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# Appendix 1

## *ABC of Camping*

What do we need to survive in the bush?

To survive in the bush,  
we need water and food, clothing and shelter.

How do we know what to wear?  
↓

We know what to wear  
by working down from our heads:  
hat, shirt, shorts, socks and boots.

Hat: army felt hats are best  
(add a chin strap)

Shirt: strong cotton, light khaki  
with long sleeves (roll them up or down)

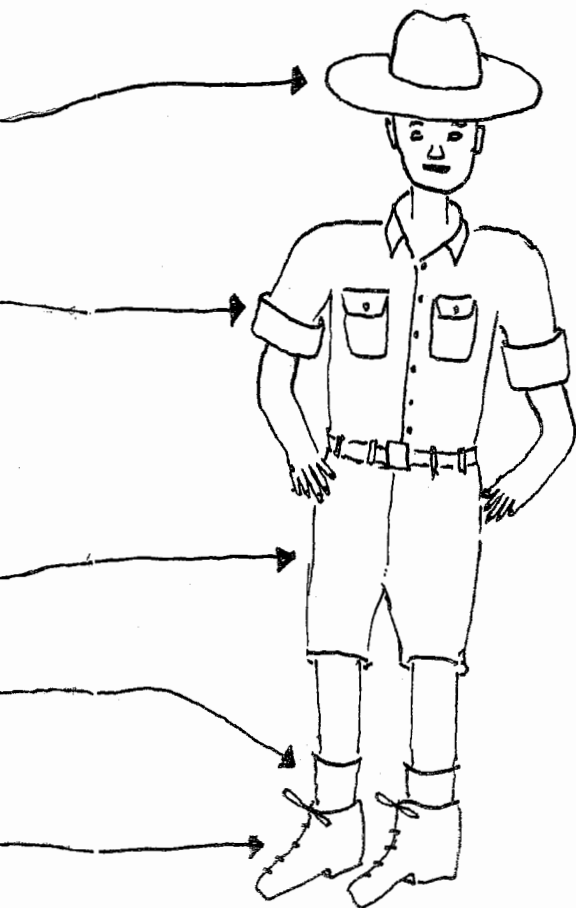
Shorts: strong cotton, light khaki  
roomy, knee length  
(no jeans: they are too hot and hard to dry)

Socks: thick cotton or wool  
(beware of nylon and artificial fibres)

Boots: solid leather uppers or gym boots  
or sandals or sneakers

# BUSH BOY

①



(chin strap  
too hard  
to draw)

greg

## BUSH BOY'S PROTECTION

What use is a staff?

A staff is an extra leg on steep slopes,  
an extension arm for pointing at things  
and rescuing people from drowning  
in water or quicksand,  
and a weapon for defending the innocent.

What are hats for?

Hats are for keeping off the sun, rain, cold,  
falling sticks and stones;  
for fanning fires, carrying water;  
and charging head-down through the scrub.

Describe good boots.

Good boots are light and tough,  
grip the ground, fit the foot,  
and easy to lace and unlace.

THE STAFF

2



HATS PROTECT HEADS



BOOTS PROTECT FEET



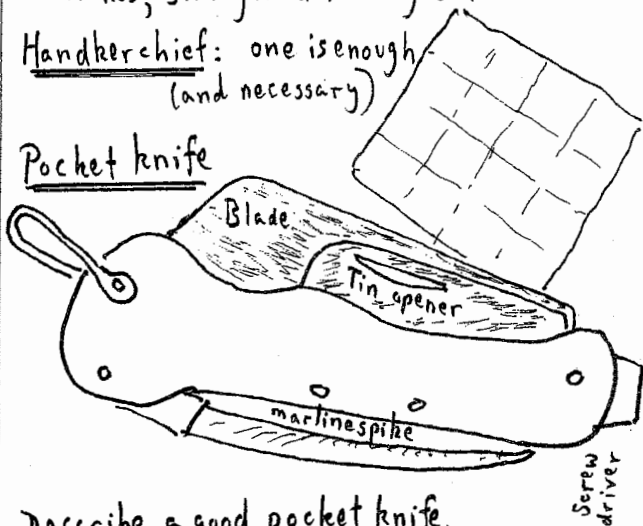
## BUSH BOY'S POCKETS

What are pockets for?

Pockets are for handkerchief, pocket knife, matches, string and Rosary Beads

Handkerchief: one is enough  
(and necessary)

Pocket knife



Describe a good pocket knife.

A good pocket knife has a big blade with a keen edge but no dagger point, a marlinespike, tin opener and screw driver.

String: it always comes in handy.

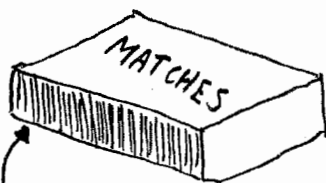


What are handkerchiefs for?

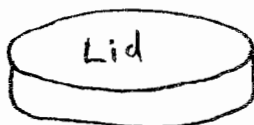
(3)

Handkerchiefs are for blowing noses,  
mopping faces, drying hands,  
holding hot handles,  
bush baths and bandages

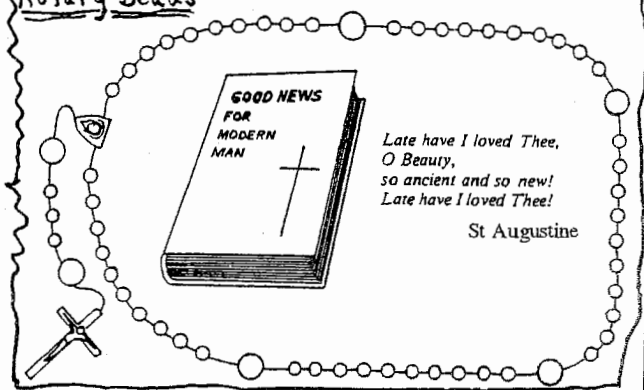
Matches in an old shoe polish tin to keep dry



Put a spare striker  
from an old box  
inside with the matches.



Rosary Beads



## OTHER PERSONAL GEAR

What other clothes do we need?

Other clothes we need are raincoat,  
woollen jumper and swimming costume.

Note: A lined Parka can sometimes count as  
both raincoat and jumper.

What is basic personal gear?

Basic personal gear is  
a knapsack, sleeping bag,  
tooth brush

mug  
dixie  
and spoon



Note: toothpaste and  
soap are group gear

OR a bowl

share a pair of dixies

enamel mug, not plastic or  
aluminium (ditto for bowl)

ALSO

- note book
  - pencil with rubber
- } in shirt pocket

FOR A BASE CAMP (when you can drive to it and  
don't have to carry it, like staying in someone's  
home)

- small piece of towel
  - face washer
  - comb
  - pyjamas (winter, for cold nights)
- } ONLY ON A MOVING  
CAMP DO WE SLEEP  
IN OUR CLOTHES

DO NOT BRING SPARE CLOTHES

If clothes get dirty, we wash them;  
wet, we dry them; torn, we mend them.  
SO WHEN WE GO, NO SPARE CLOTHES.

{ WE MUST  
TRAVEL LIGHT,  
IN SAFETY  
AND COMFORT

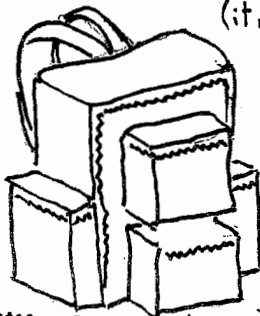
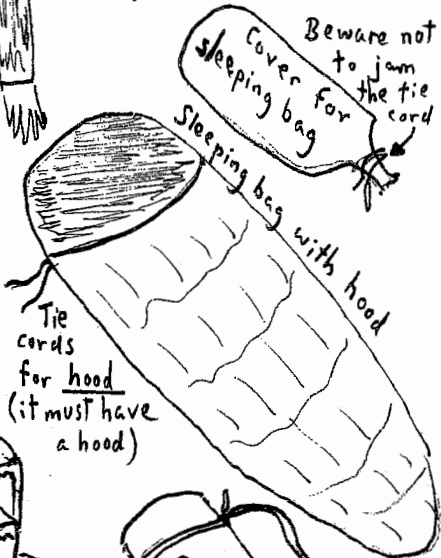


Hood too hard to draw

No socks

Note: If our clothes get (4) wet we might wear all three at once: raincoat, jumper, gaiter; also to change into before rain to keep our ordinary clothes dry.

Sleeping bag  
or light warm blanket



zip means a zip.  
Small knapsacks OK if you take a swag as well



**GROUP GEAR** • you do not bring it  
• but you use it  
• and help carry it

What group gear do we need?

The group gear we need is  
cooking gear, cleaning gear and a tent.

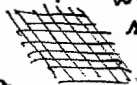
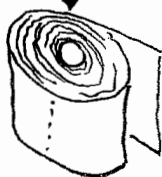
We never tried an  
igloo or an A-tent.  
freq.

What is group cooking gear?

Group cooking gear  
is enough billy cans and dixies  
to cook the food on the menu.

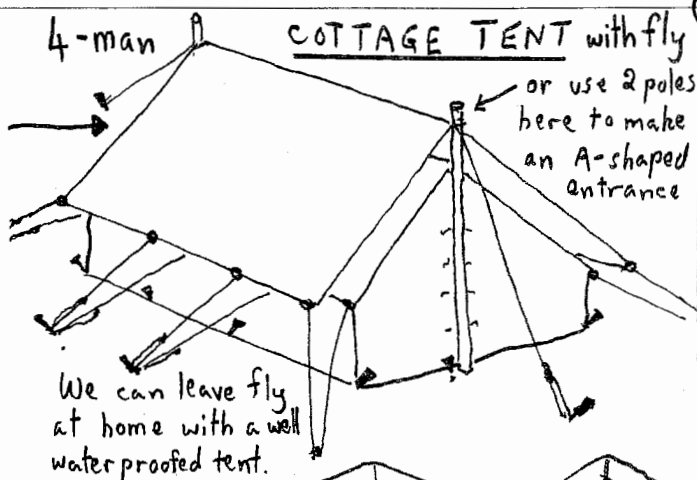
What is group cleaning gear?

Group cleaning gear is soap, scourer,  
toilet paper and toothpaste.

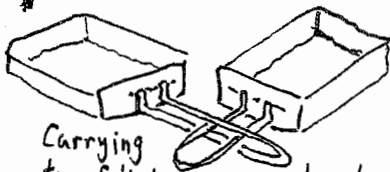
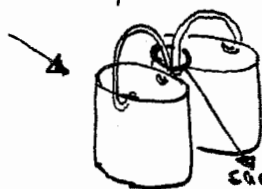


We also use  
sand as a  
scourer.  
freq.

**NO RADIOS ~~ALoud~~ ALLOWED**  
(not even Walkmans.)



We can leave fly at home with a well waterproofed tent.



Carrying two full dixies in one hand. carry two full billies in one hand here

### OTHER GROUP GEAR

- Canvas water bucket
- Torch with spare cells
- Hurricane lantern and kerosene
- Wrist watch (in knapsack)
- Map(s) or photocopies
- Compass
- Rope for clothes/line and cliffs
- Digger (plastic)
- First Aid Kit
  - { 2 crepe (stretchy) bandages;
  - { bottles ammonia and tea-tree oil for ball sores and abrasions
  - { 12 band aids



(or use a jagged stick)

cuts, burns, blisters

# SAFETY FIRST

What are the Seven Deadly Dangers which lead to death in the bush?

The Seven Deadly Dangers which lead to death in the bush are getting lost, getting drowned, violent collisions, snakebite, burns, dehydration/heat exhaustion/hyperthermia and hypothermia.

**DON'T SPLIT UP THE PARTY**



Don't let this happen to you or your friends.

Remember, "Prevention is better than cure."



## FINDING NORTH

point 12 o'clock at the sun

How do we avoid getting lost?

We avoid getting lost by following a good leader, not splitting-up the party, navigating by creeks & ridges, map & compass, sun & stars.



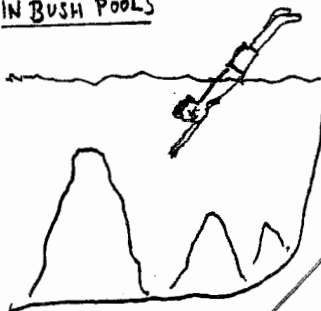
TRUE NORTH is half way between the hour hand and 12 o'clock (in Northern Hemisphere, point the hour hand at the sun and true south is halfway to 12 o'clock)

*How do we avoid drowning?*

We avoid drowning by  
not trying to cross flooded rivers,  
not swimming in cold or muddy water,  
not after eating or for too long at a time,  
not diving because of rocks, snags or weeds,  
not bombing and breaking people's necks,  
keeping to shallow water  
and having a resuscitation officer.

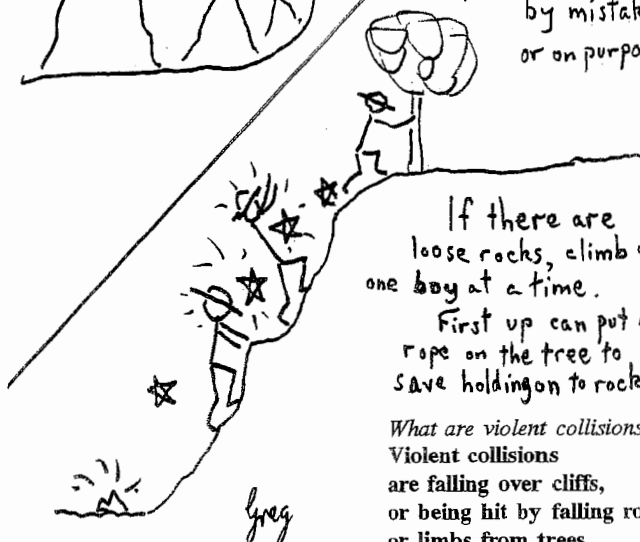
6

DON'T DIVE  
IN BUSH POOLS



DON'T ROLL ROCKS

by mistake  
or on purpose



If there are  
loose rocks, climb up  
one boy at a time.

First up can put a  
rope on the tree to  
save holding on to rocks

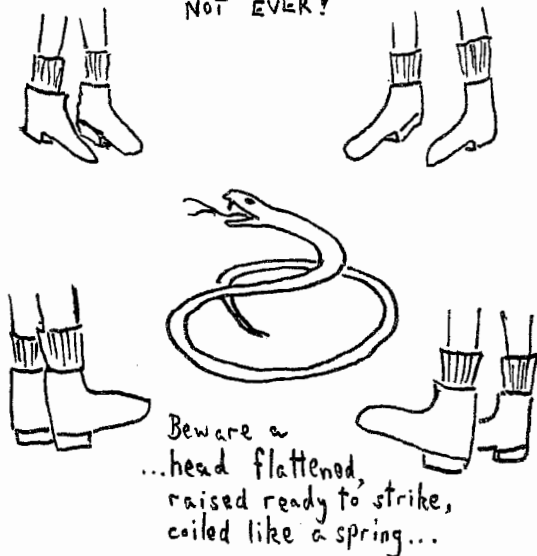
*What are violent collisions?*  
Violent collisions  
are falling over cliffs,  
or being hit by falling rocks  
or limbs from trees.

Greg

*How do we avoid snake bite and spider bite?*

**We avoid snake bite and spider bite**  
by wearing boots at all times,  
watching where we're walking,  
not distracting the man in front  
and using a torch at night.

NEVER GATHER ROUND A SNAKE.  
NOT EVER!



*What is the First Aid for snake or spider bite?*

**The First Aid for snake or spider bite is bandages,  
pressure or crêpe, bound as tight as for sprains  
from thigh to toe or shoulder to finger;  
next immobilize leg in splints or arm in a sling,  
re-assure the victim, treat for shock  
and carry him to hospital.**

Note: This treatment acts on lymph vessels. Lymphatic fluid ceases to flow when limb is immobilized.

**PHOTOCOPY of the ABC of CAMPING No. 7 (LHS)**

*How do we avoid burns and scalds?*

**We avoid burns and scalds by not fooling with fire, and never passing hot things over people.**



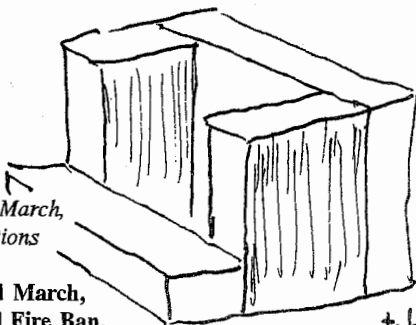
Keep all burning sticks in the fire

*What is the First Aid for burns?*

**The First Aid for minor burns is to immerse them in icy water, but for the worst major burns to cover them with a clean wet cloth, treat for shock and get a doctor.**

Note: Treat scalds as burns.

Rake  
all round  
with  
two  
forked  
sticks



*Between October and March, do the bushfire regulations allow cooking fires?*

**Between October and March, except during a Total Fire Ban, the bushfire regulations allow cooking fires if cleared around for 3 metres with an adult; or cleared around for 2 metres in a permanently constructed fireplace.**

*The bigger the fool, the bigger the fire.*

*Fire is a good servant but a poor master.*

or take  
a small  
rake-hoe

greg

# Appendix 2: Australian Bush Catechism of Camping

**QUESTION:** *What does the camping catechism give us?*

**ANSWER:** The camping catechism

gives us **FACTS, DOs AND DON'Ts,**  
**clear, brief<sup>1</sup> and easily learnt**  
**with rhyme<sup>2</sup>, rhythm and sense-lines.**

1. Its 50 Questions & Answers average 22½ words each.

2. It often has rhyming consonants (alliteration) and rhyming vowels (assonance) rather than rhymes at the ends of lines as in poetry.

NOTE: a cross-reference with an asterisk \* means there is a picture.

## **SURVIVAL**

1. *What do we need to survive in the bush?*

**To survive in the bush**  
**we need water and food,**  
**clothing and shelter.**

## **WATER**

2. *Where do we find water?*

**We find water in creeks, springs,**  
**and water roots of trees;**  
**by digging wells**  
**and by condensation on plastic.**

3. *How do we purify polluted water?*

**We purify polluted water**  
**by boiling it to make tea**  
**or with water-purification tablets.**

## **FOOD**

4. *Describe good camping food.*

**Good camping food is nutritious,**  
**cheap to buy, light to carry,**  
**easy to package, prepare and wash up.**

See 231, 462, 464 for Food Lists; cooking, 468-469.

## CLOTHING

5. *How do we know what to wear?*

**We know what to wear  
by working down from our heads:  
hat, shirt, shorts, socks and boots.**

6. *What are hats for?*

**Hats are for keeping off the sun, rain, cold,  
falling sticks and stones;  
for fanning fires, carrying water,  
and charging head-down through the scrub.**

Felt hats are best for all these; cotton hats are too floppy.

7. *Of what should our clothes be made?*

**Our clothes should be made  
of cotton, not polyester,  
but wool for cold, wet and windy weather.**

Wet cotton shirts can be dangerous when wet and windy.

8. *Describe good boots.*

**Good boots are light and tough,  
grip the ground, fit the foot  
and easy to lace and unlace.**

Loose boots require thicker socks. So do tight boots — extra socks spread the pressure and so ease the pain and even stretch the leather.

9. *What other clothes do we need?*

**Other clothes we need are raincoat,  
woollen jumper and swimming costume.**

If clothes get wet (or to keep them dry) wear all three at once. See 436-437\*. Two thin woollen jumpers are warmer than one thick one. A lined Parka counts as raincoat and jumper in mild weather.

10. *When do we wear long trousers?*

**We wear long trousers and even over-pants  
in cold and windy weather and scratchy scrub.**

Long trousers should be wool. Waterproof over-pants of japara, gortex or nylon keep out wind and rain.

11. *What if clothes get dirty, wet or torn?*  
**If clothes get dirty, we wash them;  
 wet, we dry them; torn, we mend them.**

See 75\*.

## PERSONAL GEAR

12. *What is basic personal gear?*

**Basic personal gear is  
 a knapsack, sleeping bag, toothbrush,  
 mug, dixie and spoon.**

In hot weather, a woollen blanket might replace a sleeping bag and be carried as a swag, 441\*,460\*,469\*. See §15 for a pocket knife. Bush meals can mostly be eaten with a spoon. Cooking forks are sharpened dead sticks. Soap and toothpaste are group gear.

13. *What are pockets for?*

**Pockets are for handkerchief, pocket knife,  
 matches, string and Rosary Beads.**

Greg put in Rosary Beads because his version of *The ABC of Camping* was for Catholics, 440-441\*.

14. *What are handkerchiefs for?*

**Handkerchiefs are for blowing noses,  
 mopping faces, drying hands,  
 holding hot handles,  
 bush baths, and bandages.**

A hanky counts as washer (sponge), face and hand towel. Use shirt tails as a bath towel. For bush baths, see §35, and 285.

15. *Describe a good pocket knife.*

**A good pocket knife has a big blade  
 with a keen edge but no dagger point,  
 a marline spike, tin opener, and screwdriver.**

A dagger point is no good for buttering bread. See 440\*. In some Australian States, restrictive laws apply to pocket knives.

16. *What use is a staff?*

**A staff is an extra leg on steep slopes, an extension arm for pointing at things and rescuing people from drowning in water or quicksand, and a weapon for defending the innocent.**

17. *What extra items must the leader bring?*

**The extra items the leader must bring are a First Aid Kit, rope and torch, map and compass, watch and whistle.**

18. *Describe a good knot.*

**A good knot does not slip or jam.**

19. *What lights do we need at night?*

**The lights we need at night are LED torches or headband torches.**

LED, Light Emitting Diodes, use small AAA batteries which last a long while and give a very bright light. For hurricane lanterns, and pictures, see 445\*, 511\*.

## **FIRST AID KIT**

20. *What items should the First Aid Kit have?*

**The First Aid Kit should have 2 pressure or 2 crêpe bandages, 12 band aids, a tube of Betadine Cream, and phials of ammonia and tea tree oil.**

See 445, 475; pressure bandages are better for snakebite: see §46.

21. *What are pressure or crêpe bandages for?*

**Pressure or crêpe bandages are for binding up bleeding, broken bones, sprains and snakebite.**

22. *What is Betadine Cream?*

**Betadine Cream is antiseptic for cuts, grazes, minor burns, scalds, skin infections.**

23. *What is ammonia for?*

**Ammonia is an antidote for  
bull ant bites and bee stings.**

It is no good for jumping ants. Laundry cloudy ammonia is cheap in supermarkets. For wasps, use methylated spirits.

24. *What is tea tree oil for?*

**Tea tree oil is for fly and mosquito bites  
and to soothe cuts and inflamed skin.**

## GROUP GEAR

25. *What group gear do we need?*

**The group gear we need is  
cooking gear, cleaning gear and a tent.**

26. *What is group cooking gear?*

**Group cooking gear  
is enough billy cans and dixies  
to cook the food on the menu.**

27. *What is group cleaning gear?*

**Group cleaning gear is soap, scourer,  
toilet paper and toothpaste.**

A scourer is a pot mit. Sand is also useful.

## SHELTER

28. *How do we sleep warm and dry?*

**We sleep warm and dry using a tent or cave,  
or a gonyah of bark or branches.**

29. *Describe a good tent.*

**A good tent is rain-proof,  
roomy enough, light-weight,  
and needs a floor or groundsheet.  
It may also need a fly.**

## CAMPCRAFT

30. *Describe a good campsite.*

**A good campsite has level grassy ground,  
no branches overhead,  
and is out of the wind and above the flood,  
with wood and water handy.**

31. *How do we light a fire in the rain?*

**We light a fire in the rain  
using dry kindling and graded fuel,  
with a hat to keep the rain off  
and fan it to a blaze.**

32. *Describe dry kindling.*

**Dry kindling is  
tiny sticks which point upwards,  
or stringy bark or turpentine bark  
rubbed into bull's wool.**

Sticks pointing downwards soak up water; 95, 118, 154, 474, 493.

## HYGIENE — WASHING & LATRINES

33. *What is camp hygiene?*

**Camp hygiene means washing and latrines:  
wash hands with soap and water  
before meals and after using toilet paper;  
wash up utensils in hot soapy water  
and clean teeth after eating;  
wash face and hands on rising  
and, on long camps, have bush baths.**

34. *What is a latrine?*

**A latrine is a bush toilet,  
a hole, dug with boot, stick or tool,  
well away from creek and camp.  
Bury manure & toilet paper, then wash hands.**

A 600g entrenching tool has shovel, digger, rake-hoe, etc: 460, 463.

35. *What is a bush bath?*

**A bush bath is sponging the body all over with hanky, hot water and soap, rinsing well-away from waterways, and a cold plunge in the creek.**

Details on 285-286. Never pollute waterways with soap.

36. *What does rubbish disposal mean?*

**Rubbish disposal means that any plastic, tins or glass are taken home, food scraps buried, but paper may be burnt.**

## **THE LEADER AND DISCIPLINE**

37. *What is essential for bush safety and happiness?*

**Good discipline is essential for bush safety and happiness.**

38. *What are the two rules for good discipline?*

**The two rules for good discipline are 'Answer properly when you're spoken to' and 'Obey, straight away'.**

'Answering properly' is also a basic courtesy. See 494.

39. *What must a good leader do?*

**A good leader must be both friendly & strict, control the group and look after them, tutor them to look after each other, prevent accidents by Safety First, be able to give First Aid, and find the way there and back.**

Only go camping with friends you know well. Don't risk taking 'the friend of a friend' until he has proved himself on day trips. See Pete's story, *Bush Boys on the Move* pp. 344-348.

40. *What is the leader's duty before setting out?*

**Before setting out, the leader's duty is to plan out everything; leave every family with written directions of where the party is going, when they'll be back, and whom to contact if overdue.**

## THE SEVEN DEADLY DANGERS

"Now, it is written — though few be that are wise enough to read before the punishment comes for disobedience — that the wilderness has rules of her own. To follow these without question is to be safe. To violate them is to invite the inevitable."

Alan Sullivan, *Under the Northern Lights* p. 115.

41. *What are the Seven Deadly Dangers which lead to death in the bush?*

**The Seven Deadly Dangers which lead to death in the bush are getting lost, getting drowned, violent collisions, snakebite, burns, dehydration/heat exhaustion/hyperthermia and hypothermia.**

Hypothermia is 'exposure', excessive loss of body heat.

42. *How do we avoid getting lost?*

**We avoid getting lost by following a good leader, not splitting-up the party, navigating by creeks and ridges, map and compass, sun and stars.**

Also hand-held GPS, Ground Position Satellites.

43. *How do we avoid drowning?*

**We avoid drowning by  
not trying to cross flooded rivers,  
not swimming in cold or muddy water,  
not after eating or for too long at a time,  
not diving because of rocks, snags or weeds,  
not bombing and breaking people's necks,  
keeping to shallow water  
and having a resuscitation officer.**

44. *What are violent collisions?*

**Violent collisions are falling over cliffs,  
or being hit by falling rocks  
or limbs from trees.**

45. *How do we avoid snake bite and spider bite?*

**We avoid snake bite and spider bite  
by wearing boots at all times,  
watching where we're walking,  
not distracting the man in front  
and using a torch at night.**

46. *What is the First Aid for snake or spider bite?*

**First Aid for snake or spider bite is bandages,  
pressure or crêpe, bound as tight as for sprains  
from thigh to toe or shoulder to finger;  
next immobilize leg in splints or arm in a sling,  
re-assure the victim, treat for shock  
and carry him to hospital.**

Compress and immobilize limb to stop the spread of venom in the lymph vessels, not to stop blood circulation (leave finger or toe tips bare to check). Crêpe bandages OK if still stretchy. Drive venom down limb, not up. Then immobilize a leg with splints (&/or tie legs together) or an arm in a sling. Don't wash off venom: it's for identification. If it doesn't delay bandaging, put gauze on bite. After bandaging, mark the bitten spot with an X. Red-back bites are too painful to compress.

47. *How do we avoid burns and scalds?*

**We avoid burns and scalds  
by not fooling with fire,  
and never passing hot things over people.**

48. *What is the First Aid for burns?*

**The First Aid for minor burns  
is to immerse them in icy water,  
but for the worst major burns  
to cover them with a clean wet cloth,  
treat for shock and get a doctor.**

Treat scalds as burns: see §22.

49. *Between October and March,  
do the bushfire regulations allow cooking fires?*

**Between October and March,  
except during a Total Fire Ban,  
the bushfire regulations allow cooking fires  
if cleared around for 3 metres with an adult,  
or cleared around for 2 metres  
in a permanently constructed fire place.**

The bushfire season may start before October or extend beyond March. For care with cooking fires, see 467.

50. *Recite the seven points on the Camping Checklist.*

**CAMPING CHECKLIST:**

- 1. Food: three good meals a day.**
- 2. Drink: tanking up with lots of tea.**
- 3. Clothing: protection and modesty.**
- 4. Shelter: tents or caves or gunyahs.**
- 5. First Aid: for the wounded and sick.**
- 6. Safety First: avoid accidents.**
- 7. Hygiene: wash body; bury manure & scraps.**

Food & Drink, see §§3-4; Clothing §§5-11; Shelter §§28-29; First Aid Kit §§20-24; giving First Aid, §39, §46, §48; Safety First §42, §43, §47; Hygiene §33-§36.

# App. 3: Clothes-Gear-Food-Skills

Suggested for 4 boys for 4 cold days

PERSONAL CLOTHING & GEAR	grams
Hat, "slouch", big brim, felt not cotton, with chin strap	
Shirt, khaki cotton, roll up sleeves;	
in pocket: note book 70g (10x8x1cm) & pencil with rubber 5g	75
Shorts, khaki cotton, roomy, knee length, with belt	
in pockets: hanky 12, knife 110, matches in tin 52, string 36	210
Socks, thick, natural fibres	
Boots, solid, leather or gym	
Mug, enamel (not plastic) 340 mL (3 litre billy holds 8 mugfuls)	80
Dixie, aluminium (sharing a pair: inner dixie 130g)	154
Spoon (soup size best)	30
Toothbrush (wrapped in plastic)	15
Raincoat of proofed japara (or lined Parka 375g)	600
Jumper, long-sleeved, 100% wool (or lined Parka 375 or both)	470
Swimming costume (nylon briefs)	45
Knapsack <sup>1</sup> , medium size, does not need a swag (heavier 2300)	1900
Sleeping bag/hood <sup>2</sup> (or worn woollen blanket <sup>2</sup> 900g; or alpac a680g)	1700
<b>TOTAL PERSONAL CLOTHING &amp; GEAR</b>	<b>5279</b>
<b>GROUP GEAR for 4 boys for 4 days</b>	
Tent <sup>2</sup> , 4-man, with floor (or groundsheet) & pegs (sticks for poles)	3725
Billy can (1) 3L homemade 280g	280
Billy can (2) 3L aluminium for porridge/rice/soup 220g+ lid 60g	280
Canvas water bucket 76g (holds 8L) & plastic bottle 80g (3L)	156
Torches x2: (1) LED headband 70g & (2) 210g + spare C-cells 130g	410
Rope, 10m, thin, light, boy-strength 125g & Whistle 24	149
First Aid Kit 228g + Emergency Kit (& extras) 125g + scourer 15g	368
Toilet paper 70g (16m, not full roll) & soap 60g & toothpaste 50g	180
Map in plastic pocket 60g & Compass 35g (Suunto liquid damped)	95
Plastic digger 50 for latrines or pit fires (or paint scraper 100)	40
<b>TOTAL GROUP EQUIPMENT</b>	<b>5683</b>
Share of group gear for 4 boys per boy	1421
Average total gear per boy: 5279 + 1421	6700
Average food per boy for 4 boys for 4 days <sup>3</sup> (+ 5% for wrapping)	2687
<b>GRAND TOTAL each boy<sup>4</sup> is 9½kg.</b>	<b>9387</b>

1. For volume/weight of food/gear: ∴ strength/rainproof/comfort/weight/price, for safety in winter in Blue Labyrinth, Blue Mountains, NSW.

2. Sleeping bag, blanket, and/or tent can be rolled as a swag: pp. 461, 469.

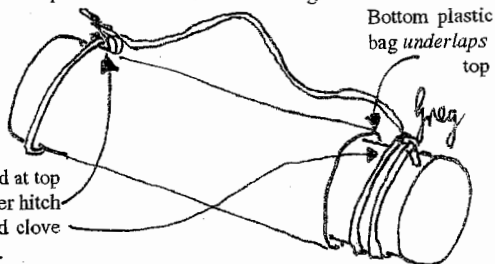
3. A boy on a 4x4 camp has 3 breakfasts @ 163 + 4 lunches (@ 135) + 3 main meals @ 288 + 10 mugs tea @ 17 + 4 snacks (@ 124) = 2559g (from p. 462).

4. Maximum reasonable load is ¼ body weight; younger boy's maximum is ½ his age in kg, e.g. 10 year old's maximum is 5kg. An average 9½kg means older boys must carry some of younger boys' loads.

<b>FIRST AID KIT</b> (see also pp. 445, 459)	grams
Crepe bandages x 2 @ 60g each (new pressure bandages lighter)	120
Betadine Cream 28g (now that Butesin Picrate is off the market)	50
Ammonia (cloudy) in phial 20g and Tea-Tree oil in phial 20g	40
Band-Aids x 12	8
Tweezers (bevel ended best)	10
Salt for leeches is listed in Snacks (p. 462), or use tea-tree oil	
<b>TOTAL</b>	<b>228</b>
<b>OPTIONAL EXTRAS</b>	
Towel (small piece)	60
Watch (or use the sun, p. 446; or Southern Cross, p. 466)	30
Hurricane lantern, smallest (in plastic bag, outside pocket)	300
Kerosene in tin: <i>must be labelled</i> (keep away from food!)	350
Telescope 180g, with leather case 30g	210
<b>TOTAL</b>	<b>950</b>
<b>EMERGENCY KIT</b> or some such in tin with matches	
needles; cotton/thread; buttons; safety pins; razor blade; spare torch globe; spare striker from match box; etc.	90
<b>TOTAL</b>	<b>90</b>
<b>EXTRA clothes:</b> winter, high altitudes/latitudes re terrain, season, duration, weather, maturity of party	
Woollen shirt (wet cotton is hard to dry and <i>deadly</i> cold)	300
Woollen T-singlet (or thermal underwear 125g)	220
Long woollen underpants (or long woollen trousers 700g)	210
Waterproof overpants	220
Woollen beanie or balaclava (with silk underneath 20g)	95
Woollen mittens	50
<b>TOTAL</b>	<b>1095</b>

**SWAG:** re-roll sleeping bag, tent &/or blanket(s) into a sausage with a short piece of soft sash cord as a bandolier. Carry bulky things in it like a woollen singlet, raincoat and light non-crushable foods (not bread), with heavier food & gear in the small knapsack. Wrap it rain-proof in plastic so the rain runs off and not inside. See p. 469 on how to wear a swag.

Sturdy plastic shopping bag at each end waterproofs the swag.



Bandolier can be tied at top end with long-stopper hitch to lasso it tight, and clove hitch at bottom end.

## FOOD CALCULATIONS for 4 boys for 4 days

ITEMS (add up repeated items) with weight/boy/meal → →	grams
Tea @ 2g per mugful (340mL): estimate a handful per billy	2
Milk per mug of tea: 1 flat soup spoon of powdered milk	5
Sugar per mug of tea: 1 flat soup spoon	10
<b>TOTAL per boy for every meal</b>	<b>17</b>
<b>BREAKFAST</b>	
Oats for porridge (soak overnight in boiling water)	40
Brown sugar for porridge (or muesli without sugar 60g)	20
Milk for oats or muesli: 3 flattish soup spoons	17
Bread made into toast x 2 slices @ 28.3 g each	57
Butter for 2 slices @ 5g per spread	10
Vegemite @ 4g per spread	4
Jam @ 15g per spread (or creamed honey)	15
<b>TOTAL per boy per lunch</b>	<b>163</b>
<b>LUNCH</b>	
Bread, 3 slices @ 28.3g each (or 40g flour for damper)	85
Butter for 3 slices @ 5g per spread	15
Peanut butter x2 @ 10g/spread (or Kraft cheese in foil or both)	20
Jam x1 @ 15g per spread (or creamed honey or sultanas)	15
<b>TOTAL per boy per lunch</b>	<b>135</b>
<b>"TEA" = DINNER = MAIN MEAL</b>	
Sausages x 2 @ 83g each (perhaps dried onion & Gravox)	166
or entire meal Chicken Chow Minh or Vesta beef @ 100g	
Peas (with carrots or corn) @ 13g (4 boys share pkt @ 50g)	13
Deb potato flakes 1/8 packet @ 340g	44
Rice x 2 flat soup spoons @ 15g each (or custard powder 7g)	30
Milk for rice 5g (or for custard 17g)	5
Sugar for rice (or custard) @ 5g per serve	5
Sultanas in rice (or custard) @ 25g per serve	25
or dried apricots 30g or dried apple rings 20g	
<b>TOTAL per boy per "tea"</b>	<b>288</b>
<b>SNACKS:</b>	
Anzac biscuits x 3 @ 28g each	84
Chocolate x 5 squares @ 4g/bit (and/or Scroggin p. 469)	20
Drink powder 15g (perhaps boiled lollies; also soup @ 15g)	15
Salt (for food and for First Aid Kit on leeches)	5
<b>TOTAL snacks per boy per day</b>	<b>124</b>

**DAILY TOTAL per boy** (17x3 + 163 + 135 + 288 + 124) = **761 grams**

At home, measure out food with scales, or estimate by spoonfuls for each item for each meal, perhaps pack in separate plastic bags. Bring all plastic home — neither burn nor bury it in the bush.

## SUMMER LIGHTWEIGHT CAMPING

### CLOTHES & GEAR – 6 boys for 6 hot days

PERSONAL CLOTHES & GEAR	grams
Hat, "slouch", big brim, felt not cotten, with chin strap	
Shirt, khaki cotton, roll up sleeves;	
in pocket: note book 10x8x1cm & pencil (with rubber)	75
Shorts, khaki cotton, roomy, knee length, with belt	
in pockets: hanky, knife, matches in tin, string (pp. 440*, 441*)	210
Socks, thick, natural fibres	
Boots, solid, leather or gymn	
Mug enamel (no plastic 340 mL: 3L billy 8 mugs; big mug 170g)	80
Dixie, aluminium (sharing a pair: outer dixie 154g)	130
Spoon (soup size best)	30
Toothbrush (wrapped in plastic)	15
Parka (or raincoat of proofed japara 600)	375
Woollen singlet, T-shirt vest, 100% wool, short-sleeved	220
Swimming costume (nylon briefs)	45
Knapsack <sup>1</sup> (smallish, so add a swag, pp. 461, 469*)	750
Blanket x1 (worn woollen blanket); expensive Alpaca is 680g(!)	900
<b>TOTAL PERSONAL CLOTHES &amp; GEAR</b>	<b>2830</b>
<b>GROUP GEAR for 6 boys for 6 days</b>	
Groundsheet, cheap heavy plastic 1.8m x 2.3m (bit small for 6)	500
Billy for porridge, rice or soup: 3L aluminium, 220+ lid 60	280
& two 3L fruit tins (make handles, pp. 459,466,467) each 280g	560
Canvas water bucket 76g (holds 8L) & plastic bottle 80g (3L)	156
Torches x2: (1) 210g + spare C-cells 130g + (2) LED headband 70g	410
Rope, 10m, thin, light, boy-strength	125
First Aid Kit 228g & Emergency Kit 110g & toothpaste 100g	438
Toilet paper 135g (36m 1½2 roll) & soap 100g & scourer 15g	250
Maps x2 (photocopied onto A4 and carried in a plastic pocket)	15
Compass 46g (Silva Type 5: induction damping) & whistle 24	70
Entrenching tool: shovel/mattock rake-hoe (plus etc inside handle)	550
Telescope, magnification 25, lens 3 cm (without 30g leather case)	180
<b>TOTAL GROUP EQUIPMENT</b>	<b>3534</b>
Share of group gear per boy	589
Average total gear per boy: 2830 + 589	3419
Average food per boy (from p. 469, including 5% for wrapping)	4450
<b>TOTAL<sup>2</sup> LOAD OF FOOD &amp; GEAR PER BOY</b>	<b>7869</b>

1. For volume/weight of food/gear: ∴ strength/rainproof/comfort/weight/price, for safety in summer in the Blue Labyrinth, Blue Mountains, NSW.
2. Maximum load, ¼ body weight; younger boy maximum kg= half age.

## FOOD – 6 boys for 6 hot days

i.e. 5 breakfasts, 6 lunches, 5 main meals for 6 boys. Number strings are algorithms: Weight/boy (from p. 460) x Boys x Meals.

<b>TEA @ 16 meals (+6) = 22</b>	grams	<b>Snacks/supper (see p. 468)</b>	grams
tea, milk & sugar: 17x6x22	2244	Biscuits/Scroggin 124x6x6	4464
<b>BREAKFASTS x 6 x 5</b>	<b>4890</b>	<b>LUNCHESES x 6 x 6</b>	<b>5772</b>
Porridge 40x6x5, milk 510, brown sugar 600	1200 1110	Bread x 3 + butter x 1 peanut butter/cheese/jam	4500
Toast x 2 with butter Vegemite/jam (4+15)x6x5	2010 570	Rice 540 + sultanas 432 Milk 180 + sugar 180	972 360
<b>'TEA' (main meal)</b>		<b>'TEA' (main meal)</b>	
<b>MONDAY evening</b>	<b>1914</b>	<b>TUESDAY evening</b>	<b>1774</b>
Steak 200x6 + pkt onions 50	1250	Sausages in onion gravy	1076
Pea/carrots x 2 pkts @ 50	100	Beans x 2 pkts @ 25 each	50
Potato flakes Deb 44x6	264	Potato flakes Deb 44x6	264
Stewed apple rings 20x6 plus sugar 5x6	120 30	Stewed dried apricots 30x6 plus sugar 5x6	180 30
Rice (half-helping) 15x6 milk 5x6 & sugar 5x6	90 60	Custard powder 7x6 plus milk 17x6 + sugar 5x6	42 132
<b>WEDNESDAY evening</b>	<b>1764</b>	<b>THURSDAY evening</b>	<b>1348</b>
Sausages/onion gravy	1076	Bacon 100x6 & onions 50	650
Peas/corn x 2 pkts @ 50	100	Beans x 2pkts @ 25	50
Potato flakes Deb 44x6	264	Potato flakes Deb 44x6	264
Stewed apple rings 20x6 plus sugar 5x6	120 30	Stewed dried apricots 30x6 plus sugar 5x6	180 30
Custard powder 7x6 milk 17x6 & sugar 5x6	42 132	Custard powder 7x6 milk 17x6 & sugar 5x6	42 132
<b>FRIDAY evening</b>	<b>→</b>	<b>FRIDAY continued</b>	<b>1289</b>
Fish tins 300x2 + onions 50	650	Stewed apple rings 20x6	120
Peas/carrots x 1 pkt @ 50	50	plus sugar 5x6	30
beans x 1 pkt @ 25	25	Rice (half-helping) 15x6	90
Potato flakes Deb 44x6	264	milk 5x6 + sugar 5x6	60

Total: 2244 + 4464 + 4890 + 5772 + 1914 + 1774 + 1764 + 1348 + 1289 = **25429**

Food/boy = 25429/6 = 4238g (add 5% for wrapping). **Grand total = 4450g.**

Lightweight Camping favours food over gear as a percentage of the load:

Camp	Boy's	Shared	GEAR	Food	+5%	TOTAL	Food/gear	Food %
4x4	5279	1421	6700	2559	2687	9387	0.40	29%
6x6	2830	589	3419	4238	4450	7869	1.30	56%

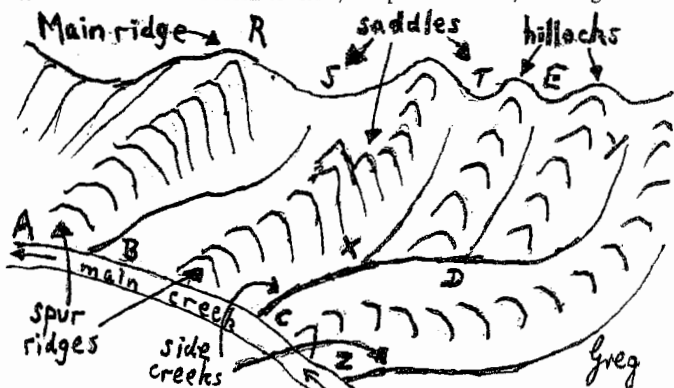
**NAVIGATIONAL SKILLS** The basic idea is up ridges and down creeks — if there are no cliffs or waterfalls to prevent it.

**UP RIDGES** — if there is a negotiable route:

- Simplest navigation from A to E is the route via ridges ARSTE.
- The creek route ABCXDE would depend on recognizing the junctions at B, C, X and D, and then on choosing C and D, and not going up too soon at B or X, or too late at Y, or worse, following the main creek to Z.
- There are problems going up or down ridges: e.g. not getting slewed at saddles S or T, (or coming down, picking R to turn off to go down to A).
- Choose creek routes in summer for drinking, swimming and bushfire safety.

**DOWN CREEKS** — if there is a negotiable route:

- Simplest navigation from E to A is via creeks to EDXCBA. Water flows downhill. Creeks don't fork downhill, except for an island, billabong or delta.

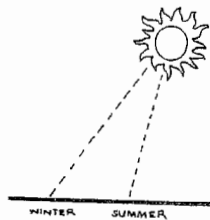
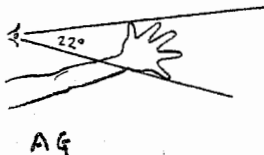


**HOW LONG TILL SUNSET?** The angle formed at the eye by the biggest span of an open hand, from thumb to little finger, is about  $22^\circ$ .

With outstretched arm count hand spans (or fractions thereof) between the sun and that point on the horizon where it will set. The sun takes about  $1\frac{1}{2}$  hours to travel through the angle of a hand span ( $15^\circ$  per hour). Calculate when it will reach the horizon.

In summer, the sun sets nearer the vertical, but in winter at a shallower angle. Allow for this, and you will know how much sunlight you have left.

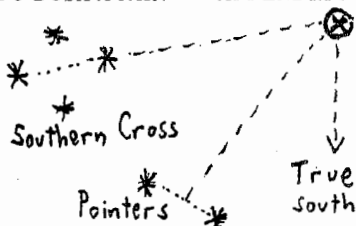
Remember, too, that in summer the twilight will last longer.



## FINDING SOUTH

The point in the sky above the South Pole is where a line through the long arm of the Southern Cross meets the perpendicular bisector of The Pointers.

Beware the false cross: it is bigger and more skewed.



## CAMPING SKILLS - HOME-MADE BILLY CANS

- Get clean fruit tin with crimped seam (not soldered). Avoid tall or squat tins — too hard to hang or balance, and to pour from.
- Smooth any jags left from opening (best to use tin opener on scout knife).
- Punch two holes just below the crimped rim on opposite sides.
- Measure wire for handle: wrap round outside, from one hole to the other, plus 2cm extra, then cut. Too long a handle is hard to hang over the fire and hard to pour from. Too short a handle won't lie flat.
- Bend wire into semicircle; make L-bends at ends; push ends through holes; check that handle will lie down; bend each L into a U with pliers.

## AVOID HOT HANDLES

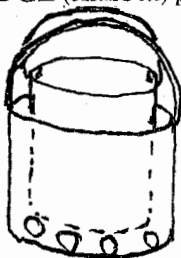
Keep dixie handles out of flames.

Use a stick to lift billys. To keep a billy hot near the fire, turn the handle down and away from the flames.



## WATER JACKETS FOR PORRIDGE (custard etc) p. 468

Inner billy sits on sticks or stones to stop heat going straight through.



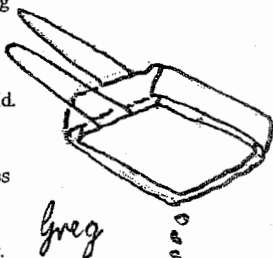
## ONE HANDED POURING

Check handle is cool enough to touch. Hold one end of handle and pour over the other.

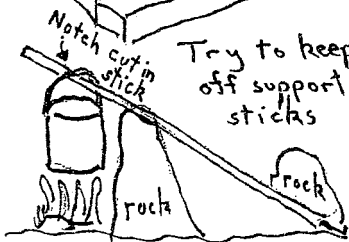
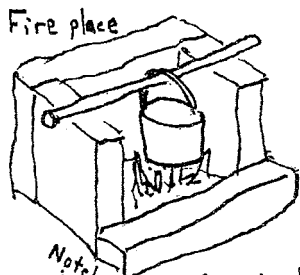


## DRAINING DIXIES

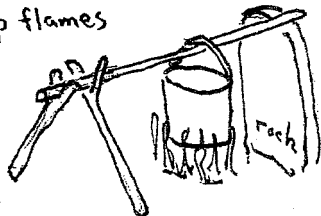
Put big dixie over small as a lid. Hold both handles and pour slowly.



**BILLY SUPPORT SYSTEMS**



Try to keep flames off support sticks



**SQUATTING AT THE FIRE: SAFE AND UNSAFE**



YES!  
Genuflect safe and versatile

**NEVER BALANCE ON THE BALLS OF YOUR FEET**  
Sooner or later, like the others before you who would not listen, you'll topple! Burns are awful and hospital is far away. Avoid accidents! Prevention is better than cure.



NO!  
Do not squat at the fire



OKAY  
Kneeling safe but not as versatile

Greg



OKAY  
Stooping safe but smoky

## MANAGING THE MENU

- Practise at home after re-reading pp. 250 and 287-288.
- Number of meals & quantities.
- FSS stands for Flat Soup Spoonful; HSS for *mildly heaped*.
- One FSS sugar weights 10g; one FSS powdered milk weighs 5g.

### TABULATE TOTALS THUS →

**TEA:** Bring the water to the boil. If polluted, boil it ten minutes. Toss in a handful of tea leaves — 2g x 6 tea for 3L billy. Lift off with billy stick. Sit billy *near* fire for tea to 'draw' without stewing and for tea leaves to sink. Turn billy handle down away from fire to cool it. Meanwhile put FSS of milk powder and FSS x 1 sugar into each mug. Stir the dry powders.

Making tea @ 16 meals	Sugar ↓	Milk ↓
22 billies of tea	1320	660
5 x porridge	600 brown	510
6 x lunch-rice	180	180
2 night-rice	60	60
3 x custard	90	315

Pour from billy holding handle at one

side (off centre) so tea can be poured one-handed over the other handle. Stir with spoon or clean stick.

**PORRIDGE:** Pour boiling water on oats to soak overnight in aluminium billy. Ratio water to oats is 3:1 by volume; if not soaked, use 2:1. Bring to boil while stirring with a spatula-shaped stick (whittled with pocket knife). When stirring no longer stops the bubbling, set it in a gentler heat to cook for 5 to 10 minutes. If no aluminium billy is available, use a water jacket with porridge billy inside a bigger billy with boiling water in it. Put little stones (or 'imprison' short sticks) under the inner billy so that the heat has to come through the water; thus the porridge cannot 'burn' — see 466\*.

**MILK FOR PORRIDGE** (and for custard and hot-chocolate) @ half-mugful /boy/day use  $\frac{1}{2} \times 340 \times 6 = 1020\text{mL}$ , i.e. 102g milk powder (ratio water/powder = 10:1 by weight), i.e. 20 FSS. Mush 20 FSS milk powder with a little cold water and stir into 3 mugfuls of boiling water in another billy to make hot milk. After pouring porridge into dixies, add hot milk, but leaving enough for tea for 6 mugs — this time don't mix milk powder for tea in mugs. Add brown sugar to dixies of porridge, white to mugs of tea.

**CUSTARD:** In aluminium billy make hot milk as above (and this time mix milk/sugar for tea in mugs). Blend 7g x 6 custard powder (4 x HSS) with 5g x 6 sugar (3 x FSS), add little water to make mush, pour into hot boiling milk while stirring against lumps. If not thick enough, let it stand in gentle heat to thicken: beware not to burn it.

**HOT CHOCOLATE:** dissolve 6 squares chocky in mug of boiling water, add sugar 5g x 6 (3 x FSS) and pour into boiling milk (as for custard).

**RICE:** add rice to boiling water (1:8 by volume). Light serve for lunch, 15gx6 (6 x FSS), double for evening. Simmer till soft. Add mush 3 x FSS sugar & 6 x FSS powdered milk. For 'spotted dog' add 6 x FSS sultanas, let soak and swell up. Do not pour off excess water with its

vitamins. **SULTANAS:** Total for rice at lunch  $12 \times 6 \times 6 = 432\text{g}$ .

**BREAD:** number of slices is  $2 \times 6 \times 5$  (breakfast toast) +  $3 \times 6 \times 6$  (lunch) = 168 which is 7 loaves of 24 slices each. N.B. pkt of 'toasting bread' has 4 less slices. Wrap plastic bags of bread in newspaper to save rupture and spillage.

**BUTTER:**  $5 \times 2 \times 6 \times 5$  (breakfast) +  $5 \times 1 \times 6 \times 6$  (lunch) = 480g. Pack butter in screw top tub inside plastic bag in Alfoil: beware summer sun melting it.

**SAUSAGES:**  $166\text{g} \times 6$  + pkt dried onion 50g (= one medium onion) + Gravox  $5\text{g} \times 6 = 1076$ . Sausages keep three days in summer thus: boil, let cool in their fat, pour off water, wrap in grease-proof paper with fat, freeze till setting out, wrap in Alfoil, wrap further in newspaper, keep in the centre of knapsack away from sun — and *no plastic*, not even as an outside wrap. Cook with dixies slightly tilted down at the hot end so the fat stops them burning. Poke holes with clean sharp sticks to let fat out. If sausages are not pre-boiled, put a little water in each dixie and boil them, and leave water to boil off as the fat takes over. Thick sausages are best but a dixie holds only five.

**GRAVOX:** Total  $5\text{g} \times 6 \times 2 = 60\text{g}$ . A mildly heaped HSS = 5g.

**FREEZE-DRIED VEGETABLES** (don't confuse with frozen vegetables): packets of peas with corn; peas with carrot; beans (half-weight) and onions: soak in water, boil, simmer till soft.

**DRIED APRICOTS & APPLE RINGS:** soak, boil, simmer till soft, sugar. Do not pour off excess water — you need all the liquid you can get.

**SALT** is included in snacks, as on p. 462.

**SNACKS:** mugs of tea and Anzac biscuits; also make **Scroggin** from peanuts, sultanas, dried apricots, chocolate, salt and glucose powder.

Knapsack shoulder strap pads the rope of bandolier

## GEAR & TRAMPING

1. A **SWAG** can be worn in front across chest with knapsack on back as usual.
2. A **4-MAN TENT** could hold 6 boys at a pinch but Greg took a sheet of heavy plastic  $1.8\text{m} \times 2.3\text{m}$  as a groundsheet and saved  $3725 - 500 = 3225\text{g}$ ; or  $546\text{g}$  each — as well as its bulk. In case of rain he planned to use caves for sleeping.
3. **EXPERIENCE:** A less experienced group needs a more experienced leader.
4. A **REAR-GUARD** stops stragglers dropping out and warns the man in front to go slower. Group speed is that of its slowest walker, so try putting the slowest in front. As a pace-setter, the slowest often goes much faster than before.
5. **STOP EARLIER** in afternoon rather than later to cook, eat and make camp for the night.
6. **NEVER GET COLD:** *In the Bush, to be wet is to be cold, to be cold is to be weak, and for the weak, the Bush has no mercy.* (cf. p. 474.)



# Appendix 4: Bush Boy Leaders

## SAFETY FIRST

**Safety First** reduces the need for **First Aid** because avoiding accidents is better than mending the damage.

The leader's motto is the Latin tag, *Pars tutior sequenda est*, "The safer course is to be followed": accidents are to be prevented at all costs. "**Prevention is better than cure.**"

It is delightful if the group comes home happy, and it is wonderful if they are better people for having been away, but these are dispensable. They must come home alive and well — all arms and legs, fingers and toes properly attached.

An army officer does not trust to luck... "She'll be okay." Nor does he have just one single thin line of defence. Rather, he has *fail-safe* plans and several lines of defence, *depth in defence*. All the time he thinks, *Constant vigilance and eternal suspicion* — the motto for jungle warfare.

The leader of a bush expedition has a **programme for preventing accidents**. He plans his campaign against the Seven Deadly Dangers, pp. 471-474, like a general against an enemy army. He **teaches** his group before entering the bush, and even tutors them individually, about the Seven Deadly Dangers and how to avoid them.

**Forewarned**, they too will help to make sure that the seven deadly situations do not arise.

**Equipment Lists** issued by the leader help prevent some of the Seven Deadly Dangers from happening: food, clothing, protective clothing, shelter, matches, torch: just enough and not too much.

## FIRST AID

**First Aid is for when Safety First has failed.**

If, in spite of all precautions, **Safety First** proves insufficient, then for each of the Seven Deadly Dangers the leader must be ready with **First Aid**. With all **First Aid**, he remembers the Surgeon's Motto, *Primum non nocere*, "First, do no harm", i.e. whatever you do, don't make the situation worse.

## SAFETY FIRST avoiding Blisters

1. **Boots must fit snugly** — 'break them in' on short walks before any major expedition. Soak leather boots in a bucket of water overnight; wear them sopping wet with thick socks; they will mould themselves to the individual foot. *Never* dry them in front of a fire.

2. **Wear thick socks** (or two pairs at once) of wool or fleecy cotton. As far as possible avoid pure nylon — it rubs and chafes. If boots are too loose, put on extra socks. If they are too tight, again put on extra socks to spread the pressure and 'bulge' the boot. Look after socks: keep them clean; never walk around in socks.

3. **Keep feet clean.** If necessary, use prickly heat powder against tinea. If the skin is broken, use Betadine Cream.

4. **Keep boots clean inside** — empty out sand, pebbles and sticks, especially after wading through creeks.

5. **Do not walk in wet boots with sand in them:** wash out the sand and put on dry socks with the wet boots.

### FIRST AID for blisters

1. If the blister is unbroken, or the skin is merely chafed:

**Pad the spot with damp tea leaves** from the billy and hold in place with a tight sock; OR apply Friar's Balsam (but not if the skin is broken: it stings!); OR apply a mixture of methylated spirits and olive oil; OR simply pad the spot with a bandaid.

2. If the blister is broken or the skin red raw:

**Prevent infection** by washing and drying plus antiseptic powder or ointment, such as Betadine Cream, AND pad with cotton wool held in place by bandaids or bandages AND put on more socks.

## SEVEN DEADLY DANGERS

AVOID DEATH IN THE BUSH BY SAFETY FIRST

Based on Q&As §§41-49 and Greg's pictures, pp. 446-449.

### 1. Becoming hopelessly lost

If the leader knows what to do, being lost is not hopeless.

Be warned **against splitting up the party.** It can make the situation worse because one group is now without a leader when it most needs him and the search parties have to look for two groups.

Beware of the party splitting up accidentally, or the wilfulness of those who go off defying the leader or even not telling him.

Splitting up the party often leads to further splitting up, until someone ends up lost all by himself. That is the worst situation.

Being lost, especially on one's own, leads to panic. Panic leads

to rushing about, hence rapid exhaustion (akin to the frantic struggles of a drowning man). Exhaustion makes the other Deadly Dangers more likely: falling over cliffs, death by thirst, or even starvation, are more likely all alone.

For what to do, p. 475 for reference details to *Stay Alive*.

## 2. Drowning

Drowning is usually the result of swimming accidents or trying to cross flooded rivers. See *Megalong Tragedy* by Michael Baker.

Younger groups should follow the **S-O-S** rules:

**S** for **shallow**: it is harder to drown in water less than neck deep.

**O** for **out**: "out of the water keep your head!" Do not swim under water in bush creeks and it is best not to dive or even 'bomb' your friends. Permanent or fatal injuries occur from violent collisions.

**S** for **short**: a shorter swim is long enough, then all come out together. Never leave a boy in the water on his own. Come out while still enjoying it — like a guest leaving before he wears out his welcome.

Groups of five or more can pair off as 'twins'. With **twinning**, each boy is responsible for his 'twin', checking that his head is above water. Twins always enter and leave the water together.

From time to time drownings occur in large groups and pass unnoticed. Twinning might have prevented them.

If *someone* is looked after by *everyone*, then *no one* is looked after by *anyone* — at least, not properly.

As for **crossing flooded creeks or rivers**, don't! Flood waters are often fast flowing, opaque, with waves, whirlpools and turbulence, and carrying debris. Drownings occur when attempting a crossing. Better to light a fire and wait a few days for the water to go down. Some crossings *might* be attempted by the skilled and experienced, with cautions from Henry Lawson's ballad, *Harry Dale the Drover*.

**Wading** through creeks with a strong current, however, is not as dangerous as crossing flooded creeks or rivers:

- Take off boots and socks and put your boots back on.
- Wear your knapsack with your clothes in it; it will float.
- On your own, use two staffs.
- If you get swept off your feet, turn to go feet first.
- A group can wade through side by side holding onto a long pole held parallel to the banks, with the heaviest boy at the upstream end to break the force of the moving water.
- Or a strong swimmer takes a rope across, but beware of the current dragging the rope and hence the swimmer downstream.

- Or piggy-back someone: the extra weight *above water* on your waist or shoulders will cancel some of the upthrust of your own buoyancy.

### 3. Violent Collisions

**Falling over cliffs** or off cliffs is not uncommon.

Other violent collisions associated with cliffs and steep terrain occur when **rocks fall or roll down** on someone underneath. Do not travel in a line straight uphill. Rather, angle your way upwards (or downwards) so that no one is directly underneath to be hit by rocks accidentally dislodged by those above.

Never let the party roll or throw rocks for fun — there may be someone underneath you do not know about. And it leads to other reckless and undisciplined behaviour. Horseplay is the sport of fools.

Do not pitch tents under dead limbs, or under smooth-barked trees. With the latter, the jointing of limbs to trunk is often 'carroty'.

### 4. Snake-bite or spider bite

- Watch where you walk and where you put your hands.
- Never get around in bare feet.
- Some snakes lie covered in dust and leaves, looking as though they are dead and mouldy, lying in wait for prey.
- Use a torch at night because some snakes travel in the dark.
- Don't yap and distract the man in front. Never annoy a snake by encircling it: it will panic and its only escape is by biting someone.
- Never hunt snakes out of bravado. Snakes are protected animals and may only be killed to safeguard human life.

### 5. Burns and scalds

Burns occur from **bushfires, campfires** and **cooking fires**.

- Survive bushfires by sticking to water-ways in summer tramping.
- Avoid ridges and slopes: there is no escape uphill from bushfires.
- The ultimate escape from a bushfire is to light a fire at your feet and move downwind into the area it has burnt. It is a 'last resort'.
- Don't get into an overhead water tank — or you will stew to death.
- Escape radiant heat, the killer, even by digging into the ground.
- Insist on strict discipline with cooking fires and campfires — a moment's carelessness or stupidity leads to horrible accidents.
- Never carry hot things liking boiling water over someone who is sitting or lying on the ground, p. 449\*. See scalds, §§47-48.
- Beware of exploding rocks in sandstone fireplaces or rocks which absorb water from being in or near a creek. It turns to steam, pressure builds up, the rock explodes: hot fragments of rock and red hot coals are flung everywhere: dangerous to health and likely to start bushfires.

- Obey bushfire regulations, §49.

*Fire is a good servant but a poor master.*

*The bigger the fool, the bigger the fire.*

A totally different aspect of fires is the leader's ability to light a fire in the rain. For this, dry kindling is essential. Fire burns upwards, so light the kindling at the bottom: the flames lick the wood above, not sideways. When putting on more wood, do not knock apart the sticks already burning: they need each other's support to keep on burning. Wet ground gives off steam which smothers a struggling fire; make a bed of dry sticks on the ground; put the kindling *on top*; light it and add the graded fuel as usual.

## 6. Dehydration and heat exhaustion

- Plan the route to have water available at all meals.
- **Tank up with tea** at all meals.
- Most creek water is polluted and must be boiled.
- Do not take anyone who does not drink tea.
- Use salt tablets and/or Staminade etc.
- Wear a hat and get into the shade wherever possible.
- Never stop to talk, eat or rest in the summer sun.
- Rest before collapse occurs: it saves time! If those in front are resting while others catch up, the latter must be allowed a rest too.

## 7. Hyperthermia and Hypothermia

**Hyperthermia** is too much heat. It is sun/heat stroke, closely associated with dehydration and heat exhaustion, but not the same, though the prevention and treatment are similar.

Sudden plunging into cold water will confuse the body's sensors and can also lead to death. Prevention is better than cure...

**Hypothermia** is too little heat. It is excessive loss of body heat with a big drop in body temperature, hence death. It arises from *exposure* in cold/wet/windy weather; and/or exhaustion/hunger/fear, and in high altitudes/latitudes. Full treatment is in survival books.

In the bush, "to be hungry is to be cold, to be cold is to be weak, and for those who are weak the bush has no mercy," (adapted from *Under the Northern Lights* by Alan Sullivan, p. 55).

Avoid hypothermia by attention to eating, clothing, effort, rest, shelter, weather, and *morale*. Know your party.

## General Comment on the Seven Deadly Dangers

Note that **Deadly Dangers nn. 1-3** can occur at any time; **nn. 4-6** are more likely in summer; **n. 7** depends on the circumstances, especially the condition of weakest in the party and the weather.

## A SCRAPBOOK ON ACCIDENTS

Good leaders keep a scrapbook to record accidents in the news. Some entries will be handwritten, others, newspaper clippings.

Each scrap-book entry can be thought about like this:-

**See:** List the essential details of the accident;

**Judge:** Work out what went wrong, e.g. faulty judgement or equipment? Disobedience? Recklessness? Weather? Circumstances beyond anyone's foresight or control. History teaches wisdom.

**Act:** Put your thinking into action. What to do? What to avoid?

## EXTRA ITEMS FOR FIRST AID KITS

See the basics, pp. 445, 461, §§20-24.

- **Needles**, for digging out splinters (see emergency kit p. 461)
- **Tweezers**, bevel-ended are more versatile.
- **Lint bandages** (to save getting blood on crepe bandages).
- **Eye bath** for washing foreign bodies out of eyes.
- **Triangular bandage** for making a sling.
- **Tube of Calistaflex or Caladryl** for sun burn, burns, scalds, stings and itches. It helps with bites from ants, bees, scorpions, wasps and mosquitoes, but is not as quick acting for bull ants as ammonia. Tea-tree oil or cream helps, too.
- **Methylated spirits**, carried in a small phial, is quick acting for scorpion bites, and for relieving the itch from leeches which have sucked full and let go when gorged.
- **Space blanket**, for keeping accident victim warm, for exposure, for a bushfire refuge, etc — make sure it is re-usable.
- **Steri-Strips**, also called Butterfly Closures: *plastic stitches* (something like band-aids) for holding gaping wounds closed.

## Teach yourself

### FIRST AID and SAFETY FIRST

The rock bottom minimum is to study First Aid from a recent manual; (it must be recent to contain the new treatment for snake bite and burns). Even better, do a First Aid course and regular updates, or join the Scouts, Guides or St John Ambulance.

For both Safety First and First Aid, study manuals like *STAY ALIVE, A Handbook on Survival*, by Maurice Dunley, available from the Australian Government Publishing Service in Canberra, phone 02 6295 4411 (or fax 02 6295 4455).

Other good reading: *The 10 Bushcraft Books* by Richard Graves.

## MORSE CODE ALPHABET

**Read & send morse by learning 26 words!**

**M**ORSE CODE is an **out-of-date** communication technology no longer used by ships, planes or the armed services.

But it **may come in handy in the bush** — with torch flashes, waving a hanky, or calling coo-ee with short COO for **dit** and long EE for **dah**. And it is a challenging hobby.

**Learn morse as rhythmic sounds, not as dots & dashes.**

**CHANT ALOUD** “d’-d’-dah-dit fas-cin-át-ing” for F, on page 477. Master one letter at a time: each of the morse rhythms *rhymes* with the accentation of its memory word. Accented syllables (bold type and marked ‘) are **dah**; unaccented are **dit**. Note that **dit** is written **d’** before a **dah** or another **dit**.

- **dah** is three times the **length of a dit**
- **within a letter**, the interval between **dits & dahs** is a **dit**
- **between letters**, the interval is the length of a **dah**
- spacing between words is not usually shown at all.
- learn Morse by **listening to it, not by sending it**.

Tapping fast on a Morse key *seems* easy but, if you record yourself, you’ll find you can’t “read” it! Listen to it to learn it.

Get downloadable **FREEWARE** to *listen to morse* from your keyboard or to translate your document files into Morse Code.

**Distress signal** d’d’dit dah-dah-dah d’d’dit ... --- ...

SOS (Save Our Souls) is always **SeriOuS** and **never a joke**.

## PHONETIC ALPHABET

**T**HE **PHONETIC** alphabet for **phone** or radio is 26 *official* words for **spelling** out letters in **TELEPHONY** (“voice far off”). Our *unofficial* Morse words opposite are simply suggestions for mastering the dits & dahs of Morse **TELEGRAPHY** (“writing far away”, by its silences, dits and dahs as an earlier form of “digital” 0,1,2).

The 26 phonetic words **clarify the spelling** of letters like B,D & V, and P&T, for everyone with English as a first or second language:-

Alpha Bravo Charlie Delta Echo Fóxtrot Golf Hotéll  
India Juliet Keelo Leema Mike November Oscar Páh-pah  
Queebec (say Kée-beck) Romeo Siérra Tango Uniform Victor  
Whisky X-ray Yankee Zulu.

Chant the morse	Chant the words	Dot-Dash	abc
d'-dah	a-há	• —	A
dah-d'-d'-dit	beáu-ti-fully-y	— • • •	B
dah-d'-dah-dit	cát-er-píll-ar	— • — •	C
dah-d'-dit	dám-ag-ing	— • •	D
dit	eh	•	E
d'-d'-dah-dit	fas-cin-át-ing	• • — •	F
dah-dah-dit	gód-moth-er	— — •	G
d'-d'-d'-dit	heh-heh-heh-heh	• • • •	H
d'-dit	id-jit	• •	I
d'-dah-dah-dah	ju-ly+jáy-wálk	• — — —	J
dah-d'-dah	kíl-o-grám	— • —	K
d'-dah-d'-dit	li-cén-ti-ous-ness	• — • •	L
dah-dah	mém-óir	— —	M
dah-dit	náv-y	— •	N
dah-dah-dah	ósc-íll-áte	— — —	O
d'-dah-dah-dit	par-áde+bú-gle	• — — •	P
dah-dah-d'-dah	quéen+Bó-di-ceá	— — • —	Q
d'-dah-dit	rel-íg-ion	• — •	R
d'-d'-dit	sil-i-con (or syzygy)	• • •	S
dah	tár	—	T
d'-d'-dah	un-fore-séen	• • • —	U
d'-d'-d'-dah	v'-v'-v'-veé (a stutter)	• • • —	V
d'-dah-dah	with-óut+me	• — —	W
dah-d'-d'-dah	Xérx-es+is+kíng	— • • —	X
dah-d'-dah-dah	yánk-ee+ráil-róad	— • — —	Y
dah-dah-d'-dit	zoo+án-i-mal	— — • •	Z

**BUZZER KITS** with morse keys are sold in the electronic shops. They use a transistor to make beeps from an audio frequency oscillator.

**OR make one** from bits and pieces: insulated copper wire wound on nails; a broken hacksaw blade vibrating to make beeps; a lever-arm switch ("key") with spring to hold it "off", with a short movement to "on". A half cotton-reel makes a knob — put thumb underneath and two fingers on top.

The movement is not from the wrist but the entire forearm.

**REMEMBER:** Don't say A is dot-dash but that d'-dah is A.

# Appendix 5: Knots & Tents

Initials indicate artists, thus: MKT = Mary-Kate Thomson; AG = Alex Grancha; IDS = Isabel de Sequera; Greg = Gregory Cumberland.

**KNOTS:** Snippets of a dialogue on knots might run like this:

*Describe a good knot.*

**A good knot does not slip or jam.**

Comment 1: The properties of a good knot can only be expressed negatively — any positive description still ends up in explaining what must *not* happen!

Comment 2: Very few people outside the armed forces, police and rescue services, sailors, the Boy Scouts and the Girl Guides, know how to tie **real knots**.

Just think of the new chum in a boat. He can't tie the painter to a post — in fact, he gives the captain *that* look as he says: *What's the painter?*

Captain: The painter is the mooring rope  
at the bow of a small boat.

New chum: *With what knot is a painter tied?*

Captain: A painter is tied with  
a round turn and two half hitches.

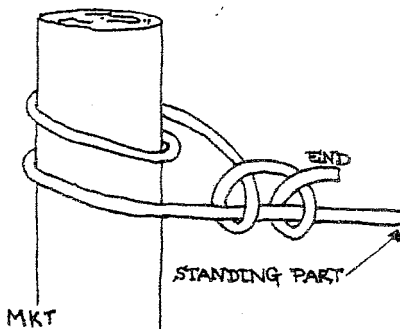
## ROUND TURN AND TWO HALF HITCHES

This knot is essential for bush boys.

It can be tied with one hand, even under strain, and also undone with one hand, even under strain. *That* is virtue!

Why is it called *a round turn* when it goes round the post nearly *twice*? The round turn is the part held really tight to the post. The other half turn doesn't add to the grip, but completes the knot with the two half-hitches on itself.

Wouldn't once around do? Yes, sometimes just one turn has to suffice



because the rope is too short to complete the hitch. But without one complete turn, hard against the post, there is not nearly as much friction, so the two half-hitches carry more strain, and are just that more likely to slip or jam.

With nylon, and other artificial fibres, on a smooth post, best go round three times and use three half-hitches.

Learn the round turn and two half hitches before all other knots. With it, a boy can moor a boat, lower a knapsack over the cliff (or haul it up), tie a rope to a tree for his comrades to pull themselves up (or lower themselves down), all in perfect security. Such knowledge is power!

\* \* \* \*

The *standing part* of a rope is the part under strain.

The *end* is the part not under strain.

The end fastened to a post (or bits) is the bitter end; (now a figurative expression for running out of alternatives).

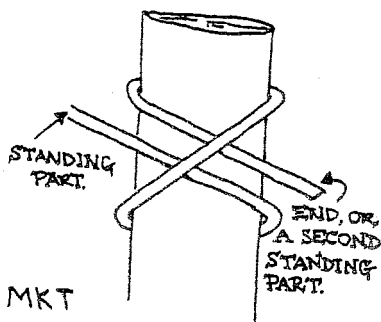
A *bight* is a loop in a rope folded on itself, either a U-bend or like a lower case alpha,  $\alpha$ .

## THE CLOVE HITCH

A clove hitch is two half hitches tied around a stick, pole, post or tree, etc. It is amazing how many people get it muddled up. The rope must run in the one direction, not cut back on itself. It is the last part of a round turn and two half-hitches.

Also, it has some limitations: it jams under heavy strains. Do not use it to anchor winching gear to a tree or you may never get it undone.

Also, a clove hitch made with artificial fibres on a metal pole will



CLOVE HITCH

probably slip.

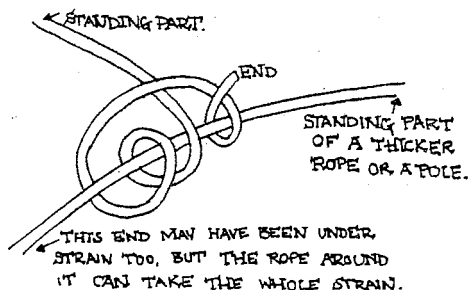
Finally, the clove hitch can be *cast on* with two deft twists of the wrist, (as long as one end of the pole is accessible — this won't work for trees). This 'casting on' is worth practising. If the middle of the rope is being tied in a clove hitch, it is much quicker to cast it on, than feeding the entire rope through the knot.

## THE ROLLING HITCH

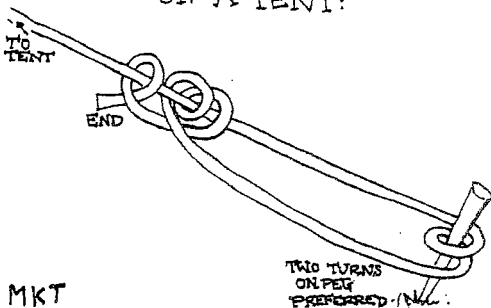
This is the third knot in the family of three. It is also known as a *long stopper hitch*.

It is like a clove hitch, but with an extra turn nearest its standing part:

It can be used to fasten a rope onto a second rope, one that is already under strain and so cannot be knotted in the usual way. It gets its grip with that extra turn in the clove hitch which slightly kinks the tensioned rope & increases the friction on one side. It will even grip a pole, e.g. for hauling it up a cliff. It is



### APPLICATION TO GUY ROPES ON A TENT:



used for the guy ropes of tents: you can slide it where you want it and *it stays put*, even under strain.

If your mate is dangling from a rope over a cliff, and the rope is fraying, this may be a way of saving his life. Bend on a rolling hitch with a thinner rope, or one of equal thickness, and transfer the strain to it.

## THE REEF KNOT

This begins a second family of knots. The reef knot is the best known, but the worst tied, knot. Strictly speaking, it is not a knot but a bend, but the terminology is loose:-

A *bend* joins two ropes together.

A *hitch* fastens a rope to a pole (or around another rope treated as something rigid — pp. 478-480).

A *lashing* binds two or more poles together.

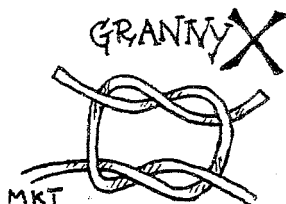
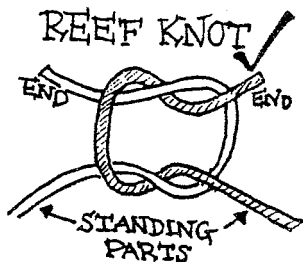
A *knot*, strictly speaking, is made in the end of a rope, e.g. a bowline.

The reef knot is also called a *square knot* or *double overhand knot*.

It looks so simple, but too often is tied wrongly as a *granny knot*.

A bow for tying boots, if properly made, is a slippery reef knot, also called a *double overhand knot with both ends slippery*. See p. 439.

A granny often jams, e.g. a *granny bow* in shoe laces. A granny has the ends cross-wise to the standing parts under strain; a reef knot has the ends coming out alongside the standing part of the same rope.



A reef knot has beautiful symmetry: it is two interlocking U-bends. It does not jam, unless tied in cloth or under tow rope strains. It can be undone by pulling one of the ends across the knot in the direction of the other end, thus changing the shape of the knot, even to the point of straightening out the part being pulled, so that the knot falls to pieces.

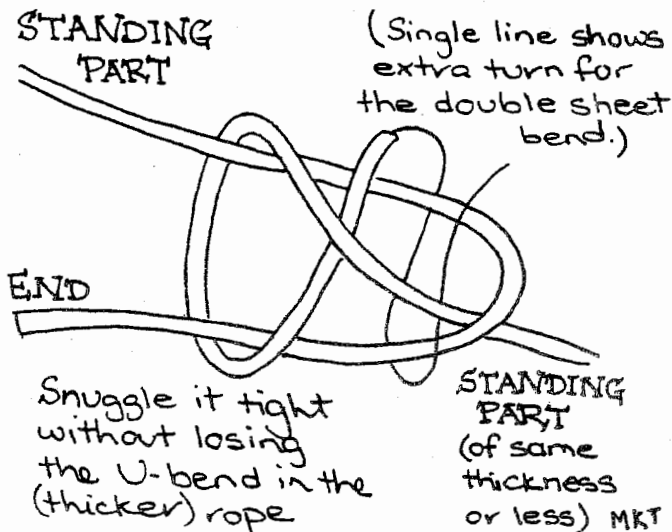
This technique for untying a reef knot is a reminder of something else. When tying any knot, always *snuggle* it tight: if it changes shape, it won't be the same knot, or may not even be a knot at all.

Reef knots should not be used for joining ropes of unequal thickness. Use a sheet bend. Do not use reef knots with artificial fibres — they may slip. Do not use them with ropes under heavy strain — they jam. Instead, use a bowline in one rope, and *bend* the other on in a double sheet bend.

### THE SHEET BEND

The sheet bend is used for joining two ropes, especially ropes of unequal thickness or of different materials.

It becomes a *double sheet bend* by going around an extra



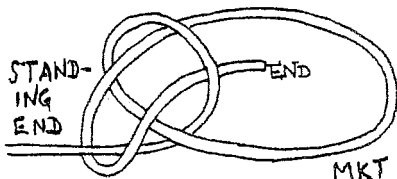
turn with the end of the smaller rope. This is less likely to slip and much less likely to jam. In fact, the bulkier a knot, the easier to untie.

To get a heavy rope over the limb of a tree (and, if required, around its trunk), throw a weighted string over first, then use a sheet bend to pull over heavier rope(s).

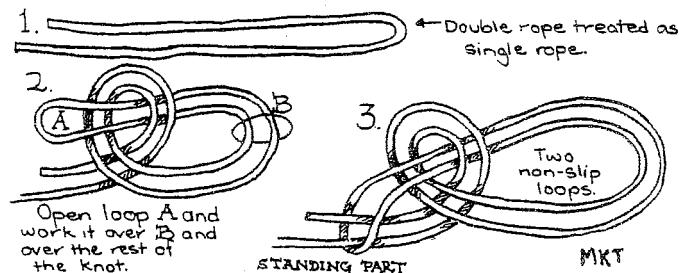
## THE BOWLINE

The bowline knot is a non-slip loop — a loop which does not pull tight and choke like a lasso.

Hold the standing part in your left hand: make an over-hand loop. This bight is 'a hole'. Say to yourself, "the rabbit comes out of the hole"—pass the free end up through the loop, *making sure that you preserve a bigger loop* which is to become the non-slip loop; "he jumps over the root"—come over the bight; "runs round the tree"—around the back of the standing part; "and then he goes back down the hole"—pass the end through the bight. Snuggle it tight, preserving its shape, and without losing the non-slip loop. To undo it, take off the strain, bend back the U-bend round the standing part, and loosen.



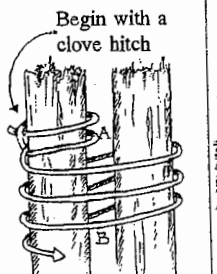
A **Bowline-on-Bight** is used as bosun's chair, with one loop under your bottom (which needs to be padded or it bites into your bottom!) and the other around your back).



## LASHINGS

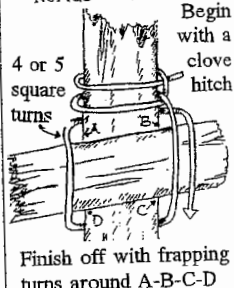
Lashings bind poles together for making a ladder, or a sheer legs for hoisting things, or even a drying rack for clothes. Note the **frapping turns** which pull the ropes really tight. Tie off with a clove hitch.

SHEER LASHING FOR TOP OF LADDER.



Begin with a clove hitch  
Finish off with frapping turns around A-B then spread the legs

SQUARE LASHING FOR RUNGS OF LADDER.



Begin with a clove hitch  
4 or 5 square turns  
Finish off with frapping turns around A-B-C-D

MKT

## THUMB KNOT

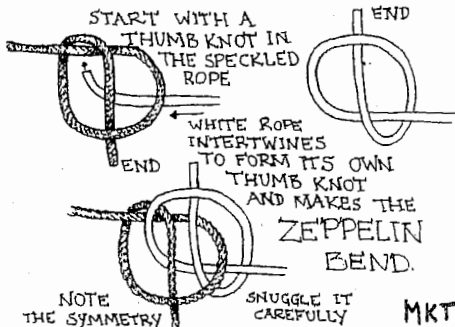
The thumb knot or *simple knot* is the simplest knot that can be tied in the end of a rope. It is scarcely ever used by itself, because it jams. Its jamming in the Fireman's Ladder, p. 488, doesn't matter. However, it is the basis of many other knots. **Do not use it as a stopper knot.**



## ZEPPELIN BEND

This is two inter-twined thumb knots.

The Zeppelin Bend is used for joining ropes under very heavy strains and yet it can be untied easily. It is also called a *Hunter Bend*. Very few people have even heard of it, let alone able to tie it. It can be tied in doubled ropes (doubling the ends of the ropes into bights) — because a bulkier knot is always easier to untie. It undoes like a bowline.

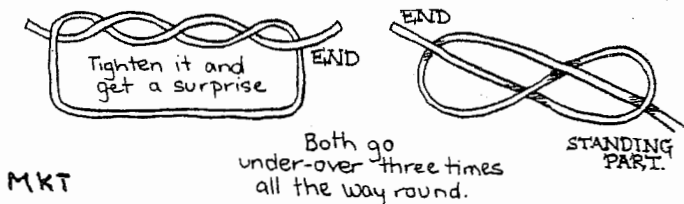


## STOPPER KNOTS

A stopper knot stops the end of a rope sliding out of a hole or a block (pulley), or to stop a rope fraying — for which a whipping (p. 487) or a back splice are sometimes better.

There are two good *stopper knots*:

1. A **double thumb knot** (called a *blood knot* on a cat-of-nine-tails!) has one more twist than a thumb knot. It is also the first part of a special reef knot (called a *surgeon's knot*) for tying up things which try to spring apart while being tied.
2. A **figure of eight knot**:



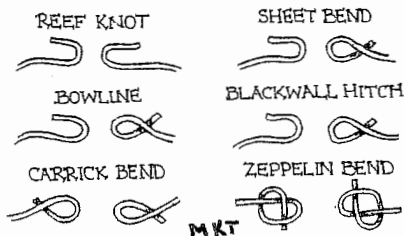
## THE THEORY OF KNOTS

A careful comparison reveals a close relationship between the reef knot, sheet bend and bowline. They are all based on bights: a U-bend, and either another U-bend or a U-bend crossed-over in a loop, like the Greek letter  $\alpha$ .

Two more members in this family of knots are the Blackwall hitch and the Carrick bend. The *Blackwall hitch* depends on a metal hook as part of a simplified sheet bend. *Never trust human life to the single or double Blackwall hitch.*

A *Carrick bend* intertwines two  $\alpha$  loops, and is used for ropes under heavy strains. But the loose ends must be seized to the standing parts, or it changes shape and is hard to undo. Better use a Zeppelin Bend.

The Zeppelin bend is an upgraded member in the same family of knots, from the reef



knot, sheet bend, bowline, Blackwall hitch to a Carrick bend.

This introduction to knots involves a few pages of reading. It will remain just that, mere theory, unless practised over and over again. Start at the beginning, and do not move on to the next knot until the earlier ones are mastered. You must be able to tie them in the dark.

Use thin rope or thick string for learning to tie knots. Soft sash cord is excellent. Do not practise with slippery, nylon ropes, or with thin string, both of which are terribly frustrating, because nothing stays in place when let go.

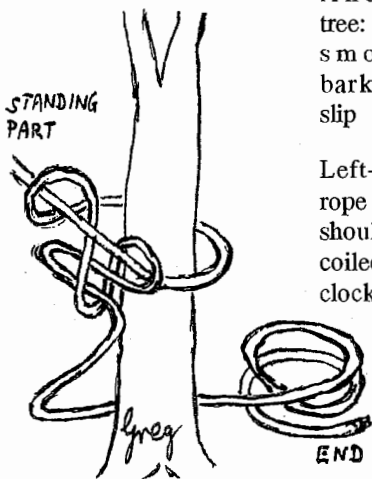
## SLIP KNOT

Never trust human life to a slip knot: see BBM, pp. 78, 93.

The standing part is the end under strain.

The first bight is jammed against the tree and the second bight is tucked into the first. Then snuggle them tight.

Tug sharply on the loose end; the bights undo. When the rope starts to slip, it must not be trapped by any turns around the tree.

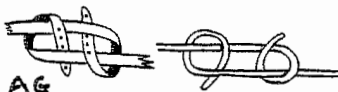


Anchor tree: use smooth bark for slip knots

Left-over rope should be coiled clockwise

## STRAP KNOT AND WIRE SPLICE

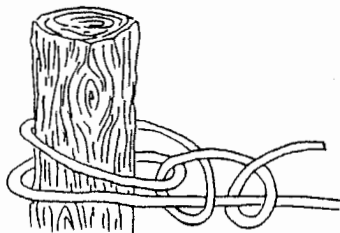
Flat leather (belt) and fencing wire lock up firmly in very simple knots.



## ADVANCED KNOTS

**Fisherman's Bend**

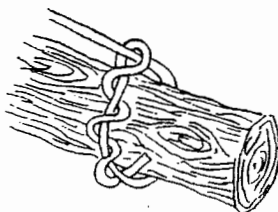
for fastening a rope to a smooth surface such as a spar, a tree, a ring or a stone



Like a round turn and two half-hitches except the first half-hitch goes *under* the round turn.

**Timber Hitch**

easy to untie after heavy strains



First turn round the standing end should be clockwise in a right hand rope. Do not turn the standing end back on itself at the loop

**Hay Hitch**

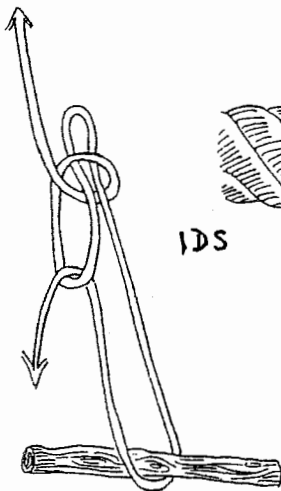
to hold a load tight

Standing end

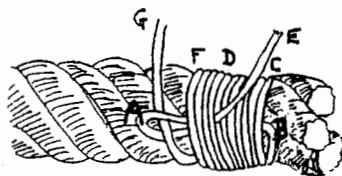
Singe half-hitch (but clove hitch for slippery rope)

Bight in rope used as a pulley

Tighten and belay

**Whipping**

to stop fraying



Thin whipping line starts at A not far from dead end E (which at the start is at the left of A). Hold AB in place with left thumb while putting on many tight turns from C to D. Make a loop at A with the end E now out to the right. Almost cover the loop with more tight turns D to F. Pass the other end G through the loop. Pull E so that G is held under the coils. Cut off any bits sticking out.

## FIREMAN'S GRIP

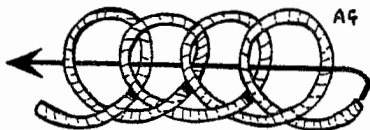
Fireman's Grip is wrist to wrist, not "monkey grip" with just the fingers.



## FIREMAN'S LADDER

Coil the rope, not in the usual way, but as a series of clove hitches (like *casting on* a clove hitch over a pole, but over and over again).

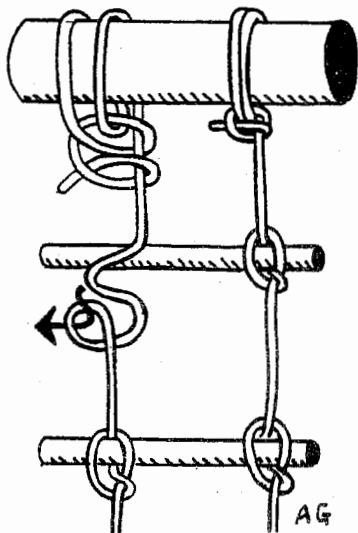
Pass the end through the coil, as indicated by the arrow.



Hold this end in the left hand and throw the coil in the usual way. The rope will straighten out in a series of simple knots spaced at more or less equal intervals. Beware: these knots jam and will never undo.

## ROPE LADDER

1. Belay both ends of the rope to a branch or level pole with a Fisherman's Bend.
2. The ropes are hitched to the rungs without passing the ends of the ropes through the knots. Make a cross-over loop and insert another loop through it to hold the rung.
3. The ladder will only work the right way up — the rungs will slip down the rope if the ladder is upside down.
4. Beware of rungs slipping out of loops. Rungs with grooves are safer.



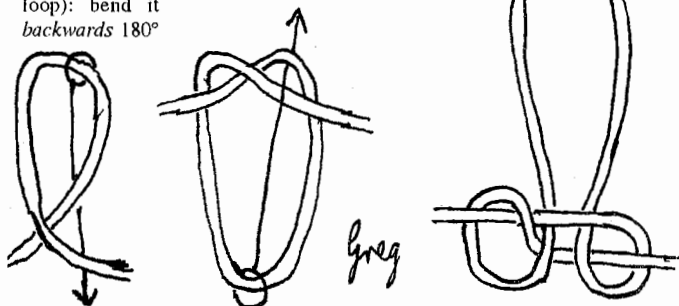
## MAN-HARNESS HITCH

Each man with an arms through a man-harness loop pulls with his shoulder. For climbing, put head and one arm through loop and wear over a shoulder and under the other arm. The ends of the rope are not needed for making the loops. It undoes like a bowline.

Make overhand loop as for a bowline (unlike the bowline, this is the final loop): bend it backwards 180°

Keep bringing the loop round another 180° and tuck it through itself

Snuggle carefully so the ropes enter and leave the knot in parallel straight lines.



## Cottage and A-frame Tents

Cottage tents are notorious for tripping on guy ropes but A-frames need only one or two guy ropes: pp. 197\*, 239, 241.

### WITH A SEWN IN FLOOR

1. Find a level grassy spot **not** under a smooth barked gum or under any tree with dead branches.
2. Spread the floor flat so door faces cross-wind; (usually towards the creek).
3. Stretch the floor tight and peg the four corners, sloping the pegs to run in under the tent at 45° angles (so they won't pull out); then peg the rest of the floor to the ground.
4. Zip the door (or tie its cords) and fit the tent pole at the door end. If a knot is needed, use a clove hitch. Adjust its height so that the floor at the bottom of the door is only just lifted off the ground — it is sure to sag a bit.
5. Hold the pole vertical and peg the main guy as far out from the tent as possible, and angle the peg at right angles to the guy so it won't pull out, i.e. sloping at 45° into the ground.
6. Fit the tent pole at the window end. Adjust the height, and peg the other main guy as in Step 5. The ridge line should be taut, even if for the moment the tent slops sideways.
7. Peg the corner guys at window end, then door end, angling the guys at

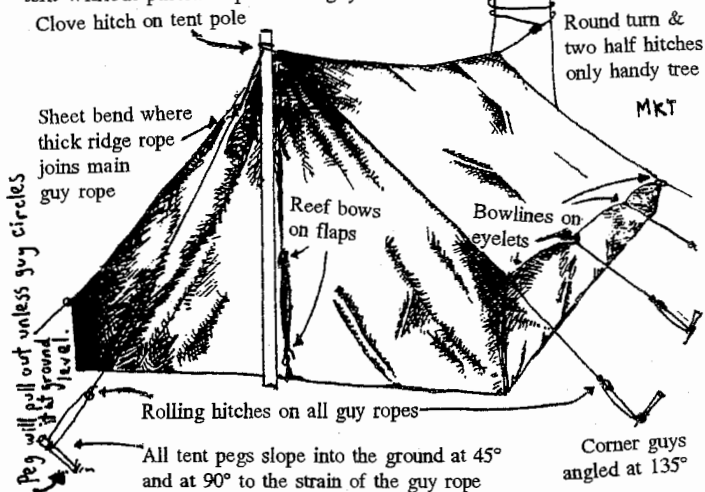
135° to the sides, with the pegs at right angles to the guys, as in Step 5.

8. Fine-tune the main guys so the poles are upright and the ridge taut; fine-tune the corner guys so the sloping surfaces have no wrinkles; if the poles are too short, put thin pieces of rock or bark under them as shims to lift them a little.

9. Peg side guys straight out, sloping the pegs as usual.

10. Tie any cords fastening the tent floor to bottom of poles.

**SIX KNOTS** for pitching a cottage tent without patent clips on its guys.



**WITH NO FLOOR** (it must be used with a ground sheet)

1. See Step 1 above.
2. Use one peg to pin the door flaps to the ground.
3. Use the length of the ridge to locate the exact spot for the bottom of the window end: peg it to the ground.
4. Stretch the four corners and peg to the ground.
5. Follow steps 4-9 on above.
6. The ground sheet must be turned up *inside* the tent walls.

**WATERPROOFING JAPARA TENTS** (see pp. 221, 223)

Sit a tin of bee's wax in a bucket of boiling water, enough to melt it. Sit a tin with four times the quantity of mineral turpentine in more boiling water. Work outdoors: do NOT use a naked flame or stove for either wax or turps. Stir the mixture and allow to cool. Pitch the tent in the shade and apply the mixture evenly with an old paint brush, taking special care to work the mixture into the seams and joints. Allow to dry, out of the sun. Keep the remainder in a sealed tin and label it, "Waterproofing mixture".

# Appendix 6

## Fathers Tutoring Bush Boys

**T**HE Bush Boys books are about boys. Boys do not read books about girls. Girls, however, revel in both. The contrast exemplifies the difference between the sexes.

“God made them male and female”, to *complement* each other in marriage and with a family. The sexes are not the same and are not interchangeable. They are specializations, though overlapping. Thus the husband is usually the breadwinner, the wife the homemaker. And it really works.

An upbringing for complementarity involves activities for boys and girls together, and some for boys and girls separately.

This book suggests some activities for boys without girls.

\* \* \* \*

A boy learns manliness of character particularly from his father. Man (herein male) is *vir* in Latin (cf. ‘virile’); from it comes *virtus*, meaning manliness, strength, moral virtue.

A boy’s growth in mind and muscle calls for some awesome choices — goodwill or ill-will towards others. Best he choose to be brave, tough and cheery; kind, clean and true; loyal to God, parents and ‘neighbour’.

A typical fallacy is, “Forget the Ten Commandments and become a man!” But profaning God’s Name, mouthing vulgarities; taking up smoking, drunkenness, drugs; womanizing and reckless driving are not marks of manliness but rather of moral weakness, and fear of jeers at less popular virtues.

\* \* \* \*

The Bush Boys’ adventures blend *perennial virtues*, albeit out-of-fashion; the *old-style freedom* of boys in the bush; some *old-style tramping practices* like swags; all in a *modern setting* with the current rules about fireplaces and not polluting creeks, and the modern counter-culture of *homeschooling*.

Impossible? No. Improbable? Maybe. Desirable? Yes! Thus in our day a father might tutor his sons in manliness:

- At sport, as spectators, or better, as coach and players.
- Building/repairing things, especially outdoors, or gardening.

• Bushwalking/camping: Dad, his sons, their cousins and friends.

Dad as tutor can equip his sons for “camping on their own”. What is more, “looking after each other” builds manly character. And “getting on with other boys” develops male identity, which is the foundation for mature esteem for girls.

Families both begin and benefit from the complementarity of the sexes. It prepares for happiness in future marriages.

## Campcraft and Leadership

**D**AD and his sons might read the Bush Boys books together, for ideas and inspiration on campcraft and leadership.

One lesson is never finished — that the adventures, freedom and beauty of ‘the great outdoors’ come with a price tag, which is **the prevention of accidents**. See pp. 470-475. Parental permission to ‘go alone’ depends on it.

### 1. A PROGRAMME IN TEN STEPS

Dad, or an older brother, becomes a master to apprentices, a tutor to students, a teacher of bush facts and skills and “do and don’t” (e.g. BBM pp. 90-91). He instills attitudes to safety and virtue through graded activities:

- (1) Enjoying day trips in the bush with Dad.
- (2) Dad’s backyard tutoring in making fireplaces and fires: at least boiling a billy and cooking sausages.
- (3) Day trips without Dad to the familiar places in 1.
- (4) Day trips without Dad to new places.
- (5) Enjoying overnight bush camping with Dad.
- (6) Dad’s backyard tutoring in cooking breakfast and a main meal, and pitching and striking a tent.
- (7) Overnight ‘camping’ in the backyard, with meals.
- (8) Overnight camping without Dad to places in 5.
- (9) Overnight camping without Dad to new places.
- (10) A three-day (two nights) moving camp without Dad.

### 2. TUTORING

- On bush trips **Dad shows how** to do things in steps 1, 5; then in the backyard in steps 2, 6.
- Dad watches patiently(!) as each boy does things ‘hands

on', just like learning to drive a car or a computer, working through steps 1, 2, 5, 6, as also the trial camp in step 7.

- Dad quizzes his sons on the "how, why, when, where, what" of bush knowledge and skills.
- Each step is repeated until it is mastered completely before moving on to the next step.

### 3. REPORTING BACK TO DAD

Dad 'debriefs' the boys after all trips made *without him* (steps 3, 4, 8, 9, 10):

- first, he listens to them, and gauges *his* own success or failure in tutoring them;
- he quizzes them on "how, why, when, where, what";
- he gives remedial tutoring in knowledge and skills;
- he checks their **attitudes to accidents**, and their exercise of the many manly virtues which they need to avoid accidents.

### 4. MANY FACTS AND SKILLS

(1) **Fires:** finding or making kindling despite rain; making fireplaces; avoiding burns, scalds and bushfires; finding and purifying water; billy supports, hot handles, making tea (everyone must drink tea).

(2) **Clothing and gear:** life may depend on them.

(3) **Finding your way** there and back.

(4) **Avoiding the Seven Deadly Dangers** that lead to death in the bush, not by chance, but by planning.

### 5. VIRTUES REQUIRED

As well, parents rightly require certain virtues in their sons before they allow them to 'go bush' without an adult.

Indeed, these are exactly the virtues which God requires as the only sort of character reference acceptable to Him:

(1) **GOD** first — source of our duty, dignity, destiny.

(2) **Honour His NAME** (no perjury, blasphemy, profanity, obscene speech).

(3) **Keep His HOLY DAY;** and keep all days holy by prayers.

(4) **HONOUR & OBEY parents** and all lawful authority.

(5) **Respect human life:** be **KIND + FIRM** and keep your temper.

(6) **Respect God's TEMPLE** (our bodies & the opposite sex).

(7) **Respect PROPERTY:** it's on loan from God.

- (8) Respect truth: be **TRUTHFUL**, also hold your tongue.  
 (9) **Think CLEAN THOUGHTS.**  
 (10) Think **GENEROUS THOUGHTS**: imitate God's goodwill.

## 6. LEADERSHIP BY THE BOY-IN-CHARGE

A boy-in-charge must tutor the others, especially to avoid accidents by **Safety First** and to develop common sense 'safety attitudes'. He must be competent to give **First Aid**.

He must have developed the characteristics of leadership: he must be dependable, true and trustworthy; competent in all the bush skills; determined but not stubborn, and able to get the other boys to obey him **without being bossy**; to keep the party together without it breaking up; and to keep them busy and cheerful without rows, frowns or grumps.

## 7. DAD'S CHALLENGE TO HIS SONS

"If you do not obey your mother and me at home, how will you ever keep my rules when you are away? How can I trust you to obey your big brother? Before Mum and I can let you go into the bush by yourselves, every single one of you must **prove himself by cheerful obedience at home**, obeying when you do not feel like it and even when you cannot see the reason. **You must obey first and you may ask questions afterwards.**"

Discipline is a means to an end:

- (1) self-conquest, self-control, self-motivation, self-respect;
- (2) defeating the effects of original sin; and
- (3) a foundation for 'survival virtues' for body and soul. Bush discipline is vitally concerned with the prevention of accidents. Its most basic rules are: "Answer properly when you're spoken to", and "Obey, straightaway".

"**ANSWER & OBEY**" is also courtesy and it is never too late for Dad and Mum to start insisting on it — just as the defence forces have to, and over and over again with each new intake of under-disciplined young men. There is no other way.

## Home-Tutoring by Mothers

**A**N UPBRINGING is the vital element in education. An upbringing advances from a secure child to an eager adolescent and then a mature adult.

An upbringing becomes good and Godly by the 7 Rs:-

1. **RELIGION** brings us God and our dignity, duty & destiny;
2. **RESPECT** for self and others, hence manners, self-control;
3. **REASON** and remembering, memory and understanding;
4. **RESPONSIBILITY** for our thoughts, words and deeds;
5. **READING**, especially "living books";
6. **WRITING**, by which thought is preserved and shared;
7. **RITHMETIC**, with mental figuring + -  $\times$   $\div$  fluency.

N.B. nn. 5,6,7 are life-skills of mind and body. Absence of nn. 1,2,3,4 reduces the efficacy of classroom teaching to a painful wasteful struggle in crowd control.

It is **NOT TRUE** that "one size fits all"

**OPTIONS:** (1) set up "school-at-home"; (2) "unschool" and facilitate learning without formally teaching a curriculum; but a majority (3) blend **some rigour with much informality**.

All foster reading for learning and for pleasure, especially *living books* by authors passionate about and knowledgeable on their topic. Children rescued from trauma in schools often need to be read to for weeks on end, to settle them down.

**Home-tutoring** or **homeschooling** or **home-educating** for the intellectual part of an upbringing is legal in all Australian states and territories, though conditions apply. Its popularity is on the increase. Going out daily to an institutionalized school is not obligatory.

**Home-tutoring** in the 3 Rs is a **SPECIALITY**. It differs from classroom teaching by distinctive methods, extra content and nobler aims. It is flexible, thus:-

1. **direct instruction** of home-tutoring one-to-one;
2. **self-tuition** in all forms of home-schooling;
3. **guided discovery** of home-educating; and
4. **free discovery** emphasized by unschooling.

## TACTICS for Home-tutoring/schooling/educating

**H**OME-TUTORING is something like a one-teacher primary school of a few pupils and run on family lines. It also has kinship with 'catch-up' coaching.

For 170 years, **one-teacher schools** in Australia and the USA developed techniques now used in home-tutoring, especially in larger families with more than two children:

- **A few pupils** are sometimes group-tutored together, to benefit from their *group-dynamic* interaction and to save time.
- **Vertical streaming:** pupils are promoted by mastering each stage, not age; diverse ages might be set the same tasks.
- **Peer mentoring:** Pupils might help siblings and, just as at school, perceive a difficulty of another pupil more clearly than a tutor/teacher, and even explain it more aptly.
- **Self-tuition** from text books & internet (with safe-guards), and so acquire skills & self-disciplines for lifelong learning.
- **Cross-age tutoring:** older pupils tutor younger in science and craft; hear them read aloud; do spelling and tables tests.
- **Cross-age activities** all done together: history, geography, art, drama, singing, sport/exercise, with more expected by age.
- **Best that a child be "home-made"**, and better, home-tutored.
- **Choice of schooling: it's a mother's right, a father's right.**
- **Private enterprise** is a vital measure of a free society.
- **Diversity** shuns the narrowness of a nation of conformists.
- **Free trade** favours efficiencies such as home-tutoring.
- **Manners, morals and religion** depend on home formation and produce better citizens for this world and for the next.

## PARENTS TUTORING — PROVEN SUCCESS

**T**HEIR own upbringing, schooling, marriage equip them to tutor basic **content, skills, attitudes** for K-10. By further **self-education** and their unique **affection** for their children they 'graduate' as **home-tutoring specialists** for Ys 11-12.

The education of school teachers does not suit such tutoring.

Networks, support groups, camps, phoning, email, ideas/ideals in text books, libraries and internet, help home-tutors, just as in-service days help classroom teachers.

## SOCIAL PHILOSOPHY for all schooling styles

“Ultimately, much of the division of opinion centres around whether the greatest right and responsibility for a child’s education rests with the state or with parents.” Thus concluded the NSW Parliamentary Research Service e-brief issue 7/2013 of August 2013 on Home Education in NSW.

Free societies avoid a *Brave New World* or *1984* scenario thus:-

- **People do not exist for the sake of governments.**
- Rather, governments exist for the sake of people.
- Governments “**harmonize**” life in society for the common good.
- **Citizens** elect politicians and employ them and the public service.
- **Subsidiarity** requires officials to give support without usurping.
- **Solidarity** requires citizens to co-operate with officials.
- **Parents procreate, so governments do not own the children.**
- **Governments** reasonably require a schooling for all citizens.
- Parents have prior rights to governments to **choose schooling.**
- Parents who home-tutor are **not government employees.**
- Governments may intervene as a **last resort** if parents fail.
- Over-rigid rules are a faulty means which **hinder education.**
- Flexibility, innovation and initiative **achieve the real end.**
- **Home-tuition & private schools** are historically the default.
- Government schools are a **last resort**, a ‘fail-safe’ provision.
- The home-tutored merit the **privileges** given to school pupils.
- **Privatized government schools in WA** give parents power.

## IS HOME-TUTORING ADVANTAGEOUS?

- It’s a richer and **different life-style** centering on the family, presently the most under-valued resource of our civilization.
- **Socialization** (across ages 0 to 90+) is better without **peer dependence** from age-grading in schools. Peer friendships of the home-tutored need not weaken parental and sibling relationships.
- **Employability** in the outcome proves its academic success.
- It forms children for **inner security** in an insecure world.
- **No money wasted** on school fees &/or **time** in travelling.
- Each learns at **his own pace** — unlikely with a school’s higher pupil-teacher ratios and more distractions. Further, the home-tutored are free to work ahead of schedule in the various studies.
- School-style **homework** afternoons & nights becomes **unnecessary.**
- The noble aim of life are achieved: growth in **virtue and goodwill.**
- Family **manners/discipline** predispose children for home-tutoring.

## LEARNING IS THE ONLY PURPOSE OF TEACHING

**S**T THOMAS AQUINAS and Aristotle agreed that man is meant to be happy through **virtue** and **natural morality**:

1. A **desire to know** is a good appetite in all human beings.
2. Learners are the **principle agents** in their own learning.
3. Different learners learn different things at different times
4. Education should be **for the good of the learner.**

### ONE SIZE DOES NOT FIT ALL:-

<b>HOME-TUTORING</b>	<b>SCHOOLING</b>
encourages <b>informal learning</b>	usually by <b>formal teaching</b>
"curriculum" is all times, places, persons	rigid curriculum & time table
all learning personalized	averaged over an age group
adjusted to interests & abilities	same subjects at same time
desire to learn for its own sake	working for exam marks

### Home-tutoring in Fiction

In a draft of *Cuthbert Joins the Bush Boys*, chapter 31, Kate Cumberland said, "We have 3 hours school in the morning and run wild in the afternoon." Shocked critics said this was illegal in Victoria, so it was revised: "We have lessons for 3½ hours in the morning, 1½ hours in the afternoon and there's lots of time to play outside." Details of this **school-at-home** style left the author little time to provide daily adventures! See *Bush Boys and Bush Rangers*, chapter 10, for a tight timetable in a schoolroom-library. Fortunately, this rigour was moderated with each pupil's free choice of **indoor and outdoor projects** — a partial unschooling.

*Bush Boys on the Move*, chapter 5, softened rigour with **flexibility**: family jobs, hobbies and 'the bush' are education. In chapter 7, six boys plan their six-day trek, made educational by daily entries in log books. Such 'learning situations' are a great strength in home-tutoring/schooling/educating. Schools, too, count excursions and camps as educational.

In *New Boys in the Bush*, the newly arrived Lawson family move into an isolated hobby farm without electricity. It is within walking distance of the Cumberlands. Twin girls and three boys have formal 'tutoring' early morning from Dad,

then later from Mum and Nanna. In the afternoons, the boys are free to explore the bush and count it as 'education' by a verbal report at the evening meal, plus writing up a log book at night, with maps or diagrams allowed as 'padding'. Again, there is flexibility, even partial unschooling. And Dad *discovers* the limitations of his *discovery method* and particularly that "what not to do" must be taught and learnt by *direct instruction!*

In *New Boys Go Bush Again*, the Lawson parents keep tutoring on track (4<sup>th</sup> term October to Christmas and 1<sup>st</sup> term February to Easter) amidst the normal family muddles thus:-

- **Sunday:** worship and *re-creation* (recreation);
- Saturday morning: the bigger family **jobs**; afternoons, **recreation**.
- **Rising time dictates bedtime**, not vice versa. 'Rising & roosting' times are graded for age. **No TV**, no late nights!
- **Monday to Friday mornings** focus on formal tutoring.
- **Afternoons**, the boys self-tutor and learn in **outdoor creativity**.

This fulfils NSW government rules, thus:

**Formal plus informal TUTORING for Lawsons adds up to about 5 hours per day, plus the breaks for morning tea & lunch and exercise.**

- 5 days/week, 10 weeks/term, 4 terms/year: total = 200 days/year by law.
- In home-tutoring, pupils often cover work faster than in schools.
- The Lawson formal tutoring for Boys, 3¾ hours daily; older Girls extra.
- Informal learning for Bs & Gs: family jobs & creative activities, 1¼ hours,
- includes trips to libraries, historic sites/buildings, museums, scenery etc.
- Boys getting firewood (a renewable solid solar energy), fires, milking, chooks all count towards technology, exercise and Personal Development (PD).
- Their bushwalking/exploring is navigation, geography, exercise and PD.
- Girls laundry (3 days), gardening, tennis, horse-riding, swimming: ditto.

**WIDER SOCIETY:** Some details from the fictitious Lawson family might be transferable to other families: boys serve Mass; girls accompany/lead church singing; friends stay weekends for bush walks, cycling, picnics, tennis, swimming, horses, family jobs. Other families have older boys/girls teach/help Scripture classes; also life-saving; cadets in St John Ambulance or Rural Fire Service; deliver parish notices; join Sports' Clubs, Little Athletics, bands, orchestra; Meals on Wheels; public speaking/debates/acting.

## KEY LEARNING AREAS

NSW government **Key Learning Areas** for **Primary School:**

1. **ENGLISH:** read, write, recite, speak, discuss prose & poetry.
2. **MATHEMATICS:** operations + - × ÷ ; shapes and areas.
3. **SCIENCE & TECHNOLOGY:** elements, forces, energy, machines.
4. **HUMAN SOCIETY & ENVIRONMENT:** history, geography, civics.

5. CREATIVE and PRACTICAL ARTS.

6. PERSONAL DEVELOPMENT, HEALTH, PHYSICAL EDUCATION.

**High School** must do 1-4 every year and two out of 5-8:

1. ENGLISH

2. MATHEMATICS

3. SCIENCE

4. HUMAN SOCIETY & ENVIRONMENT: history, geography, civics.

5. LANGUAGES other than English

6. TECHNOLOGICAL and APPLIED STUDIES

7. CREATIVE ARTS

8. PERSONAL DEVELOPMENT, HEALTH, Physical Education.

**I**NTIMATE HUMAN RELATIONSHIPS are taught **individually** by mother/father out of respect for a child's mental privacy and varying readiness, physical, mental, psycho-social, moral and spiritual.

At school, a child falls so easily into *human respect*, i.e. thinking or speaking (even acting out) false or ignoble ideas lest he lose esteem in the eyes of his peers — like a crowd lowering moral sensitivities. Peer pressure becomes a form of psychological bullying.

## RELIGION

**A** CHRISTIAN CURRICULUM has a noble world-view of Truth, Beauty, Goodness, plus God, Whose attributes they are. It ennobles, with ideas/ideals quite counter-cultural in today's 'politically correct' atheism-agnosticism-amorality-immorality.

Its basis is simple: **God made us** (our dignity) **to know, love and serve Him here on earth** (our duty) **and to see and enjoy Him for ever in Heaven** (our destiny).

Religion takes cognizance of those effects of **original sin** which remain after Baptism — Satan's hindrances to clear thinking and virtuous choosing. Today's **individualism breeds anarchy!** Further, marriage and family are God's vital plan for new human beings by procreation and education. *Redefining* them is stealing from those who own them already, merely to suit oppressive social engineers.

Australia still officially believes in God despite pushy 'change agents' and thought-police. Parliaments still open with the Lord's Prayer. Witnesses in law courts usually declare, "So help me, God." Our criminal code is still partly based on Moses's Ten Commandments of natural morality.

## GENERAL PROCEDURE

1. *Tutoring* by direct instruction with one or several at a time; written work set from texts/internet; plan to cope with babies/toddlers. Provide incentives to work at one's best pace to "get ahead", earning free time to follow-up personal interests and learning to use time responsibly, e.g. while being patient waiting for tutor's help.
2. Later, the tutor corrects written work and does some quizzing.
3. Some put pupil's schedule on weekly sheets nn. 1—40 listing books and tasks. Programs can be home-made or borrowed or a 'distance education' package from a homeschooling organization.
4. Date completed items so they become a legal record of work set and work done. This saves paper, time and temper!
5. Fridays are best left flexible for drills, revision or catching up.

### A SCHOOLROOM OR NOT?

A dedicated space/place can help studious habits & atmosphere, with book stands for Bible, Catechism, Dictionary, Atlas; and tables for globe and computer. Some use the dining table, though it lacks *atmosphere*. Bedroom study reduces noise but risks the 'daydream syndrome'.

Pupils need to *teach themselves* not to be distracted by their tutor talking to the others, or by the presence of pre-school children.

"Heaven and earth are full of His glory" is the Lawsons' **Creation School Room** motto.. It includes the study of man's activities, too.

### LEARNING TO LISTEN

**Listening is an activity.** It is an *act* of mind and will, one of 'the lost tools of learning', greatly undervalued. **We listen to learn.** Learning to listen helps **learning to think**, to follow a sequence of ideas. It requires and strengthens obedience, humility, patience, self-control. Learning to listen *without interrupting* is a rare but vital learning skill. Too much electronic wizardry breeds passivity and deadens effective listening. **Memorizing & understanding** the basics must come first.

### FEELING a FAILURE

Despite every effort/goodwill, home-tutors like all teachers suffer **frustration**, depression, 'burn-out'. A sympathetic ear, a cup of tea, family prayer for perseverance, enlisting fathers to help, do wonders.

**Desperate mothers** who enrol the children in school are often surprised to find that their home-tutoring has put the children ahead of their age. Some withdraw them again if their character and virtue suffer.

**Older boys and girls** who enrol in the upper years of a secondary school usually discover that, due to their home-tutoring, they are ahead of their peers in good manners and at least equal to them in learning.

## APPENDIX 9: Index & Glossary

- Numbers refer to pages in **this book** unless a book title is quoted before them.
- The paragraph sign § means that the number following it is a Question & Answer in this book, pp. 450-459.
- An **asterisk \*** means a picture.
- **Bold print** for a word or number means a major entry.
- See the Index in *Bush Boys on the Move* pp. 506-511 for indices to *Bush Boys*, and *Cuthbert Joins the Bush Boys*, and *Bush Boys and Bush Rangers*.
- Abbreviations of these book titles are by their initials: BB, CJBB, BB&BR, BBM and, for *New Boys in the Bush*, NBB. See synopses pp. 508-501

**ABC of Camping** in 50 Q&As: 73-74, **450-459**.

**animals**, Australian: koala, dingo, wombat, kangaroo: **357\***, and, parrots, kangaroo, snake and goanna, 10\*.

antidote, 65; antidote for bull ants & leeches, 374, snakes §46  
arvo: afternoon, 30.

ASAP: As Soon As Possible, 195.

Baden-Powell, Lt. General, found of Boy Scouts, 158, 381, 422.

bandages: crêpe (stretchy) and pressure: §20, §21, §46.

Barrallier, Francis: 1802, explored southern Blue Mountains, 423.

'Behaviour is purposive' (teleology): causality in conduct, 247;  
(‘there is a reason for everything’, ‘everything has a cause’).

belay: (1) stop; (2) fasten a rope, 72, 212.

bend\*: (1) noun, a knot, 482,484,487; (2) verb, bent (fasten) 239.

Betadine Cream, §20, §22.

‘biff on the boko’: a clout over the head, 19.

**billy**: ‘billy can’, a pail: 445\*; home-made, **375\***; hot handle pouring, 466\*; support systems, 467\*.

blisters, 314, **471**.

bloodwood tree: rough barked eucalypt, sticky red sap, 36.

bombing (in): jumping in near a boy in the water, 156, §43.

boots: 25, 438, §8.

bow: shoe lace knot (double overhand, ends slippery), 439\*.

bowline & bowline-on-bight: non-slip loop knots, 212, 483\*.

bull ants: bull dog ants, bull-joes, 65, 358, 374.

bulls wool: dry fibrous bark shredded into kindling, §32.

**bush, the:** (1) forests; "the woods"; (2) "a bush," shrub(s);

(3) 'a bushy': man living in or accustomed to the bush.

bush bath: sponge bath, 285, §33, §35.

cairn: stones heaped up as a marker, 154, 159, 249.

camouflage, 61, 247.

cave: not underground passages but an open overhang, 245.

chiack: tease, jeer, taunt, 272.

chooks: domestic fowls ('chickens'), 20.

city slicker (insulting), no good in the bush: 11, 136.

clobber: (1) verb, to hit, 238; (2) noun, clothes.

**clothes**, tramping/camping, to suit season and possible

weather, 25, 437\*, 460-461, 463, §5, §7, §9, §11, §50.

clove hitch: knotting onto ring, spar, or thick rope, 70, 479\*.

cockatoo: (1) a big bird, 10\*, 115; a watchman, 382.

coiling rope, putting in "the twist", 163; BB ch. 27\*.

complementarity of the sexes, 491.

conk, conk out: collapse or even die, 100 (×2), 150, 226, 232.

**coo-ee:** Aboriginal signal: *oo* and *ee* can be loud, 12, 61, 423.

**cooking**, 468.-469

cop: verb, get punished, 332; noun (derogatory), a policeman.

cos: because, 'by a cause', 14.

cossie: swim costume, swimmers, bathers, trunks, togs, 175-176.

Creation School Room, 22, 177, 326.

**cuppa:** bush slang for a cup of tea, 43.

deady-bones: dead (from May Gibb's stories), 225, 275.

dehydration: 25, 94, 474; §41; see also 72, 130, 196.

dingo: native wild dog (warrigal), 432.

dink: doubling an extra person on a bike or horse, 180.

dip: in the ground, 36, 240; a brief swim, 163.

**dixie:** cooking/eating pans: a pair "tins, mess, rectangular, one",

10\*, 74, 75\*, 442\*, 445\*, §12; draining, 466\*, support, 467\*.

dob: to tell tales, to get someone into trouble, 74, 142.

drying clothes, 73\*.

drying without a towel, 25, 77.

dynamic floating: see swimming.

Emergency Kit/Equipment: 461, 470, 475; see First Aid Kit.

**exclamations:** (1) aha! wow! woweel! phew! wacky do! whacko (the diddle-oh)! you beauty! oh yeah! ouch! ugh! ugghh! ugggle-gluggle! O boy! Boy oh boy!

(2) It is better to avoid the old substitutes for God, like golly, gosh, by gum; or for Jesus, like jissus, jeeze, gee, gee whiz; or for Christ, like cripes, crikey: better not to pass them on; besides, they may give offence to those aware of their origins.

**fire(-place):** 118, 449\*, §47, §49; fire-lighting 474 (see kindling); squatting at a fire, 467\*.

**First Aid (Kit):** 374, 461, 470, 473, §20, §39; Other Items 475. food, 231, 462, 464, 468-469.

fly: 1. an insect; 2. outer covering of tent, 445\*, 490\*, §29.

frapping turns: which pull a lashing really tight, 214, 484\*.

fridge: refrigerator, 33.

fudge, to stretch the rules, 44, 168.

gear, 196,232,460,463; personal §12-§19; group §25-§27.

geek: to look at something, 254.

gem scones: made in a gem iron, 230.

goanna: like a 2 metre lizard, 10\*, 17\*.

Good Samaritan: 97, a merciful stranger, from Luke 10:30-37.

granny: a false reef knot (& granny bow slip knot), 481\*.

gutzer: come a gutzer, fall over , 163; a bust up, 277.

hanky, handkerchief: 265, 285, 440\*, §13, §14.

hat: army/ slouch hat (stiff brim): 267-268, 436, 437\*, §6, §31.

heat exhaustion: 72, 82, 474, §41; heat stroke is hyperthermia.

helter-skelter: reckless rush, 409.

high jinks: boisterous fun, mischief, 343.

hippo-bumpo: wrestling, with a piggy-back rider, 251.

hitch: a knot fastening a rope to a rod, 478\*-480\*.

home-tutoring/schooling/educating 495-501; cf. CJBB p. 505;

BB&BR pp. 90-97; BBM pp. 59-62; NBB pp. 151,195,468.

homestead: family home with out-buildings on a farm, 103, 363.

Hurricane Lantern (kerosene/paraffin), 445\*,459\*,461,511\*,§19.

**hygiene:** 279, 497, §33, §50.

hypothermia/hyperthermia: §41; see heat exhaustion; NBB 442.

- inverter: steps up battery electricity to mains voltage, 88.
- jeans: trousers tough Denim (hard to dry), 264, 265, 269, 430.
- jugular: neck veins: "Go for the jugular", ruthless action, 346.
- jumping ants: §23.
- Kalgoorlie Safe, dripping water evaporative cooler, 33, 34\*.
- kangaroo: 10\*, 43, 356, 357\*.
- Key Learning Areas: for home-tutoring, 499.
- kid: (1) lamb; (2) child, 228, 229, 378; (3) verb, to joke.
- kindling: 95, 118, 154, 474, 493, §31, §32.
- knapsack**, rucksack, back pack held by shoulder straps, 443\*.
- Knots**, bends, hitches, lashings, splices, 478\*-489\*, §18.
- knife, scout/army/yachting, 440\*; §13, §15.
- koala: 357\*, 416, 422, 427-428.
- kookaburra: laughing jackass, 155.
- landforms**, valleys/ridges/saddles/gaps, **465\*** (see watershed).
- lashing: a knot binding two rods or sticks, 484\*.
- latrine**: **279**; see hygiene.
- Lawson, Blaxland & Wentworth crossed the Blue Mountains (in 1813): 35, 45.
- leader**(ship), **6**, 492, §37-§40, §42.
- leech, legless bloodsucker: 119, 358, 374, 376, 461, 462, 475.
- log book: home, 26, 28-30, 225; camping, 202, 205, 219, 242.
- long stopper hitch, also rolling hitch, 239, 30, 70, 480\*.
- lout: (1) stupid; (2) uncouth; (3) violent, vandal, 423.
- maps**: 8-9; Paradise 123; map reading 361.
- matches: in a waterproof tin, 441\*; 470, §13.
- metric measurements:
- metre = 1.1 yards; 1 foot = about 30 cm;
  - kilometre =  $\frac{5}{8}$  mile; 1 mile = 1.6 km;
  - kilogram = 2.2 lbs (pounds); 1 pound = 454 g.
- modesty**, 268-269, no showing off: (1) not boasting, humble, 304; (2) no vulgar display, but purity, 95, **285**, 434, §50.
- menu, food lists**: 231, 462, 464; lunch, 152; measuring 270.
- Morse Code: signalling/telegraphy, 61, 66, 76, 85, **476**.
- mug: (1) cup without saucer, 10\*, 442\*; (2) stupid person, 232.
- Murphy's Law: "If it can go wrong, it will," 212.

- navigation:** 273, 465-466, §§39,40,42; compass 352; see maps.  
nick it: steal it, 13.
- obey, obedience, §38; disobedience 457.
- parka:** waist-length waterproof coat, 25, 150, 196, 443\*, §9.
- phonetic alphabet: for telephony, 476.
- Pisgah "a beautiful aspect" (Deuteronomy 3:27), 35, 396, 413.
- poop, pool: manure, 101.
- porridge: how to cook, 468; in a thin billy 466\*.
- pyjamas, pajamas, PJs: at home; never on a camp, 196, 269.
- reef knot: a double-overhand knot, 481\*;  
a bow, a double-overhand reef with slip-knot ends, 439\*.
- rice: how to cook, 468.
- ridge-walking, a navigational art, 465-466.
- rig: an articulated vehicle, truck & trailer, 14.
- rolling hitch: long stopper hitch (30, 70), 239 480\*.
- Rosary Beads, 440-441\*, §13.
- round turn & two half hitches: knot, 478\*.
- Safety First:** prevention of accidents, 470-475, §39, §46, §48.
- scroggin, homemade energy snack, 462, 464; 469.
- Self-Reliance & Leadership**, 6, 161, §47-§40
- Seven Deadly Dangers** leading to death: 471-474, §41.
- shade, 90; few trees give 100% shade: Morton Bay Fig, 93;  
turpentine, 161, 278; but not the eucalypts.
- sheet bend: knot, 482\*.
- she-oak: casuarina tree with green needle-like pseudo leaves, 51.
- shorts: short pants/trousers, legs bare below knee, 437\*.
- sideling: easy route *across* a slope; often an animal page, 316.
- sissy, cissy: girlish, timid or cowardly man or boy, 16, 98, 119.
- slewed: lost, but finally finding the way home, 35.
- Slim, Sir William, on Self-Reliance & Leadership, 6.
- snags: (1) sausages, 152; (2) danger for swimming, 266, §43.
- snake(bite): avoidance, 473, §45; First Aid, §46.
- snakes:** tiger, 43, 155; red-bellied black, 10\*, 264, 356; death adder, 318.
- soap: keep suds out of creeks: 283, 285, §35.
- socialization: enhanced by home-tutoring, 498.

- sool: to incite (usually a dog) to attack, 229.
- spotted dog: sweetened boiled rice/custard, with sultanas, 252.
- sprung: caught in the act, 338.
- square lashing: see knots, 484\*.
- stars, planets: 143-144; Southern Cross to find south, 466\*.
- stats, statistics, 38: 'rats, stats, bats' of university psychology.
- squatting** at a fire, 467\*.
- stopper knots, 485\*.
- stringybark: fibrous barked eucalypt, good kindling, §32.
- subsidiarity, 'all for one', & solidarity, 'one for all', 469, 497.
- sultana: small sweet seedless raisin, 231, 252, 267, 462, 464.
- sunburn & sunstroke: 93, 203, 278; red raw, 98.
- swag: blanket roll, 232, 235, 443\*, 460-461\*, 469\*, 491, §12.
- swig: heartily gulping down tea, 16; contrast chewing tea 119.
- swim(ming): drowning, 472, §43; no diving in bush, 75; bushy, in a creek, 75; drying without a towel, 25, 77; torpedoing (dynamic floating) propelled by a push, 292; or torpedo, fast swimming, 114, 284; in shade, 90.
- tea**: (1) "tanking up with tea" for hard walking and hot days, §50; (2) evening meal (dinner, supper), 21.
- tent**: 489, §25, §50; A-frame, 197\*-198, 241\*; cottage, 445\*, 490\*, 222\*, §25.
- turpentine: tree, leaves darker on top; very good shade, 51.
- tutoring: (1) in campcraft 491-492, §39; (2) home-tutoring 495.
- ute, utility truck with cab and an open tray with sides, 15.
- Vegemite: black yeast extract put on sandwiches, 267.
- vigilance: 'Constant vigilance & eternal suspicion,' 245, 256, 470.
- watershed: ridge between creeks, 35, 276, 350, 360, 367, 409.
- weather, 89-90, 99, 150, 196, 304, 379, 461, §7.
- wheedle, clever persuading/pestering, 181, 200, 422, 432.
- wombat, Australian marsupial a bit like a pig, 14, 357\*.
- yarn, yarning**: story telling at campfire or in bed, 21.
- yeah (say 'yair'): yes; O yeah! sceptical agreement, 14.
- yer; yers; yours: slang for your, yours, you (plural).
- yuk: exclamation at unpleasant food or circumstances, 172.
- yum, yummy: exclamation of delight at food, 168.

## Appendix 10: The Earlier Books in the *Bush Boy* series

**T**Hese books are adventures about boys. Girls, too, read them avidly. Indeed, girls were the author's most helpful critics with advice for the pre-publication texts.

The stories enliven the camping 'doctrine' of the *Australian Bush Catechism of Camping*, p. 450. Both the adventures and the bush catechism instil in readers the bushy Safety First that makes their own camping a real possibility.

They are ideal for reading curled up in your cosy bed or a comfy chair, for tedious travel by bus or train, or car or plane.

### *Bush Boys* and *Cuthbert joins the Bush Boys*

**T**HE FIRST TWO books are now in a one-volume double-adventure. In *Bush Boys*, Greg and Bernie, and cousins Peter and John, have camping fun, and outwit the yahoo cheats. In *Cuthbert Joins the Bush Boys*, they rescue cousin Cuthbert from kidnappers, and make him one of themselves.

### REVIEWS

**Brendan:** *Bush Boys* feels like it's alive; it made me feel I was there; and I'd love to have those boys as my friends.

**Stephen** (on a pre-publication draft of *Cuthbert*): **It's exciting! My mother says it's too exciting — but don't change anything!"**

**Monette:** Although I am a girl, I love to read books for boys. I like the parts about the bush, and when the boys are naughty.

- 516 action-packed pages.

### *Bush Boys* and *Bush Rangers*

**T**HE school holidays are over. Sickness at home means the city Cumberland boys and girls stay on at *The Hills of Home*, and Cuthbert stays, too. Mornings are for home-schooling, and afternoons searching for the long lost gold, stolen by bush rangers in 1880.

Jenny and Judy, and Kate and her little sister Tess, declare they are 'bush girls' — and *bush rangers* (i.e. bushwalkers).

Their "bushranging" centres on picnics at The Mermaids' Pool and sharing in the detective work of their older brothers.

Rival gangs of boys and girls from the co-ed Grammar School, egged on by teachers, are also after the gold...

This third story spans two weeks and though there is no camping out at night there is plenty of adventure-time in the bush.

This is perhaps the first Australian children's adventure set in a homeschooling context, plus a detective story and treasure hunt, and much *bushy* excitement.

The 39 chapters are a bit longer than in the earlier books.

• 396pp.

## REVIEWS

**Benedict:** *Bush Boys and Bush Rangers* is an excellent story. I like the combination of the thrill of a junior adventure with the absorbing excitement of a treasure hunt. Plus there is the interesting and useful information on bush lore and camping rules.

**Shannon:** The author combines wit, excitement, mystery... for one of the best Australian series ever written for children. As with the other Bush Boys books, it is a lively, exciting account of yet another adventure. The dialogues and vivid descriptions kept my attention the whole story through, while the plot is a classic!

**Isabel, Elizabeth and Jean:** We loved *Bush Boys and Bush Rangers* because the author described things so vividly and made us feel as though we were there sharing the adventure. One can never guess what is coming next and the suspense ensures that the reader, once having picked up this book to read, is unable to set it down until the end. The author has succeeded for a third time in giving young people a work that is uplifting and inspiring in its characters and story unlike many novels for children today. *Bush Boys and Bush Rangers* is one of the most exciting and interesting works of fiction we have ever read.

**Tammy:** I found it exciting and most cleverly written. I loved Mermaids' Pool and the many bush treks, but more particularly the Moonlight Pillow Fight. Tim, I like for his innocent nature and Greg for his 'great ideas', his knowledge and his capability.

**Elizabeth:** I couldn't put it down until I'd finished! Well done, an excellent book. Chapter 22 was certainly the greatest ever pillow fight! Reading about it is almost as good as having one!

## *Bush Boys on the Move*

**G**REG AND BERNIE, Pete and John Cumberland, with two new boys Kev and Sam, go on a six day camping adventure in the Wild Bush Mountains, and it counts as a home-school educational excursion. For **441 pages** you'll feel you're really there, working up an appetite, cooking on a campfire, smelling wood smoke and sleeping under the stars, and outwitting the Tricky Trio who are thieves and firebugs.

You'll know the wild and lyric beauty of the bush — rugged ridges, tall trees and scratchy scrub, rocks and rapids, wind and water, light on leaves, cliffs and waterfalls, inviting pools, awe-inspiring distances, and the wonder of bird calls amid uncivilized silences...

Each of the 31 long chapters is broken into two parts — an advantage for reading the story aloud in shorter episodes.

• 512 pp.

## *New Boys in the Bush*

**H**EROES Jack, Jim and Joe Lawson have just moved from city to an old rambling house in the bush. It is the same Wild Bush Mountains as the earlier stories, but with a brand new homeschooling family with nine children.

First, a **Pioneer Week** on a 40 acre farm: a strange but wondrous way of life — no electricity, dependent on solid solar energy, rashly risking daily death to get firewood — felling trees on themselves; a loaded gun going off by mistake; “daring-do” in an old Land Rover; nearly burning the house down plus infants stranded up a windmill.

Then an **Explorer Week** with ‘applied ignorance’ of the Seven Deadly Dangers that lead to death in the bush, all amid the ridges and gorges of the Wild Bush Mountains: lost in scrub; a monster rock hurtling like a cannon-ball; tripping over a cliff; teaching each other swimming; a bushfire; a snake-attack; sun-parched thirst; sunstroke...

• 492 pp.

## *Squiggles and Squinter and the Bushrangers*

**SQUIGGLES AND SQUINTER** are twin boys on a farm in 1875. There are no cars, mobiles, nothing electric, but lots to eat, fun in the creek, farm work and chopping down trees with father, mother's school on the kitchen table, and home-made board games by candlelight.

It is a world with adventures and bushrangers, with lots of BANG BANG from revolvers in this fast-moving story.

Nearest neighbours only newly arrived are desperate for help, though they are hours away by foot, or on or behind a horse. They too prove vital for beating the bushrangers.

As well as the twins themselves, this short book has some interesting characters: Fred, the new boy from the city; Old Ben Axletree, the coachman; and Miss Margaret Montmorancy, a governess, who carries a small revolver in her bosom.

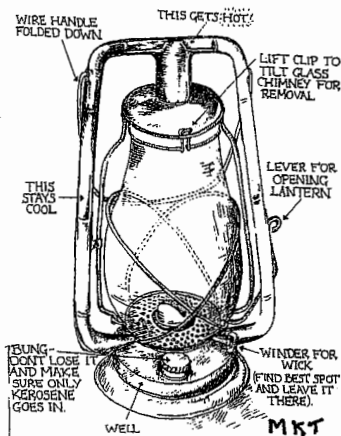
A **Who's Who** and a **What's What** in 1875, help today's readers situate themselves in this story of "the olden days".

Short chapters: read aloud

Silhouette pictures

Suits juniors

100 pages.



### THE HURRICANE LANTERN

*What are the rules*

*for the hurricane lantern?*

**Rules for the hurricane lantern are:**  
**don't wind the wick so high**  
**you smoke the chimney glass and**  
**don't wind the wick into the well.**

Find out how to open your lantern  
 (they are not all the same).

Trim wick level, smooth the corners.

To extinguish, blow it out, (don't wind the wick down: leave it alone.)

Take glass out to wipe it clean.

Liquid kerosene is poisonous.

Burning it makes poisonous gas.

It is coloured blue for safety.

It is not as explosive as bottled gas.

Double wrap the "K" bottle.

Carry in outer knapsack pocket.

Keep away from food.

# WHO'S WHO

## **The Lawson family at Terra Sancta, Guntawang**

Dad & Mum: Max & Meg;.

Big sisters: Colleen & Kathleen (twins);

Our heroes, **Jack, Jim & Joe**, Bush Boy Explorers  
(*Jehu Jack, Cowboy Jim, Goanna Joe*)

The Littlies: Tilly (Matilda), Tommy & Billy

and the baby Bridgee (Bridget);

and Mrs Ann Cox (Meg's mother).

## **ANIMALS at Terra Sancta**

Buttercup, cow in milk

Bubs, her bull calf at heel,

Kanga (was Caligula), Tom & Billy's blue cattle dog cross

Sox, Tilly's cat with white paws

Lady, Liz, Lucy: ponies loaned to Colleen, Kathleen & Tilly

Chooks or 'chickens', known as Joe's 'dwarf emus'

Go-go, Joe's goanna.

## **The Shy Spy Triplets (SST) of Galway Crag**

named by the Cumberlands throughout the story as

**Shadrach, Mesach & Abednego**,

(= Dudley & Dennis Dollerman, cousin David Marsden),

pupils at the Academy of Bible Christians,

(Dudley & Dennis adopted by uncle Ernie & aunt Sue.

## **OTHER CHARACTERS in Galway Crag**

Father John Tyndale, Parish Priest, St Gregory's Galway Crag

Other altar servers Harry, Mick & Bob Mahoney; and Gerry.

Mr Mike Mistry (Big Misty), Manager, St Vincent de Paul Store

Adam McGinty, editor, *The Mountain Clarion*, son Andy

Miss Maisie Tanglewebb, Genealogist.

Folk Museum, Alexander 'Gargoyle' Guilfoyle

Trixy's Trash 'n' Treasures (junk/antiques)

National Parks & Wildlife Service, John Baldwin, Ranger

Dr Percy Pinn, Principal of the Wild Bush Mountains Grammar School

Cuthbert Bishop (Greg & Bernie's cousin on mother's side).

**VISITORS to *Terra Sancta*****On the first weekend**

Flo, Jane, **Mick, Rick & Phil** from Boxwatch/Lahdidar  
**Fred Fox**, former owner of *Terra Sancta*, VIP.

**On second weekend:**

Bess, **Ben, Ken & Steve** from Boxwatch/Lahdidar,  
 plus Cecilia, Lucy & Agnes Mahoney from Galway Craggs.

**Former Visitors** in the earlier book, *New Boys in the Bush*:  
 uncle Wal (Meg's brother) and cousins Patricia, **Simon & Dominic**, (with auntie Irene and four littlies at home in Lahdidar.

**OTHER CHARACTERS**

In Guntawang Village: General Store, Café, Bank, Post Office  
 & motor Garage, all run by **Luigi & Caterina Castonelli**.

**The Cumberland Family at *The Hills of Home***

Dad & Mum: Mat & Mary;  
 Frank (R.I.P. four years ago);  
 the original Bush Boys **Greg & Bernie**;  
 Kate, Tim & Tess  
 and baby Beth (Elizabeth);  
 and Gran, Mrs Anne O'Neill.

**Their friends in Coachwood Falls Village**

Jenny, Peter, John & Judy Cumberland who are Greg and  
 Bernie's cousins  
 plus their neighbours, Kev Keys and Sam Kalumbo.