goes with them as soon as they dismount. That get-off-and-go simplicity can make a backpack just as useful for short trips by any cyclist, so long as the load isn't too heavy.

Courier-style shoulder bags look cool. However, when you lean forward on a bike the bag can creep round until it's hanging off one side and banging your knee. The more you lean forward – for instance, on drop handlebars – the more of a problem that this is. The other disadvantage is that one shoulder bears the bulk of the weight.

A backpack-style bag is more comfortable and more secure – particularly if, like a mountain biker's hydration pack, it's got waist and sternum straps. If you're using a walker's rucksack, use a small one – a daypack rather than a towering backpack, which will unbalance you.

On the bike

The further you plan to travel and the more you've got to carry, the more it makes sense to put at least some of the load on the bike.

All bikes can carry some luggage. Those that can carry panniers give the most options and the biggest capacity. You may see expedition cyclists with bags all over their bikes – two rear panniers, two front ones, a bar bag, a rack pack and a seat pack. For shorter trips, all you really need is two panniers on a rear carrier rack.

To fit that carrier rack, you want a bike with eyelets by the rear dropouts and on the seatstays. The bottom eyelets are the most important, as they bear most of the load. You can use P-clips to substitute for the top set. Or you can use a seat clamp with integral rack eyelets. If you also want to fit a front rack, it needs eyelets at the dropouts and low-rider mounts on the fork legs – most bikes don't have these.

The rear rack itself needs to be fairly sturdy. Get one that attaches at four points rather than three, as it won't flex from side to side as much under load. Racks made from steel tubing are the stiffest and strongest.

Bags for the bike

Panniers are available in two rough sizes: rear panniers, which have a volume of 20-25 litres each, and front panniers – sometimes called 'universal' panniers – which have that sort of volume per pair. Rear panniers are sometimes left or right specific: the front edge of the pannier tapers sharply to avoid the rider's heel when pedalling. Being smaller, front/universal panniers don't have this problem if you fit them to a rear rack. Why would you want to? You might not need the space of big rear panniers.

The golden rule of pannier packing is: your luggage will expand or contract to fit the space available. If you use big panniers, you'll fill them. If you use small panniers, you'll fill them too – but with a lighter load that's easier to carry.

For a long weekend away in the UK, around 25 litres of luggage space per person should be plenty, assuming you're staying at B&Bs, hotels or youth hostels. By way of comparison, a typical medium-sized suitcase holds 60 litres, so two rear panniers should hold all your holiday gear for a fortnight... For a more stable load, pack your heavier items at the bottom of the bags.

For shorter journeys, such as day trips, commuting or going to school, one or two universal panniers should be plenty. The problem will come if you need to transport A4 files or papers. They'll get dog-eared in a small pannier. One solution is to use a bigger pannier. A more elegant one is to use an office pannier. This is a briefcase-style bag that fits onto the rack at an angle to provide enough heel clearance, while easily accommodating files, papers – even a laptop computer, if you add a padded insert.

You can get cheap nylon panniers quite cheaply, under £30 for a rear set is likely. These are fine to begin with but they won't be as tough and won't be waterproof, so use plastic bags inside to keep things dry. Some lack the stiff backplate of quality panniers too, so you may need to pack carefully or use a pannier rack with a dogleg rear strut to keep the rear corner of the pannier out of the wheel.

Not all bikes can be fitted with a rear rack, and there are others you might not want to fit with a rear rack. There's still the saddle or seat post to attach bags to. Smaller bags, often referred to as seat-packs rather than saddlebags, clip to a bracket fixed to the saddle rails and are stabilised by a strap wrapped around the seat post. With small capacities (usually around one litre or so), they're best for tools, a spare inner tube and perhaps an energy bar or two.

Trailers

A child trailer will carry a week's groceries for a family. It's easier than using panniers as you can just lift the bags from the trolley to the trailer, instead of decanting the shopping bit by bit.

If you have a large load to pull then you will need a dedicated luggage trailer, while for really heavy haulage, you need a load-carrying bike or trike.