

#### **REDUCING STUDENT PACK WEIGHTS**

OCT 2025

Students' enjoyment of camp is influenced by their comfort, a big part of which is determined by pack weight.

Schools put significant effort into ensuring the equipment they supply is suitable, in terms of both function and reasonable weight. However, items purchased by students and their families can vary significantly in weight, resulting in some students carrying substantial extra weight.

This document is designed to decrease pack weight and increase student comfort by providing guidelines for purchasing. In many cases following this guide can also save parents money – *lighter isn't always more expensive!* 

It is easy to see the weight savings on key items (sleeping mat, sleeping bag etc), but small items (crockery, water bottles, extra socks) can really add up.



Items supplied via www.camplist.au follow this guide and have been considered for weight, price, function and durability.

	Ideal weight range	Notes
Cup	Under 100 g	A quality plastic cup holding between 330 and 400 mL should weigh between 50–100 grams and cost \$10–30. Lids aren't required – they get lost! A handle helps to avoid spills.
		We do not recommend heavier stainless steel, glass or thermal mugs.
Bowl	Under 100 g	A good plastic bowl between 800–1000 mL should weigh 80–110 grams, often costing between \$10–20.
		Solid simple bowls are often the most effective and durable. Collapsible bowls are compact but may not last as long and may spill with inexperienced users.
Cutlery	Under 30 g	A set of cutlery should weigh between 15–70 grams and cost \$15–\$40, while a simple spork is 10 grams and around \$5.
		We don't recommend stainless steel (too heavy) or titanium (too expensive).
Water bottles 1 L	Under 200 g	A 1 L water bottle with a secure lid (not a squeeze bottle) should weigh 100–200 grams.
		Larger capacity 1.5 L bottles can be hard to store in your pack and can create uneven load distribution. We do not recommend heavier stainless steel or insulated bottles.
Water bladder 2 L	Under 150 g	A quality 2–3 L water bladder with hose should weigh between 100–150 grams.

# Microfibre towels

Many are of similar weight; however some students bring unnecessarily large ones. Small or medium size preferred.

### Toiletries and accessories

This is an easy area for weight to slip in unnoticed, and it's one of the hardest to manage.

Before heading on camp, get students to check:

- The weight of their toiletry bag. Would a lighter plastic bag work?
- If they need everything they're taking?
- If there is a small, travel-sized option that could reduce weight? Or if could they put some products in smaller, lighter containers?

## Understanding sleeping bag styles and temperature testing



Most camps will recommend a sleeping bag with an ISO 23537-1 rating of -5°C male lower limit (the same as -1°C female lower limit).

For alpine winter journeys, we recommend an ISO 23537-1 rating of -10 $^{\circ}$ C male lower limit (the same as -4 $^{\circ}$ C female lower limit).

School outdoor education departments have a keen understanding of sleeping bags, temperature ratings and how to sleep warm on school camp. Please follow their guidelines and ensure your bag is ISO 23537-1 temperature rated when hiring or purchasing.

MALE LOWER LIMIT OF COMFORT	The lowest temperature at which a 'standard' male will be in thermal equilibrium during sleep.	
FEMALE LOWER LIMIT OF COMFORT	The lowest temperature a 'standard' female will be in thermal equilibrium during sleep.	
EXTREME	Extreme rating is a survival rating for a 'standard' male.	

Down bags are generally lighter in weight and more compact (easier to pack). They do cost more but can be used during all school camps.

Synthetic bags are affordable and easily washed at home. A quality synthetic is fairly compact but will always be heavier and bulkier than an equivalent down bag.

For school programs with annual camps, encouraging parents to purchase a quality sleeping bag in Year 7 results in the best value for money over time.

Synthetic sleeping bag	Under 1100 g	Synthetic bags are affordable, durable and easy care. A quality -5°C model will weigh less than 1.1 kilograms, while a quality -10°C should weigh less than 1.65 kilograms.  * Hire options available. All Camplist.au hire bags are washed and cleaned after every use.
Down sleeping bag	Regular size -5/+1°C (male/female lower limit of comfort)  Less than 750 g  Regular size -10/-4°C (male/female lower limit of comfort) Less than 900 g	Down sleeping bags are popular because they are significantly lighter and more compact (easier to pack) than synthetic alternatives. They are more expensive but are a good long-term investment.  A high-quality down bag with a -5°C male lower limit (+1°C female lower limit of comfort) should weigh around 700–750 grams. A midrange model will weigh under 1 kilogram.  A quality down bag with a -10°C male lower limit (-4°C female lower limit of comfort) should weigh 850–900 grams. A midrange model will weigh around 1.1 kilograms.

## Liner

Sleeping bag liners are easy to clean after camp and may add a familiar feeling/touch. However, sleeping in thermals does the same job and adds just as much warmth. Consider whether you need to carry the extra weight.

The lightest option is silk blend.

## Understanding a sleeping mat's R-value (insulation value)

Quality mats are rated according to R-value – a measure of the insulation they provide. We recommend sleeping mats have a minimum of R3.2. Choosing a mat with the correct R-value and a good sleeping bag will keep you warm on school camp.



#### What is a self-inflating mat? How is it different to an inflatable mat?

Self-inflating mats (sometimes abbreviated to SIM) have foam inside them. When the valve is opened, this foam expands and sucks air into the mat, leading to the term 'self-inflating'. It's still common practice to blow some air in to get maximum inflation. They are more affordable, durable and easier to use than inflatable mats. Even when not fully inflated, they provide some measure of insulation and warmth. Self-inflating style mats are recommended for school programs.

Inflatable mats are designed with baffle technology and are lighter, more compact and more expensive. They often come with pumps or bags to inflate them, suiting more experienced users. They are not warm if not fully inflated.

Both options are compact and light enough for bushwalking.

Sleeping mat	Under 700 g	Self-inflating style mats should have an R-value of at least R3 and weigh less than 700 grams. Packed size should be around 22 Ø by 33 centimetres long.  * Hire options available.
Pillow		A pillow is a luxury item, adding both comfort and weight. Placing your jumper in a stuff sack works just as well! Choose a stuff sack made from mesh or breathable fabric for greater comfort.
		If you take a pillow, ensure it weighs under 100 grams (and packs up small!)
Rain jacket	Under 600 g (medium) for a three-layer waterproof	Choose a three-layer waterproof/breathable rain jacket with a full-length cut, room for layers underneath and a quality hood. It should be designed for bushwalking. These generally weigh between 500–700 grams.  * Hire options available.
		Don't take jackets designed for lightweight trail running (too cold, flimsy and not enough coverage) or an insulated ski jacket (too hot, bulky and heavy).
		If you're wearing an older jacket from home, check it for holes and damage, wash it and reapply DWR before your trip. See instructions here: <a href="https://oneplanet.au/technical/product-care-use/clothing-rainwear/">https://oneplanet.au/technical/product-care-use/clothing-rainwear/</a>

# Fleece and warm wear

Fleece garments are warm when wet while down jackets are not. Fleece garments are also less likely to get damaged.

Consider whether a windproof fleece will also help reduce cold from exposure to wind. Often wind is as much of a factor as air temperature. You can always wear your rain jacket as a windproof outer layer.

# **Clothing and thermals**

Quality clothing and thermals are a must, but weight, warmth and price must be balanced. The most common problem is overpacking, so don't take items you won't use.

Packs	Under 2000 g	We recommend a 70–75 L pack with a comfortable, supportive harness, zipped lid and large front pocket. To ensure it is reliable on camp, it should be from a reputable brand. It should weigh two kilograms or less.
		* Hire options available.