

Some Thoughts on Ultralight Gear

by Mary and Steven Robinson

The following article appeared in the August 2007 edition of the Coast and Mountain Walkers Club magazine *Into the Blue*. It has been reprinted here with the permission of the authors.

"The greatest comfort one can indulge in is a light pack".

Last summer while lugging a 12 kg load over big hills in New Zealand, we read an article by Bryan Dudley of Tramplight in New Zealand, on going 'ultralight', with a total bare pack weight of less than 4.5 kgs. Sounded blissful, so we decided to try out some of Bryan's ideas.

We have now done several overnight trips (including winter trips in Tasmania) with what feels like a day pack (about 5 kgs each all up for a Tassie winter weekend). When asked if we would ever go back to 'normal' gear, our answer, and that of our muscles, knees and back, is decidedly "No way!"

Ultralight is generally accepted as a total bare pack weight of less than 10 lbs (4.5 kgs) for three season walking, going up by about 1 kg for snow camping. This includes everything (pack and contents) except consumables (food, fuel, water).

Going ultralight does not mean going without – it means substituting lighter gear for 'normal' weight gear, and using gear with multiple functions as much as possible. We are just as warm, just as safe and just as comfortable as we ever have been. New 'space age' materials mean that much lighter gear is possible, while still doing the things the gear is meant to do – keep off rain, stand up to wind, keep you warm, cook food etc. Unfortunately though, the major manufacturers, selling to a wide cross section and fearing returns, seem not to be prepared to market such gear as yet – ultralight gear does need a degree of care in use. This means that for now, you need to search widely to find what is available commercially (almost only from North America), or make your own (much cheaper). Kits are available if you decide to make your own. Lots of contacts are given below for ready made gear, materials and kits. The wonderfully warm sleeping bag we now use is from a kit, the tent is of our design.

As ever, gear should be chosen to suit expected possible conditions. For example, if extreme scrub bashing is likely, a heavier raincoat would be taken. This does not mean that a heavier sleeping bag, tent etc are also needed. Total gear weight would still be low.

The 'big three', where it is easiest to save substantial weight, are pack, shelter and sleeping gear. All three should be considered together -the weight saved on any one of these may well not be too apparent, but together they make a huge difference. It is not difficult to get the total of these three below the weight of a conventional internal frame rucksack alone (a little over 2 kgs). It is on these three that one should concentrate. For example, packs can go as low as 335 gms, sleeping gear about 800 gms (for down to freezing) and shelter down to 245 gms. How low you go depends on your priorities – we chose a 'heavy' 720 gm pack because it is made of much tougher material, does not have bush-snagging net pockets and other rubbish on the outside, has a hip harness and has a closed cell foam 'frame' (which can double as a sleeping mat). It will not last as long as a Macpac or WE pack, but then it is half the price.

Ultralight gear need not cost an arm and a leg. For under AU\$500, you should be able to get below 4.5 kgs, if you're prepared to do a little sewing. For example, the packs we use cost AU\$180 including postage (ready made), a winter-weight sleeping gear kit (single) from Ray Jardine is US\$79.90 and a shelter kit from Ray Jardine is US\$70.90 (or US\$118-85 with mozzie net inner) – a total of about AU\$450 for the 'big three' including exchange rates and postage.

Our gear is not as light as we plan to get to, but we have included some 'luxuries' in our gear – for example, a Thermarest, an EPIRB, and a double skin tent with full mozzie protection and heavy duty floor (rather than an ultralight tarp and plastic groundsheet).

For our present three season weekend gear list for two people, please refer to the table below page.

Description	Steven (gms)	Mary (gms)	Description	Steven (gms)	Mary (gms)
Pack (includes closed cell foam sleeping mat)	720	740	Mugs, bowls, cutlery etc. for two	----	140
Sleeping quilt (extremely warm double, splits in two)	660	700	Pack liner (plastic bag)	60	60
Fly, tent and pegs (equivalent to 630 gms per person)	1260	----	Water bottle (platypus hydration bottle)	55	55
Down jacket	340	340	Head torch	60	60
Light fleece coat	240	240	Water purification	----	40
Thermal top	160	160	Washing kit (teeth, soap etc. for two)	----	60
Thermal long johns	60	60	Knife, emergency blanket, odds and ends	30	150
Balaclava	60	55	Thermarest	440	440
Spare socks	50	50	Shovel	—	10
First aid kit	----	160	EPIRB	----	170
Raincoat	150	150	Long roller bandage for snake bite	40	40
Spare undies	45	30			
Billy, meths stove including stand, windshield, fuel bottle	----	140	Totals	4430	4050

The above gives an average of 4,240 gms per person. There is an excess of warm clothes for summer walking. Our aim is to get well below 4 kgs for Sydney region winter walking, still keeping our 'luxuries'. To do this, we plan to make new insulated jackets and a few other bits of clothing (our clothing at the moment is normal gear), and to try a much lighter shelter (around 400 gms), keeping our present tent for more extreme conditions.

Our advice to anyone contemplating going down this route is to weigh everything that you already own, see how it compares to what is available .or can be made (which involves doing lots of reading on the web), then make decisions on where it is best to start **for you**. Make lists of everything and total the weights up. But always remember, start with the big three – pack, shelter, sleeping gear.

(NB. **Queries** regarding the opinions, ideas and equipment mentioned in this article should be directed to the authors c/o Willis's Walkabouts at email walkabout@ais.net.au.)

Some Useful Web Links

(NB loz = 28.35 gms) :

Shelter

Note that this can go as light as 245 gms for a one person shelter, groundsheet and pegs.

www.gossamergear.com/cgi-bin/gossamergear/xdpy/s/Shelter/index.html (very good service).

www.rayjardine.com/ray-way/tarp-nettent/index.htm (we know someone who has one & is very happy with it)

www.thru-hiker.com/store.asp

www.sixmoondesigns.com/default.asp

www.tarptent.com/products.html

www.integraldesigns.com/product.cfm?id=6&CFID=8851455&CFTOKEN=3348535&mainproducttypeid=1

www.backpacking.net/makegear.html (explore side index under 'Shelters')

www.hikelight.com/shelters.html

You can make your own from ideas gained from any of these links, or that you have yourself.

Sleeping Gear

www.rayjardine.com/ray-way/quilt/index.htm (we have a 'RayWay 2 person deluxe alpine quilt' – super warm, and very light. Ray raves on, but has a lot of experience (see his home page), and service is very good. His quilt kit is strongly recommended by us, either single or double – cheap also)

www.thru-hiker.com/store.asp

www.featheredfriends.com/productoverview.aspx?CatId=1&selection=0

www.gossamergear.com/cgi-bin/gossamergear/sleeplight.html

www.integraldesigns.com/product.cfm?id=22&CFID=8851455&CFTOKEN=33548535&mainproducttypeid=1

(click on image for more info)

Packs

www.tramplight.co.nz/feedback.htm (We have the 'Bushcrasher' packs -they are comfortable and easy to use, but could have more beef around the bottom for Aussie conditions. No attachments to catch when bush bashing. You need to post a cheque to order. Service good. Don't be tempted by Tramplight's sleeping bags – they lack insulation)

www.thru-hiker.com/store.asp

www.sixmoondesigns.com/default.asp

www.gossamergear.com/cgi-bin/gossamergear/xdpy/s/Packing/index.html

www.backcountry.com/store/GOL0158/c3/s8/GoLite-Jam-2-Pack-3000-cu-in.html?id=F8cosLVN

Stoves

www.tramplight.co.nz/feedback.htm (We have the little Varga meths stove. It is more fiddly to use than a Trangia bummer, but is otherwise similar. Note that the 28 gills includes a stand! We have added a foil reflector (more robust than cooking foil), windshield and lid, which greatly increases efficiency. Total weight is then about 40 gms.)

www.zenstoves.net (any number of stove designs!)

www.imrisk.com/woodgas/coffeestove.htm (A great little home made twig stove. See his other stove experiments by following the link at the bottom of his page)

Materials and Kits

www.thru-hiker.com/store.asp (We bought all our materials here for tent etc. Very good service. Have also made one of their clothing kits, which worked well. Look at the weights of some of the clothing in the kits, and compare to what you carry!)

Lightweight Breathable Raincoat

www.integraldesigns.com/product_detail.cfm?id=840&CFID=8851455&CFTOKEN=33548535&mainproducttypeid=1
(In the original article they said, "We have one of these on order. Will be interesting to see how it performs. E-Vent fabric has been widely reviewed as better than Gortex." Now that they've had a chance to use the raincoat, they've added the following.

"The raincoat worked out very well. It kept is totally dry in cold rain and in snow. No chance yet to try it out in warm rain! It is very comfortable, with generous hood, but is short by usual Australian bushwalking standards. You really need overpants unless you are happy to be wet around the bottom. Our silnylon overpants worked well, and are lighter than the extra weight that a longer coat would entail, but the overpants would not stand up to really heavy scrub bashing. Their sizing is a bit on the small size - I would recommend one size bigger than their tables indicate."

"Ordering is a bit of a hassle. Their method is to download an order form, print it, snail mail it to Canada, they email back an order number, then you order on the web. I shortened it by making a word copy of their downloaded form, filling that out and emailing it back to them. They accepted it happily and I had the order in the next day.")

Note that postage from US is expensive – luckily this gear is light – but typically think of adding around \$30 to \$50 for postage. It is cheaper to order several things in one order.

For comparison, another couple of gear lists (with weights) from the US can be found here:
www.fiddleheadpa.safeshopper.com/14/96.htm?567

For how to go below 1.8 kgs ('psycholight'), see:

www.gossamergear.com/cgi-bin/gossamergear/Photos_sub4.html

(**Note.** When they talk about coping with temperatures into the 20s they are referring to Fahrenheit, that means temperatures down to about -5°C.)

When I (Russell Willis) emailed Steven Robinson to request permission to use his article he sent me the following email. He and Mary have taken things even further than in the original article.

19 September 2007

We have just completed a 7 day winter overland track walk (Cradle Mountain - Lake St Clair) in Tassie with a bare pack weight of 5 kg (starting weight 11 kg). Hit the full range of weather – rain plus gale, heavy snow, beautiful sunshine. Fabulous trip.

Attached is a picture of Mary on day three.

The ultralight gear was superb. I think we were warmer and drier than anyone else in our party who was using normal gear. For walking we were in thermal top and long johns, shorts, boots and gaiters as a base, then could add insulated vest (Thru-Hiker Minima Vest), lightweight stretch pile coat, E-vent Integral Designs raincoat, sil-nylon overpants (my design), thermal balaclava, insulated mittens and overmitts (my design), sun hat and sunglasses.



At night we changed into clean dry thermals top and bottom, insulated vest, down jacket, insulated "helmet" (over head, around ears and around neck), insulated trousers and insulated hut/tent shoes (all the insulated stuff my design except the vest). We were warm! We carried (and used) our double skin 2 man tent, and cooked on our 28g stove. Our 800g down bags kept us cosily warm (again my design). Within our weight allowance we also had an epirob, gps, first aid kit - I'd hardly say we were skimping on gear!

I think that for dry season walking up your way it should be easy to get down to 3.5 kg without food and water.

Still fondly remember our "Kakadu in the Wet" Willis walk! Keep up the good work.

That's all from Steven and Mary. Here's a bit more to think about.

3.5 kg. You seldom need to carry more than 500 mL of water. That brings it up to 4.0. Add in breakfast and lunches and **it should be possible to do a one week walk in Kakadu or the Kimberley without ever carrying more than 7½ kg**. I don't know anyone who has managed to go quite that low yet, but I do know people who have come close.

Our original **light-pack bushwalking check list** was written in early 2003. The information there is just as relevant now as it was then. The main difference is that some of the gear has got even lighter. See www.bushwalkingholidays.com.au/pdf/new-light_v5a.pdf for the original info.

Some of the websites mentioned in our 2003 light-pack bushwalking information page www.bushwalkingholidays.com.au/pdf/new-light_v6b.pdf are no longer relevant but the general information should still be still useful. As above, the biggest change has been that there are a lot of new and even lighter items on the market.

Finally, there is one product which I think deserves a special mention as it is so suited to our dry season climate, the 650 g Equip, free standing mosquito net. Two of our clients, Helen and Jim Thyne from Hobart, brought one along on our August-September Kakadu Highlights trip. The picture at right shows Helen and Jim in the net. As you can see, it has plenty of room. It is also easy to set up. A standard mossie dome weighs more than twice as much.

For more information, see www.equip.com.au/Products/mosquito.asp

