



JUNE 2025

NEXT TRIPS

Mystery Day Trip June 28
Curry Night July 5
AGM July 26

**CLUB FEES ARE NOW DUE
PLEASE RENEW BEFORE THE AGM JULY 26**



Aids to Survival
Preparing physically for 4WD adventures
Your Guide To Mud Driving in a 4WD
What modifications need to be engineered to be legal?
Trailblazer Pad Thai
Northern Territory Red Centre Photos
4X4 Association Gathering Trip Report

Next Meeting
25/6/25

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CLUB CONTACT DETAILS

POST OFFICE BOX 8233

WARNBRO WA 6169

<https://peel4x4club.com>Club Email: peel4x4club@hotmail.comSecretary: secretarypeel4x4club@outlook.comTreasurer: peel4x4.treasurer@gmail.comMagazine Email: peel4x4magazine@gmail.com**2024—2025 COMMITTEE**

President Gary Mayes

Secretary Julie Power

Treasurer Vacant

Vice President / Insurance Officer Dave Knudsen

Environmental Officer Chris Jones

Trip Coordinator Steven Power

Magazine Editor Brian Tanner

Property Officer Jacob Yardley

Delegate Vacant

NEXT GENERAL MEETING

25/6/2025

GENERAL MEETING VENUESecret Harbour Surf Lifesaving Club
(Downstairs)

Doors open 7.00 pm

Meeting starts 7.30 pm

NEXT COMMITTEE MEETING

13/8/2025

COMMITTEE MEETING VENUE

It's a secret

Membership Fees \$140.00 for the first year then \$90.00 per annum. Pro rata fees will be charged depending on your joining date.



Find us on

Facebook
[peel4x4club](https://www.facebook.com/peel4x4club)




PEEL 4X4 CLUB TRIP RATINGS



SCENIC / SOCIAL: Sealed roads & some good unsealed roads or tracks.

Road tyres are acceptable.

No 4WD experience required.

EASY: Unsealed roads or tracks. Expect some corrugations.

Road tyres are acceptable. Little or no 4WD experience required.

Front & rear recovery points at the Trip Leaders discretion.

MEDIUM: Off road tracks, with some obstacles expected (rocks, ruts, mud, etc...).

All Terrain tyres are preferred.

Low range may be required, with a snatch strap recovery possible.

Front & rear recovery points are required, along with basic recovery gear.

Tracks may be a little bit scratchy.

HARD: Steep terrain and / or rutted tracks.

All terrain tyres are acceptable; however mud tyres are preferred. Road tyres are not acceptable.

Snatch strap and / or winch recovery may be required.

Front & rear recovery points are required, along with basic recovery gear.

A winch & full recovery gear is preferred.

Some scratches to panel should be expected.

EXTREME: Very steep, deeply rutted tracks or rock hopping will be encountered.

Mud terrain tyres are essential, with appropriate driver training preferred.

Adequate front & rear recovery points, and full recovery gear required.

Winching will be expected, and a winch is compulsory on all vehicles.

Expect scratches to body work, along with panel damage.

Basic Recovery Gear: Snatch strap, 2x rated shackles, and gloves.

Full Recovery Gear: Snatch strap, rated shackles & gloves, tree trunk protector, winch extension.

PLEASE NOTE

Whilst every attempt will be made to accurately describe & classify all trips, weather & other conditions can alter a trip significantly.

The Trip Leader may alter the trip classification at any time, depending on the prevailing weather conditions.

Please confirm your attendance by contacting the Trip Leader a few days prior to the trip. This also gives them the opportunity to advise you of any last minute changes.

Vehicles without adequate front & rear recovery points are limited to Social / Scenic & Easy rated trips.

Visitors are always welcome on Scenic / Social, Easy & Medium rated trips.



CONVOY PROCEDURES

1. Trip leader is to call a group meeting prior to start and remind members of convoy procedure.
2. Leader is to appoint a tail end Charlie and safety officer for each trip.
3. Observe road rules at all times.
4. Leader to appoint a trip reporter.
5. All drivers are responsible for their passengers at all times.
6. All vehicles are responsible for the following vehicle when turning off the road and at cross roads.
7. Vehicles leaving convoy for any reason wave on the remainder of the convoy and inform the Tail End Charlie of their intentions.
8. Keep a safe distance behind the vehicle in front of you. Drive within braking distance especially when wet.
9. When off road allow the vehicle in front of you to get over the crest of a hill before you attempt to follow. Wait for the all clear.
10. No vehicle is to pass the trip leader unless directed or in an emergency.
11. Drive with headlights on at all times. Daylight run lamps are not sufficient as tail lights are required to be on to aid visibility
12. All cars to maintain position/order in convoy at all times.
13. Collect magnetic numbers at designated point of dispersal.

TAIL END CHARLIE RESPONSIBILITIES

1. Assists trip leader with convoy as directed.
2. Advises when - Convoy is mobile
 Change in direction is completed
 Member leaves convoy
3. Stays with a vehicle that may leave the convoy for a short stop. Advises trip leader when mobile again.
4. Closes gates etc if advised by trip leader.
5. Ensures cleanliness of area at all stops before leaving.



TIPS TO BECOMING A TRIP LEADER

1. **A Trip:** If there is somewhere you would like to go and would also like to drag the club along with you, why not approach the trip coordinator or another club member and discuss your ideas. Failing that, choose a trip from the club's varied range of notes and maps available.
2. **What Experience Must I Have?** This depends largely on the grade of trip (scenic/ social, easy. Medium, hard, extreme) and area you wish to conduct you trip in. As a rule of thumb, if you, the trip leader feel confident in your abilities, yet realize your limitations, you're in.
3. **Should I Have An Assistant?** YES. An assistant is invaluable in helping to bridge the gaps in your experience and to help balance the decision making, someone who is experienced in 4WD is a good choice. They would normally fill the position of tail end Charlie, providing backup from the rear.
4. **How To Plan A Smooth Trip:** Your trip will only run as smoothly as you plan it. Your pre trip briefing should include convoy procedures, identify tail end Charlie, safety officer, allocation of magnetic numbers, give brief description of what the group may encounter, (the element of surprise doesn't enhance the element of a good trip) and any safety tips eg use of flag.
5. **Flexibility:** At some stage during your trip, things may go wrong such as running behind time, countless recoveries, trapped or lost. Don't despair, things are never as bad as they seem. Don't be afraid to come forward and consult with the group as they are in it just as much as what you are. Pool your ideas and something always comes of it. Flexibility is the key, never be afraid to change your plan.
6. **How To Get Started:** Formulate your intention on paper - where you want to go, time and date and any special features of land marks you wish to include. See the trip coordinator who can help out with maps and advice or give you the name of someone who has been there before. You may also need to contact relevant authorities', eg CALM, caravan parks, road conditions and property owners for further information. The trip coordinator will place your trip on the calendar and organize a sheet to go out at the meeting.
7. **What's The Hardest Task?** Giving It A Go!!: con, bribe, coerce or draw straws to pick some unfortunate soul to write up a trip report for the magazine (definitely the hardest part). So when you reflect back on your trip your hearsay adventures and yourself, umpteen grueling hours up to your neck in mud and leeches, grueling hours of gut wrenching recoveries and those dribble sessions around a campfire. A trip report ending in the words, "Good time had by all" is well worth giving trip leader a go.

NOTE - If you have ever been a trip leader, you will know how frustrating it is when people put their name on the trip sheet then don't turn up! If you put your name down to go on a trip make note of it and if you are unable to attend for any reason (or no reason at all) let the trip leader know so they are not waiting for you. Be punctual too as you being late can cause frustration when we have to meet up with other people along the way or set tour times! If you are running late phone the trip leader.



CLUB FEES NOW DUE

\$90 Regular membership

DUE 1ST
JULY



Please note:

We are not offering a spouse membership anymore. General membership now includes everyone in the members immediate family and children under 18. This means there is one vote per family and a member's spouse will be able to sit on the committee if they so desire. Please renew your membership before the AGM 26th July



2025

Annual General Meeting

Saturday 26th July

@ TPDVWA

Total & Partially Disabled and Veterans of WA Inc.

1677 Old Mandurah Road Baldivis

- **4pm Meeting** followed by
- **BBQ** CLUB WILL PROVIDE THE MEAT & CONDIMENTS
- **Members** TO PROVIDE A SALAD OR DESSERT TO SHARE
- **DRINKS** CHEAP BAR PRICES
- **OVER NIGHT CAMPING** SWAG OR CAMPER for those wishing to stay
Hot shower and Toilets
- **AWARDS, RAFFLES & DOOR PRIZES**
- Sunday -Breakfast**
PROVIDED BY CLUB



Member, Spouse and children of members under 18 free

Non members welcome at \$10.00 per head (note this cost will be deducted from your joining fee when you become a member)

Any additional adults attending with members will be at the cost of \$10.00 per head

This is not a BYO drinks venue cheap club prices for drinks will apply



DUTIES OF OFFICE BEARERS & COMMITTEE MEMBERS



Association = Peel 4x4 Club

Rules = Constitution

WA4WDA = Western Australia Four Wheel Drive Association

OFFICE BEARERS

CHAIRPERSON

- Is the face of the Peel 4x4 Club.
- Handles phone communication into or out of the club as required.
- Communicates with the Secretary, and plans for General Meetings, Committee Meetings & Annual General Meetings, as required.
- Runs all club meetings.
- Point of contact regarding ABN, Tax File Number, and Associations Online.
- Manages the Rules of Association (Constitution).
- Custodian of the keys for the Secret Harbour Surf Lifesaving Club.

VICE PRESIDENT

- Fills in for the Chairperson, when the Chairperson is unavailable (with reasonable notice).

SECRETARY

- Responsible person for the club laptop.
- Manages communication into & out of the club via email. And also by phone where required.
- Checks the club Post Office Box, unless this has been delegated to someone else. Custodian of the key for the PO Box key.
- Manages the Attendance Book at each meeting (General, Committee, Special, and Annual General).
- Communicates with the Chairperson in regards to club matters.
- Submits the annual information statement to Consumer Protection
- Maintains the register of members.
- Point of contact for the WA4WDA.
- Takes minutes of meetings, and issues to the Chairperson for acceptance.
- Sends out Minutes of Meetings for each meeting of the club, to the required members.
- Ensures all club records are satisfactorily filed & maintained.



DUTIES OF OFFICE BEARERS & COMMITTEE MEMBERS



TREASURER

- Maintains the club financial account/s.
- Point of contact for all financial matters.
- Keeps a formal record of all financial expenditure of the club (incoming & outgoing).
- Ensures that any payments made from the club account have been authorised by the Committee where required.
- Manages the raffles at General Meetings & Annual General Meetings. This includes purchasing raffle prizes where require.
- Issues receipts for monies taken, where required / requested.
- Sends out notification to members when membership fees are coming due.
- Issues invoices / communication for payment to new members.
- Organises badges & payment of badges for new members.
- Organises shields, and payment of shields for Annual General Meeting awards.
- Provides a written overview of financial records at each club meeting – Received, Expenditure, Pending, and total balance.



DUTIES OF OFFICE BEARERS & COMMITTEE MEMBERS



ORDINARY COMMITTEE MEMBERS

INSURANCE OFFICER

- Holds & maintains all records of all insurances held by the club.
- Attends meetings relating to club insurance where possible, or arranges a delegate.

TRIP CO-ORDINATOR (S)

- Maintains a list of all upcoming trips, and communicates upcoming trips at club meetings.
- Displays upcoming Trip Sheets at General Meetings, ensuring all required information has been filled out.
- Maintains all previous trip sheets.
- On occasions, coordinate group gatherings (booking of sites, etc...)
- Encourages members to run trips; and assists where necessary.

ENVIRONMENTAL OFFICER

- Responsible for dealing with environmental issues as they arise, and attends WA4WDA meetings as required

MAGAZINE EDITOR

- Produce and distributes the Club magazine at the general meeting each month.
- Ensures a copy of each Public Magazine is filed with the National Archives.

PROPERTY OFFICER

- Holds all property that belongs to the Club.
- Maintains a log detailing all property taken by members, date taken, and date returned.
- Ensures the Club property is maintained in good order. Items requiring attention to be tabled at the next Committee meeting, which shall consider, and if necessary, authorise any expenditure for the repair or replacement.
- Notifies the club at a General / Committee Meeting when PLB's are 12 months from expiry date.

ASSOCIATION DELEGATE (S)

- Attends Association meetings and represents the Clubs best interests and reports back to the Club as necessary at General & Committee Meetings.

WEBMASTER

- Maintains and updates the club website and social media pages.
- Point of contact for website enquiries.
- Liaises with website host where required.
- Updates members on website & social media traffic at General Meetings.



ANNUAL GENERAL MEETING AGENDA SUMMARY

- CHAIRPERSON Opens meeting
- APOLOGIES AND ATTENDANCE
- MINUTES OF THE PREVIOUS MEETING
- PRESIDENTS REPORT OF THE PREVIOUS YEAR
- TREASURERS REPORT ETC
- COMMITTEE STANDS DOWN
- ELECTION OF NEW COMMITTEE MEMBERS
- GENERAL BUSINESS
- Meeting Closed

Next Committee Meeting Date

Next General Meeting Date



ANNUAL GENERAL MEETING OF THE PEEL 4X4 CLUB

Annual General Meeting Minutes

Date: Saturday 06th July, 2024

Venue: Greenhills Inn, Greenhills



Meeting Opened: 5:31pm

Chairperson welcomed all members & visitors.

Safety Briefing.

ATTENDEES & VISITORS. As per attendance register.

APOLOGIES / PROXIES. As per attendance register.

2. TRIPS SINCE LAST MEETING

- All trips for the last financial year were read out, with a brief discussion of each trip.

3. CONFIRMATION OF MINUTES FROM PREVIOUS GENERAL MEETING – 27th May 2023

- Chairperson has accepted the previous minutes, however they had not been signed.
- There were no objections as to the accuracy of the minutes, therefore unanimously accepted.

BUSINESS FROM THE PREVIOUS MINUTES

- No formal business from the previous minutes.
- Club awards from the previous AGM were read out & discussed.
 - Club Person of the Year: Gary Mayes
 - Most Talked about Trip: Dave Knudsen (Nungarrin Trip)
 - Best Mishap: Dave Knudsen (losing a wheel on the way home from Nungarrin)
 - Club Stirrer of the Year: Phillip Crewe (no surprises)
 - Golden Snorkel Award: Chris Jones

PRESIDENTS REPORT (Gary Mayes)

- Chairperson thanked the standing down Committee for their work over the last 12 months, and discussed the changes that we have seen over the last 12 months:
 - Updated website, with maps available to download.
 - Increase in visitors. 2 new members. ~20% new member to visitor ratio.
 - 2 members not rejoining.
 - Constitution update started. Tailoring to the club, rather than the Model Rules.
 - Quorum change from 60%? To 30%? Also change to Committee Quorum.
 - Headlights mandatory on club trips (as opposed to just DRL's)
 - Technical segments at General Meetings (where time permits)
 - Pizza at meetings

Business for the President:

- No business for the Chairperson.



ANNUAL GENERAL MEETING OF THE PEEL 4X4 CLUB

Annual General Meeting Minutes

Date: Saturday 06th July, 2024

Venue: Greenhills Inn, Greenhills



SECRETARY'S REPORT (Donna Light) (Apologies)

- Nothing to report.
- **Business for the Secretary:**
- No business for the Secretary.

TREASURERS REPORT (Cassie Mayes)

- Opening balance at the start of the Financial Year: \$5,810.50
- Current total in the bank \$6,744.25
- 2023/2024 memberships totalled 38.
Currently 18 members have renewed. (15 full members, and 3 spouse members)
Cassie reminded everyone that fees are now due for those that have not yet paid.
- Reimbursement for WA4WDA Grant has now been received.
- **Business for the Treasurer:**
- No business for the Treasurer.

INSURANCE OFFICERS REPORT (Dave Knudsen) (Apologies)

- Nothing to report.
- **Business for the Insurance Officer:**
- No business for the Insurance Officer.

PROPERTY OFFICER (Vacant)

- Not Applicable
- **Business for the Property Officer**
- Not Applicable

ENVIRONMENTAL OFFICERS REPORT (Peter Light) (Apologies)

- Nothing to report.
- **Business for the Environmental Officer**
- No business for the Environmental Officer.

DELEGATES REPORT (Gary Mayes)

- Nothing to report since the previous General Meeting.
- **Business for the Delegate**
- No business for the Delegate.

MAGAZINE EDITORS REPORT (Brian Tanner) (Apologies)

- Nothing to report.
- **Business for the Magazine Editor**
- No business for the Magazine Editor.



**ANNUAL GENERAL MEETING OF THE PEEL 4X4 CLUB****Annual General Meeting Minutes**Date: Saturday 06th July, 2024

Venue: Greenhills Inn, Greenhills



Club Awards were then read out by Donna & Julie, and handed over by the Chairperson.

- Club Person of the Year: Gary Mayes
- Most Talked about Trip: Ian Screech, for his Mellenbye Station trip.
- Best Mishap: Chris Jones, for drowning his vehicle on the Holland Track Trip. It was discussed that this happened the previous year, however the number of votes showed that it was a mishap that remained in everyone's minds.
- Club Stirrer of the Year: Duane Bucko

GENERAL BUSINESS

- Gary apologised for the AGM starting later than expected, being a result of car issues.
- Gary also thanked Julie Power & Cassie Mayes for setting up the venue.
- Gary forgot to thank Julie Power for organising the venue, so **thankyou very much to Julie for her time in organising the venue for the AGM.**
- Gary thanked Donna & Julie for counting the votes.

Major Prize & Raffle Winners

- Door Prize: Anne Discombe: 1000A Jump Starter
- Major Raffle: Glenn & Sue French: 17 piece recovery kit
- Minor Raffle: Various winners of a large number prizes, except for Mark Skeels. He must have stood on a leprechaun that was picking a 4 leaf clover.
- \$100 fuel voucher: Glenn & Sue French
- Gary then thanked everyone for attending, and asked for those that were driving home, to please be careful with the poor weather.

NEXT GENERAL MEETING: Wednesday 24th July 2024. Secret Harbour Surf Life Saving Club.

Doors open at 7:00pm. Meeting starts at 7:30pm. Pizza for those interested.

NEXT COMMITTEE MEETING: Wednesday 14th August 2024. Hosted by Steve & Julie Power.

Meeting closed at: 8:08pm

The minutes from this meeting have been verified as true & correct.

Gary Mayes

Peel 4x4 Club Chairperson

Date: 14/07/2024



Peel 4x4 Club – Trips & Events since the 2024 Annual General Meeting

Saturday 6th July 2024

Annual General Meeting – Greenhill Inn, Greenhills

Trip Leader: Peel 4x4 Club Committee

Sunday 21st July 2024

Harvey trip

Trip Leader: Brian Tanner

Sunday 4th August 2024

Mundaring to Collie section of the MundAI Track, with Out & About 4x4 Club

Trip Leader: Gary Mayes

Sunday 1st September 2024

Julimar Tracks

Trip Leader: Dave Knudsen

15th September to 29th September

Kalgnet & Magenew Tracks

Trip Leader: Mark Skeels

21st to 22nd September 2024

Avon Valley Exploring

Trip Leader: Steven Power

Saturday 28th September 2024

AFL Grand Final Party

Trip Leader: Dave Knudsen

11th to 13th October 2024

Mandurah Boat, Caravan, 4WD & Camping Show

Trip Leader: Dave Knudsen

Saturday 26th October 2024

Collie Powerlines

Trip Leader: Gary Mayes

Saturday 2nd November 2024 (9 days)

Shark Bay Trip

Trip Leader: Duane Buckenara



Peel 4x4 Club – Trips & Events since the 2024 Annual General Meeting

Sunday 17th November 2024

Lancelin Trip

Trip Leader: Dave Knudsen

Saturday 7th December 2024

Secret Harbour Surf Club Carnival

Trip Leader: Gary Mayes

Sunday 15th December 2024

Club Christmas Party @ Birdees

Trip Leader: Peel 4x4 Club Committee (but organised by Julie Power)

Friday 24th January to Monday 27th January 2025

Australia Day Long Weekend @ Northcliffe

Trip Leader: Steven & Julie Power

Day Trip 1 (25th January): Broke Inlet: Gary Mayes

Day Trip 2 (26th January): Callcup Hill: Winton Headlam

Sunday 16th February 2025

Lennard Track & Gnomesville

Trip Leader: Gary Mayes

21st to 25th February 2025

Koorda Drive-In & Sandy Cape

Trip Leader: Mark Skeels

21st to 23rd March 2025

Dwellingup Camping Trip / Captain Fawcett Track both ways

Trip Leader: Gary Mayes

Sunday 13th April 2025

All Grain Beer Brewing Day

Trip Leader: Gary Mayes

From 24th April 2025

Nullarbor Muster. Tent / Swag Trip

Trip Leader: Mark Skeels

Friday 25th April

Wandoo Swag Trip

Trip Leader: Ray Warry



Peel 4x4 Club – Trips & Events since the 2024 Annual General Meeting

Sunday 4th May
Mundaring Powerlines
Trip Leader: Gary Mayes

Sunday 18th May to 21st June
Red Centre Trip - Ruby Gap, Hamilton Station, Alice Springs
Trip Leader: Mark Skeels

28th June 2025
Mystery Trip
Trip Leader: Steven Power

5th July 2025
Curry night
Trip Leader: Steven & Julie Power





Nomination Form 2025

Annual General Meeting
Peel 4x4 Club



I / we.....

Nominate.....

For the Position of (Please Circle)

President

Secretary

Magazine Editor

Property Officer

Webmaster

Vice President/Insurance Officer

Treasurer

Environmental Officer

Trip Co-Ordinator

Delegate

Please remember: **ONLY ONE FORM PER MEMBER**

Thank you.



Club Awards 2025

Annual General Meeting
Peel 4x4 Club



I / we.....

Would like to nominate the following people for the 2025 Peel 4x4 Club Awards

Club Person of the Year:

Most Talked About Trip:

Best Mishap:

Club Stirrer of the Year:

Please remember: **ONLY ONE FORM PER MEMBER**

Thank you.



PEEL 4X4 CLUB BYLAWS

- 1.The trip leader will delegate the position of Safety/Recovery officer to another member prior to trip departure.
- 2.All members and visitors are to follow the Safety Officer's instructions at all times
- 3.No pets allowed on club trips.
- 4.Each club member is to be responsible for the safety and whereabouts of their own children.
- 5.Trip Leader responsibilities and Tail End Charlie role to be read out before each trip.
- 6.After 2 trips you must have adequate front and rear recovery points fitted to your vehicle and must have a UHF CB radio.
- 7.Vehicles without adequate front and rear recovery points are limited to scenic/social and easy rated trips.
- 8.All trips are to be rated scenic/social; easy; medium; hard and extreme. Visitors are not permitted on hard and extreme trip. Membership of the WA4Wd Assoc is required for attendance on hard and extreme trips.
- 9.Proceeds from fundraising will be used for club purposes.
- 10.A limit of 15 vehicles per trip will apply. Trip leader has the discretion to increase or decrease this number.
- 11.First in best-dressed, if in excess of 15 vehicles wish to attend a trip, based on prior confirmation.
- 12.Club bank account to hold a minimum of \$1000 balance. A portion of this amount may be used to purchase urgent items at the committee's discretion.
- 13.Whilst every care is taken, no responsibility is accepted.
- 14.Visitors must attend at least 2 trips, rated easy and/or medium, to qualify for membership. Scenic/social trips will not be counted.

PEEL 4X4 CODE OF ETHICS

- 1.Keep to the laws and regulations for 4wd vehicles. They may change from state to state.
- 2.All vehicles must have either comprehensive or third party fire and theft insurance.
- 3.Keep the environment clean. Carry your own and, maybe, other people's rubbish home.
- 4.Obey restrictions on use of public lands. Respect national parks and other conservation areas.
- 5.Obtain permission before driving on private land. Leave livestock alone and gates as found.
- 6.Keep your vehicle mechanically sound.
- 7.Take adequate water, food, fuel and spares on trips. In remote areas travel with another vehicle.
- 8.Respect our wild life. Stop and look but never disturb or chase animals.
- 9.Respect other recreationalists rights to peace and solitude in the bush.
- 10.Obey all fire restrictions. Extinguish your fire before leaving. Don't let your exhaust emit sparks.
- 11.Help in bushfire emergencies and search and rescue but only if you are properly equipped and able.
- 12.Support 4WD touring as a responsible and legitimate recreational activity.
- 13.All members should behave in a socially acceptable manner at all times.

This code is valuable only if you observe it

CLUB SHIRTS



PILBARA COTTON SHIRT

**AVAILABLE IN
FULL & HALF BUTTON
LONG & SHORT SLEEVE**

\$55 ALL STYLES



RAZOR POLO

**AVAILABLE IN
MENS, LADIES
& KIDS SIZING**

**ADULTS \$40
KIDS \$35**

**ALL PRICES INCLUDE
EMBROIDERY OF CLUB
LOGO**

**NAMES OPTIONAL
EXTRA \$7**

**** ORDERS CAN BE PLACED
THROUGH THE WEBMASTER****

**PEEL4X4.WEBMASTER@GMAIL.COM OR AT
A GENERAL MEETING**



PEEL 4X4 CLUB Property Register



- * 1x Space Case (900L x 390W x 400H)
- * 4x 490mm Black Plastic Sand Pegs
- * 1x ARB Gazebo
- * 1x Wanderer Gazebo
- * 1x Heatlie BBQ (~880mm x 540mm)
- * 1x Plastic Peel 4x4 Club sign (Folding Triangle Core Flute Type)
- * 1x 5.33kg Gas Bottle (Empty)
- * 1x Wanderer single wall for gazebo
- * 1x wanderer half wall for gazebo
- * 1x 600mm diameter collapsible bin
- * Gavel & block (President)
- * Trophy – Most talked about event of the year (1998 – 2014) (Broken)
- * Trophy – Burnt pot award (2000 – 2014)
- * 4x metal Peel 4x4 signs (staked flag design)
- * Various large paper & laminated maps
- * 1x 2.9m Snatch Strap
- * 1x Red & Yellow Peel 4x4 Club Flag / Banner (1940mm x 970mm)
- * 1x Tennis Net in bag (no racquets)
- * Heap of old Peel 4x4 Club magazines, hard floppy disks, and stuff...
- * 1 orange safety vest

- * GME MT610G GPS PLB (with cover)
 UIN = 3EEEEAA4E8AFFBFF
 Batch Expiry = 12/2029
 Serial No. = 2206617244

- * GME MT610G GPS PLB (with cover)
 UIN = 3EEEEAA4E8CFFBFF
 Batch Expiry = 12/2029
 Serial No. = 22066200345

- * GME MT610G GPS PLB (with cover)
 UIN = 3EEEEAA4E78FFBFF
 Batch Expiry = 12/2029
 Serial No. = 2206620806



Containers for Change



After the AGM we made an account to donate the empty recycling containers to the club.

These funds can then be used towards our social functions or other agreed upon purchases for the club as something a little extra.

No obligation, and we understand people collect their own, but if you have any empty bottles or cans laying around please feel free to use the QR code or account

C11064407



Purchase an Entertainment Membership and get a FREE UPGRADE
Simply click on the link below:

<https://subscribe.entertainment.com.au/fundraiser/84490n>



We're fundraising with
 Entertainment

Discover more, everyday
with the Entertainment Membership

Bonus Upgrade to
Multi City Membership*

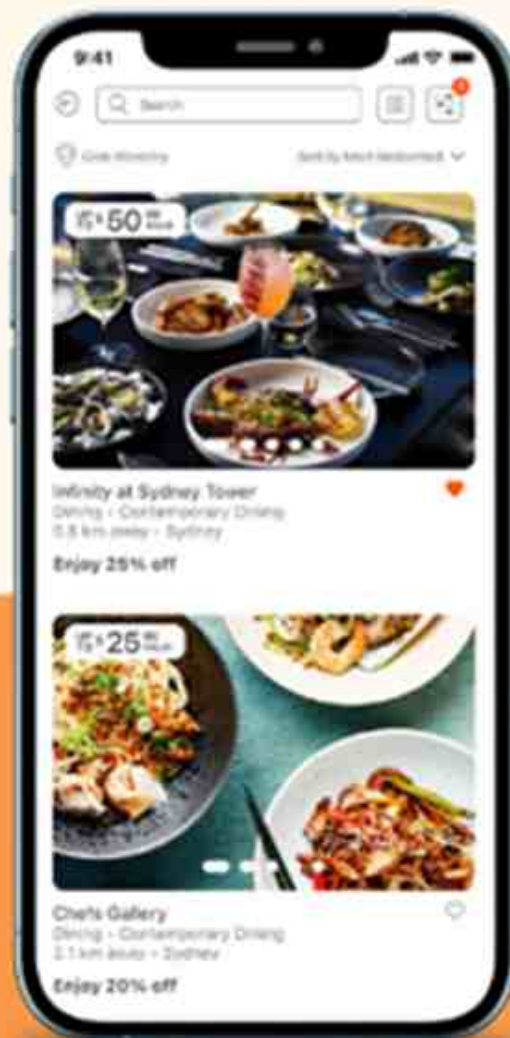
12 months		24 months	
Pay	Save	Pay	Save
\$70	\$50	\$120	\$110
We receive		We receive	
\$14		\$24	

*T&Cs apply.

The savvy
way to give back

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Hey Everyone,

I hope you're managing to get out & about with this wet & gloomy weather.

As you are aware, we are moving closer towards the Annual General Meeting each day.

You will see in this months magazine, there is an updated (simplified) description of what is required for each role within the Committee, along with nomination forms for the Committee positions, and club awards.

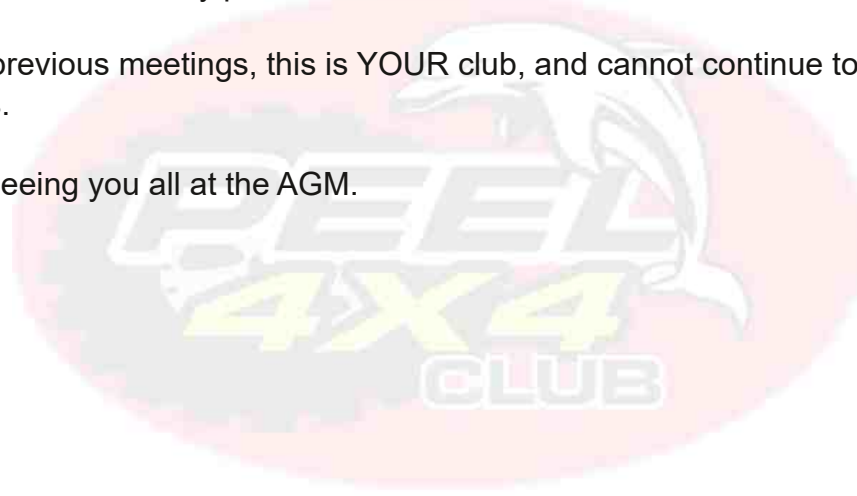
May I please ask that everyone has a look at what is required for the Committee positions, and consider nominating yourself for a role on the Committee - even if only for 12 months.

If you would like any further information, please see me at the General Meeting, call me, message me on Facebook or my phone, or send me an email.

As mentioned at previous meetings, this is YOUR club, and cannot continue to run without the help of volunteers.

I look forward to seeing you all at the AGM.

Gary





I put the new caravan in for it's first service a couple of weeks ago, soon after dropping it off the repairer phoned me to tell me they noticed the solar plug and a reflector were broken. After explaining I grazed a bollard in the shopping centre carpark in Albany I said just replace the reflector as I have all the gear to replace the plug at home (thinking it would only be a few dollars for the reflector). After I got the van back home I looked at the bill and saw the reflector was \$3.50 but \$25.00 in labour to fit it?????? Two screws????? I'm glad I didn't get them to replace the Anderson plug.

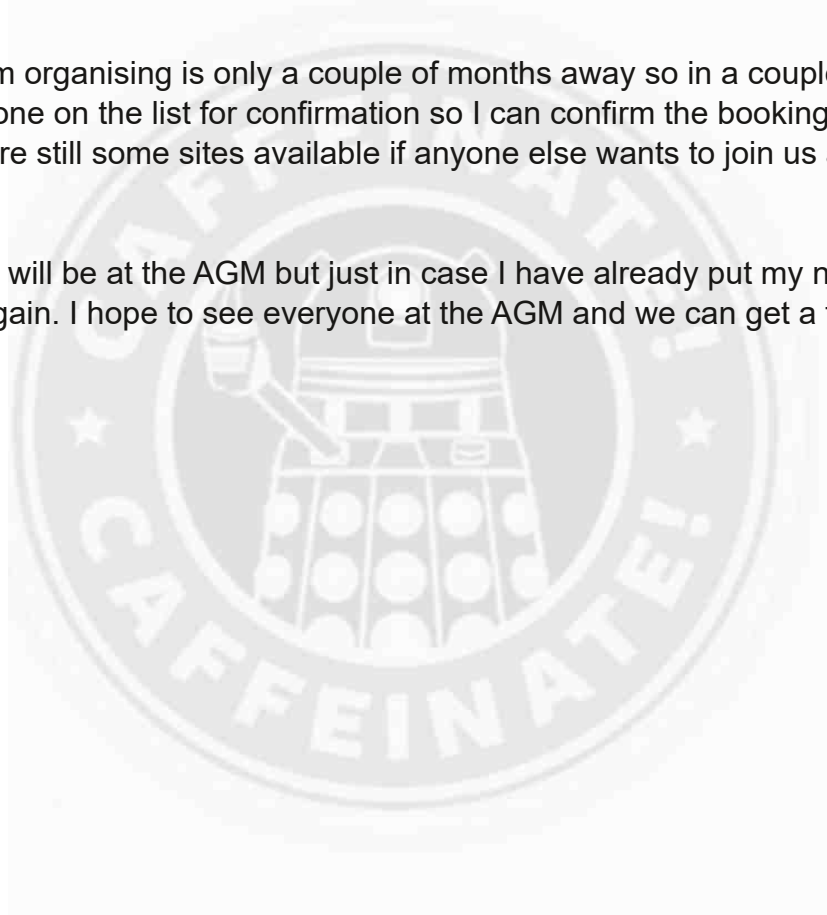
Rant over.

Speaking of the van we just returned from a nice week in Margs for Julies birthday. Her brother phoned and said she is now officially a geriatric. That made her day :-) Unfortunatly we were a bit early to see any whales so its a good excuse to come back down again in a couple of months.

The wildflower trip I am organising is only a couple of months away so in a couple of weeks I will be emailing everyone on the list for confirmation so I can confirm the booking at the caravan park. There are still some sites available if anyone else wants to join us and of course visitors are welcome.

I am about 80% sure I will be at the AGM but just in case I have already put my nomination in for Magazine Editor again. I hope to see everyone at the AGM and we can get a full committee.

Brisey





GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 28th May, 2025

Venue: Secret Harbour Surf Life Saving Club



Meeting Opened: 7:31pm

Safety Briefing.

ATTENDEES & VISITORS. As per attendance register.

APOLOGIES / PROXIES. As per attendance register.

1. TRIPS SINCE LAST MEETING

- Friday 25th April – Wandoo Swag Trip. Trip Leader: Ray Warry
- Sunday 4th May – Mundaring Powerlines. Trip Leader: Gary Mayes
- Sunday 18th May to 21st June – Red Centre Trip. Trip Leader: Mark Skeels. Just left Oodnadatta. Gary mentioned about Mark Skeels posting of his burger & 2x tyre replacements in Oodnadatta. Should now be at William Creek.

2. CONFIRMATION OF MINUTES FROM PREVIOUS GENERAL MEETING – 23rd April 2025

Chairperson Gary Mayes has signed & accepted the previous minutes.

No objections as to the accuracy of the minutes. Unanimously Accepted.

3. BUSINESS & ACTIONS FROM THE PREVIOUS MINUTES

- Tax returns needed to be completed by 31st March 2025. Gary advised that he will follow up when he gets time.
- Gary to transfer files to Secretary laptop. Gary advised that this is 99% complete now, however will finalise once the Secretary has been determined at the AGM.

4. PRESIDENTS REPORT (Gary Mayes)

- Gary advised that there was no real club business to report, and reminded everyone that we had a long weekend coming up, which results in double demerits.
- Gary also mentioned that all future meetings will now be in the current location, as the Surf Club are getting busier with venue requests. They advised it getting challenging to accommodate businesses now wanting to hold evening classes / workshops upstairs, along with our meetings.
- New member Stuart Snart was welcomed to the club (although not present).
- Badges were handed out to those members who were waiting for them.
- Gary advised that despite previous discussions to stay on as President, he will need to stand down from all roles he is currently doing at the AGM for personal reasons. He did state though, that he is happy to stay on as Webmaster, and will provide support where possible. Gary also intends to finish off everything he was working on, including the Constitution update.

Business for the President:

- No business for the President.



GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 28th May, 2025

Venue: Secret Harbour Surf Life Saving Club



5. SECRETARY'S REPORT (Julie Power - Apologies)

- Nothing to report.
- No relevant mail passed on.
Business for the Secretary:
- No business for the Secretary.

6. TREASURERS REPORT (Gary Mayes)

- Gary advised that Hugh has now stepped down from the role of Treasurer.
- CREDITS: 22/05/2025: \$65.50. Stuart Snart membership
4/04/2025: \$14.71. Raffle tickets from April General Meeting
- DEBITS: Nil
- PENDING: Nil
- CLOSING BALANCE (26/05/2025): \$4,925.58
Business for the Treasurer:
- It was asked when club fees were going to be due. Gary advised that he would send out an email to all members. **ACTION: Gary**

7. INSURANCE OFFICERS REPORT (Dave Knudsen)

- Nothing to report.
Business for the Insurance Officer:
- No business for the Insurance Officer.

8. PROPERTY OFFICER (Jacob Yardley - Apologies)

- No business sent through.
Business for the Property Officer
- No business for the Property Officer.

9. ENVIRONMENTAL OFFICERS REPORT (Chris Jones)

- Nothing to report.
Business for the Environmental Officer
- No business for the Environmental Officer.

10. DELEGATES REPORT (Vacant)

- This position is currently vacant. No members attended the last Delegates Meeting.
- Gary put the suggestion to members present about going into a rotating pool.
Business for the Delegate
- Gary advised that the July Delegates Meeting has been brought forward to Monday 14th July.



GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 28th May, 2025

Venue: Secret Harbour Surf Life Saving Club



11. MAGAZINE EDITORS REPORT (Brian Tanner)

- Brian advised that the recent magazine was a big one, at 100 pages in length.
- There is a new segment in the magazine, being "Aids to Survival". Brian advised that the full content he has for this, is approximately 120 pages long, so will break it down to 25 pages, and run it across a few magazines.
- An updated information book will be sent out after the AGM.
- Spoke about ideas for articles for the magazine. Brian had an idea of including 4x4 tips for different terrains, and may even look at doing a book for this.

Business for the Magazine Editor

- No business for the Magazine Editor.

12. WEBMASTERS REPORT (Gary Mayes)

- 161 website visits in the last 30 days. 39 in the last 7 days.
- 346 social media views in the last 30 days. 67 in the last 7 days.
- Gary advised that since Cassie removed herself as Admin from the Public Page, Mark Skeels & himself have been unable to access it as an Admin also. Gary has asked Cassie if she can resolve it, however she removed all access for herself, and no longer has any authority. Gary asked if any members may know how to sort this out.

Morgan mentioned that he would ask his wife, as she might know how to sort it out.

Business for the Webmaster

- No business for the Webmaster.

13. TRIP COORDINATORS REPORT (Steven Power)

- 30th May, to 2nd June. WA4WDA Gathering at Kalgan River (Albany).
- 18th May to 21st June. Ruby Gap, Hamilton Station. Alice Springs. Trip Leader: Mark Skeels.
- 28th June. Mystery Trip. Trip Leader: Steven Power.
- 5th July. Curry night. Trip Leader: Steven & Julie Power.
- 26th July. Peel 4x4 Club Annual General Meeting. Trip Leader: Peel 4x4 Club Committee. Members asked to bring a salad or dessert to share. Breakfast provided by the club on the Sunday morning.
- 10th August for approximately 2 weeks. Kennedy Ranges. Trip Leader: Max Milbanke. Then Mt Augustus to Esperance for approx.... 2 weeks. Lead by Duane Buckenara.
- 27th to 31st August. Dowerin. Trip Leader: Mark Skeels.
- 20th & 21st September. Whitegum Farm. Trip Leader: Jacob Yardley.
- 26th to 30th September. Westonia Wild Flowers. Trip Leader: Brian Tanner.
- 2nd to 6th October. Lake Perkolilli. Trip Leader: Mark Skeels.
- 9th to 12th October. Mandurah Caravan, Camping, Boat & 4x4 Show. Gary to follow up
- 18th to 25th October. Koorda Rangelands. Trip Leader: Mark Skeels.

Business for the Trip Coordinator

- No business for the Trip Coordinator.



GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 28th May, 2025

Venue: Secret Harbour Surf Life Saving Club



14. GENERAL BUSINESS

- A silent auction was held throughout the night for the Peel 4x4 Club BBQ.
This was won by Steven Power, with a final bid of \$90. ACTION: Steve to pay for BBQ, and to organise the pick up with the Property Officer, Jacob Yardley.
- Gary advised those in attendance that he will be standing from the President role as of the Annual General Meeting for personal reasons. Gary advised that he will however stay on the Committee as the Webmaster, and will continue to provide support where required, and aims to complete the items that he has started – ie, Constitution update.
- ARB Rocking Grand Opening was discussed.
- There was also a brief discussion in regards to the Glue Treads that Brian had put in the magazine.

15. TECHNICAL SEGMENT

- No Technical Segment.

NEXT GENERAL MEETING: Wednesday 25th June 2025. Secret Harbour Surf Life Saving Club.

Doors open at 7:00pm. Meeting starts at 7:30pm

NEXT COMMITTEE MEETING: Wednesday 11th June. Hosted by Steve & Julie Power.

NEXT DELEGATES MEETING: Monday 16th June. 7:30pm. Gosnells RSL Hall

Meeting closed at: 9:02pm

The minutes from this meeting have been verified as true & correct.

Gary Mayes

Peel 4x4 Club Chairperson

Date: 08/06/2025



COMMITTEE MEETING OF THE PEEL 4X4 CLUB

Committee Meeting Minutes

Date: Wednesday 09th April, 2025

Venue: Hosted by Gary Mayes



Meeting Opened: 7:12pm

PRESENT: Gary Mayes (GM); Julie Power (JP); Hugh Burns (HB); Brian Tanner (BT); Steven Power (SP)

APOLOGIES (A) & PROXIES (P): Dave Knudsen (DK)(A); Jacob Yardley (JY)(A); Chris Jones (CJ)(A);

1. CONFIRMATION OF MINUTES FROM PREVIOUS COMMITTEE MEETING – 12th March 2025

Chairperson Gary Mayes has signed & accepted the previous minutes.

There were no objections as to the accuracy of the minutes, therefore unanimously accepted?

2. BUSINESS & ACTIONS FROM THE PREVIOUS MINUTES

- Tax returns were to have been completed by 31st March 2025. The previous Treasurer was unable to accomplish this due to being unable to obtain a Tax File Number. GM was going to attempt to obtain this, however was unable to due to personal circumstances. Gary advised he would try over the weekend, and if unable to, or unsuccessful, HB said he would also attempt. **ACTION: GM.**
- GM was to transfer files to Secretary Laptop. GM advised that due to personal circumstances, this has not been accomplished. **ACTION: GM.**
- GM was to create a handover document for the new Treasurer & Property Officer. GM advised that due to personal circumstances, this has not been accomplished. GM mentioned he will attempt to get this completed over the weekend. **ACTION: GM.**

3. PRESIDENTS REPORT (Gary Mayes)

- Nothing to report.
- GM mentioned about the question raised at the last General Meeting, being what members would like to see more of. Social Days, day trips, etc... Members would like more Social Days. Items such as Garys upcoming Brew Day, fishing trips, etc.. were discussed.

Business for the President:

- No business for the President.

4. SECRETARY'S REPORT (Julie Power)

- JP mentioned that she had caught up with the Total & Permanent Disable Veterans of Western Australia to discuss the AGM. This seems to be a great venue.
A brief discussion was had, with an agreement to go ahead with this venue for the AGM on Saturday 26th July 2025. **Action: JP to confirm with venue.**

- No mail.

Business for the Secretary:

- No business for the Secretary.

**COMMITTEE MEETING OF THE PEEL 4X4 CLUB****Committee Meeting Minutes**Date: Wednesday 09th April, 2025

Venue: Hosted by Gary Mayes

**5. TREASURERS REPORT (Hugh Burns)**

- It was discussed about how difficult it is dealing with the Westpac Bank, and it was only due to the relationship the previous Treasurer had with the bank, we were able to get things moved along. HB had mentioned about moving the account to the Commonwealth Bank, as they were much easier to deal with. HB said he could do this on the upcoming Monday.

ACTION: HB to open new account with the Commonwealth Bank.

- CLOSING BALANCE (09/04/2025): \$4762.82

Business for the Treasurer:

- No business for the Treasurer.

6. INSURANCE OFFICERS REPORT (Dave Knudsen)

- Nothing to report.

Business for the Insurance Officer:

- No business for the Insurance Officer.

7. PROPERTY OFFICER (Jacob Yardley)

- All equipment was collected from Phillip Crewe's house, and is now stored at JY residence.

Business for the Property Officer

- Gary mentioned about getting photos of the BBQ for the silent auction.

ACTION: GM to contact JY to send through.**8. ENVIRONMENTAL OFFICERS REPORT (Chris Jones)**

- Nothing to report.

Business for the Environmental Officer

- No business for the Environmental Officer.

9. DELEGATES REPORT (Vacant)

- Nothing sent through from the WA4WDA.

Business for the Delegate

- No business for the Delegate.

10. MAGAZINE EDITORS REPORT (Brian Tanner)

- BT mentioned that he is now using a new program for the magazines.
- The next magazine will have a few technical articles, such as diff locks & tyre safety.
- Deadline for magazine contributions will be 16th April.

Business for the Magazine Editor

- No business for the Magazine Editor.



COMMITTEE MEETING OF THE PEEL 4X4 CLUB

Committee Meeting Minutes

Date: Wednesday 09th April, 2025

Venue: Hosted by Gary Mayes



11. WEBMASTERS REPORT (Vacant / Gary Mayes)

- Nothing to report.
- **Business for the Webmaster**
- No business for the Webmaster.

12. TRIP COORDINATORS REPORT (Steven Power)

- 13th April. All Grain Beer Brewing Day. Trip Leader: Gary Mayes
- 24th April. Nullarbor Muster. Tent / Swag Trip. Trip Leader: Mark Skeels
- 4th May. Mundaring Powerlines Trip. Trip Leader: Gary Mayes
- 12th to 18th May. Duane had to cancel the Esperance Trip.
- 30th May, to 2nd June. WA4WDA Gathering at Kalgan River (Albany).
- 18th May to 21st June. Ruby Gap, Hamilton Station. Alice Springs. Trip Leader: Mark Skeels.
- September Long Weekend. Brian Tanner mentioned about maybe doing a trip to Westonia in the Wheatbelt for the Wild Flowers.
- 11th August for approximately 2 weeks. Kennedy Ranges for approximately 2 weeks, lead by Max Milbanke. Then Mt Augustus to Esperance for approx.... 2 weeks. Lead by Duane Buckenara.
- 27th to 31st August. Dowerin. Trip Leader: Mark Skeels.
- 2nd to 6th October. Lake Perkolilli. Trip Leader: Mark Skeels.
- 18th to 25th October. Koorda Rangelands. Trip Leader: Mark Skeels.

Business for the Trip Coordinator

- JP mentioned that DK had reached out in regards to doing another community involvement day with disabled people. JP will follow up with Midway Community Care.

ACTION: JP to follow up with Midway Community Care.

13. GENERAL BUSINESS

- There was no General Business discussed at this Committee Meeting.

NEXT GENERAL MEETING: Wednesday 23rd April 2025. Secret Harbour Surf Life Saving Club. Doors open at 7:00pm, with meeting starting at 7:30pm.

NEXT COMMITTEE MEETING: Wednesday 11th June 2025. Hosted by HB. Starts at 7:00pm.

NEXT DELEGATES MEETING: Monday 14th April 2025. Gosnells RSL Hall. Meeting starts at 7:30pm.

Meeting closed at: 8:25pm



COMMITTEE MEETING OF THE PEEL 4X4 CLUB

Committee Meeting Minutes

Date: Wednesday 09th April, 2025

Venue: Hosted by Gary Mayes



The minutes from this meeting have been verified as true & correct.

Gary Mayes

Peel 4x4 Club Chairperson

Date: 12/04/2025



COMMITTEE MEETING OF THE PEEL 4X4 CLUB

Committee Meeting Minutes

Date: Wednesday 11th June 2025

Venue: Hosted by Steve & Julie Power



Meeting Opened: 7:15pm

PRESENT: Gary Mayes (GM); Julie Power (JP); Steven Power (SP); Brian Tanner (BT); Chris Jones (CJ);

APOLOGIES (A) & PROXIES (P): David Knudsen (DK) (App); Jacob Yardley (JY) (App).

1. CONFIRMATION OF MINUTES FROM PREVIOUS COMMITTEE MEETING – 9th April 2025

Chairperson Gary Mayes has signed & accepted the previous minutes.

No objections as to the accuracy of the minutes. Unanimously Accepted.

2. BUSINESS & ACTIONS FROM THE PREVIOUS MINUTES

- Tax returns were to have been completed by 31st March 2025. Dave Knudsen has been in contact, with forms having been sent to him. Dave will follow this one through.
- GM was to transfer files to Secretary Laptop. All done; just need to transfer everything to laptop. Waiting to see who takes on the role at the AGM, and will hand over.
- GM was to create a handover document for the new Treasurer & Property Officer. COMPLETE.
- JP to with the Total & Permanent Disable Veterans of Western Australia to discuss the AGM. COMPLETE
- Hugh Burns was going to look at opening a new Commonwealth account. Not completed due to resigning. Julie will contact Cassie instead, and become signatory, which will allow her to hand over to the new Secretary.
- GM to contact JY to get photos of club BBQ for silent auction. COMPLETE.
- JP mentioned that DK had reached out in regards to doing another community involvement day with disabled people. JP followed up with Midway Community Care, who are very interested. Suggested we wait until after the wet weather though.

3. PRESIDENTS REPORT (Gary Mayes)

- As discussed at the General Meeting, Gary will be standing down as President at the AGM. Will stay on as Webmaster though.

Business for the President:

- No business for the President.

4. SECRETARY'S REPORT (Julie Power)

- Nothing to report.
- Mail came in from ATO for Dave Knudsen. Julie will pass onto Dave. Also bank statement.

Business for the Secretary:

- No business for the Secretary.



COMMITTEE MEETING OF THE PEEL 4X4 CLUB

Committee Meeting Minutes

Date: Wednesday 11th June 2025

Venue: Hosted by Steve & Julie Power



5. TREASURERS REPORT (Vacant)

- CREDITS: \$450 – membership renewals.
- DEBITS: Nil
- PENDING: Nil
- CLOSING BALANCE (11/06/2025): \$5,375.58
6x members have renewed for 2025/26. Mark Skeels; Karen & Steve Hong; Leon Castle; Phillip Gausden; Gary Mayes; Chris Jones
- Gary mentioned that badges have now increased from \$22, to \$33. It was mentioned to ask if this is due to a new design, and if they have other prices. **ACTION: GM to follow up.**
Business for the Treasurer:
 - No business for the Treasurer

6. INSURANCE OFFICERS REPORT (Dave Knudsen - Apologies)

- Nothing to report.
Business for the Insurance Officer:
 - No business for the Insurance Officer.

7. PROPERTY OFFICER (Jacob Yardley - Apologies)

- Nothing to report.
Business for the Property Officer
 - No business for the Property Officer.

8. ENVIRONMENTAL OFFICERS REPORT (Chris Jones)

- Nothing to report.
Business for the Environmental Officer
 - No business for the Environmental Officer.

9. DELEGATES REPORT (Vacant)

- No Delegate, therefore nothing to report.
Business for the Delegate
 - No business for the Delegate.

10. MAGAZINE EDITORS REPORT (Brian Tanner)

- BT advised that 18th May will be the deadline for any magazine submissions.
- All AGM documents will be in the magazine, along with a notice that Membership renewals are due; and will need to be paid by mid July, so that numbers can be confirmed for catering for the AGM.
Business for the Magazine Editor
 - No business for the Magazine Editor.

**COMMITTEE MEETING OF THE PEEL 4X4 CLUB****Committee Meeting Minutes**

Date: Wednesday 11th June 2025

Venue: Hosted by Steve & Julie Power

**11. WEBMASTERS REPORT** (Vacant / Gary Mayes)

- Website: 166 visits in the last 30 days. 47 in the last 7 days.
- Social Media: 340 visits in the last 30 days. 59 in the last 7 days.
- Gary advised that he is still looking to get into the Public Page. Looks like we may be locked out, due to it not being set up properly. Will need to look at it when time permits

Business for the Webmaster

- Gary to put on members page that there is no General Meeting in July, due to the AGM.

ACTION - Gary**12. TRIP COORDINATORS REPORT** (Steven Power)

- 18th May to 21st June. Ruby Gap, Hamilton Station. Alice Springs. Trip Leader: Mark Skeels.
- 28th June. Mystery Trip. Trip Leader: Steven Power.
- 5th July. Curry night. Trip Leader: Steven & Julie Power.
- 26th July. Peel 4x4 Club Annual General Meeting. Trip Leader: Peel 4x4 Club Committee.
Members asked to bring a salad or dessert to share. Breakfast provided by the club on the Sunday morning.
- 10th August for approximately 2 weeks. Kennedy Ranges. Trip Leader: Max Milbanke.
Then Mt Augustus to Esperance for approx.... 2 weeks. Lead by Duane Buckenara.
- 27th to 31st August. Dowerin Field Days. Trip Leader: Mark Skeels.
- 20th & 21st September. Whitegum Farm. Trip Leader: Jacob Yardley.
- 26th to 30th September. Westonia Wild Flowers. Trip Leader: Brian Tanner.
- 2nd to 6th October. Lake Perkolilli. Trip Leader: Mark Skeels.
- 9th to 12th October. Mandurah Caravan, Camping, Boat & 4x4 Show. Gary to follow up
- 18th to 19th October. Sandy Cape. Trip Leader: Jacob Yardley.
- 18th to 25th October. Koorda Drive-In & Karrara Ranges. Trip Leader: Mark Skeels.
- 16th November. Lancellin Dunes. Dave Knudsen.

Business for the Trip Coordinator

- No business for the Trip Coordinator.



COMMITTEE MEETING OF THE PEEL 4X4 CLUB

Committee Meeting Minutes

Date: Wednesday 11th June 2025

Venue: Hosted by Steve & Julie Power



13. GENERAL BUSINESS

- Gary put a motion top the Committee to remove the spouse membership, as this was introduced to allow partners to have a seat on the Committee. This will be addressed with the updated Constitution. This was unanimously accepted.
- AGM was discussed.
 - We will do a 100 board, at \$2 a number, for a \$100 fuel voucher.
 - Visitors are welcome to attend, at \$10 per adult. This will come off membership.
 - Raffle prizes were discussed.
 - Gary has contacted all winners of the awards from last year to return the awards prior to the AGM.
 - 12V Oven will be the door prize.
 - Need to get a Major Raffle Prize. Gary will look at this.
- New membership application for Simon Henderson was accepted.

NEXT GENERAL MEETING: Wednesday 25th June 2025. Secret Harbour Surf Lifesaving Club.

Doors open at 7:00pm, with the meeting starting at 7:30pm.

NEXT COMMITTEE MEETING: Wednesday 13th August 2025. Venue TBC. Maybe at Garys house.

NEXT DELEGATES MEETING: Monday 16th June 2025. Gosnells RSL Hall. 7:30pm

July Delegate Meeting has been cancelled.

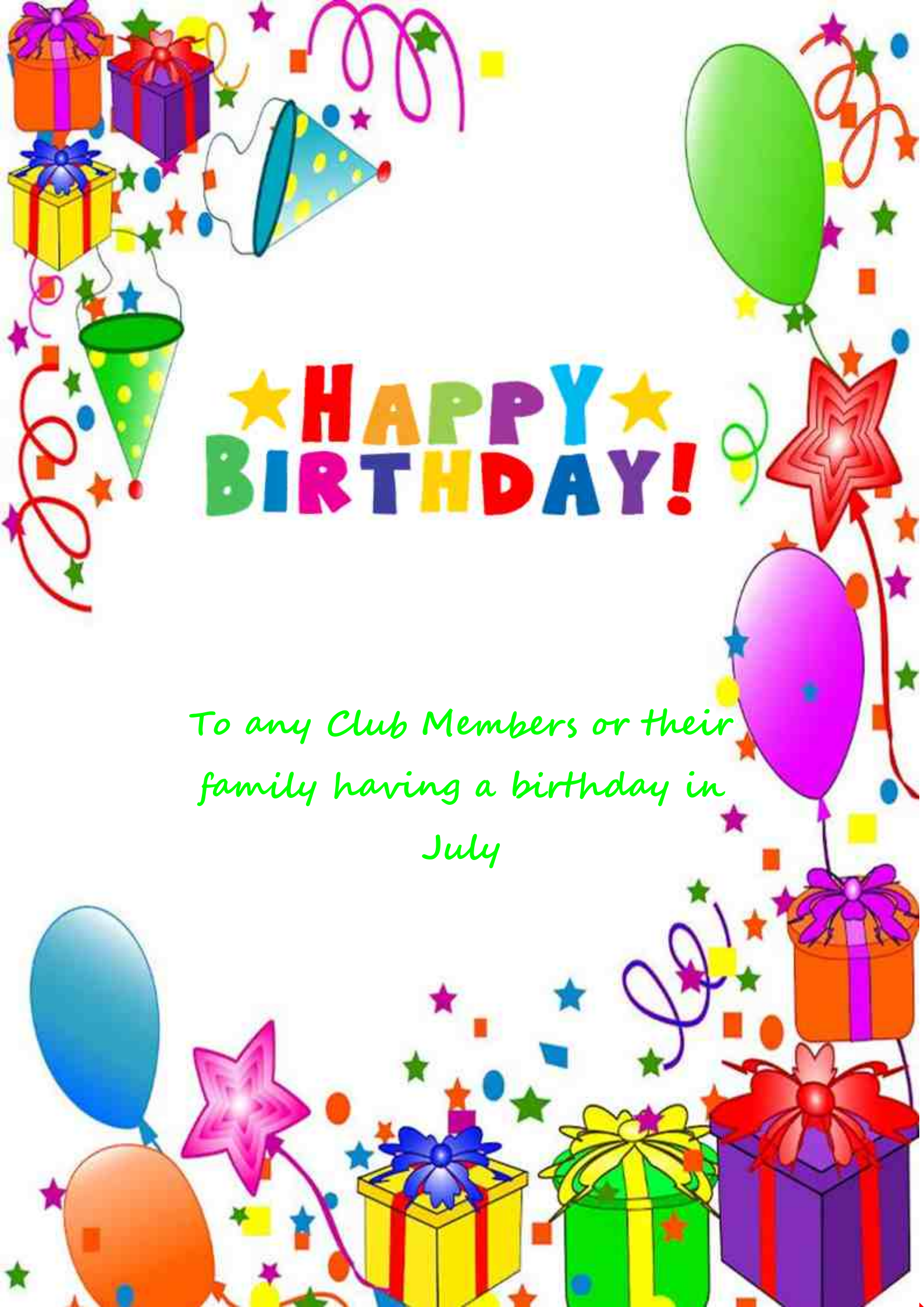
Meeting closed at: 8:43pm

The minutes from this meeting have been verified as true & correct.

Gary Mayes

Peel 4x4 Club Chairperson

Date: 18/06/2025

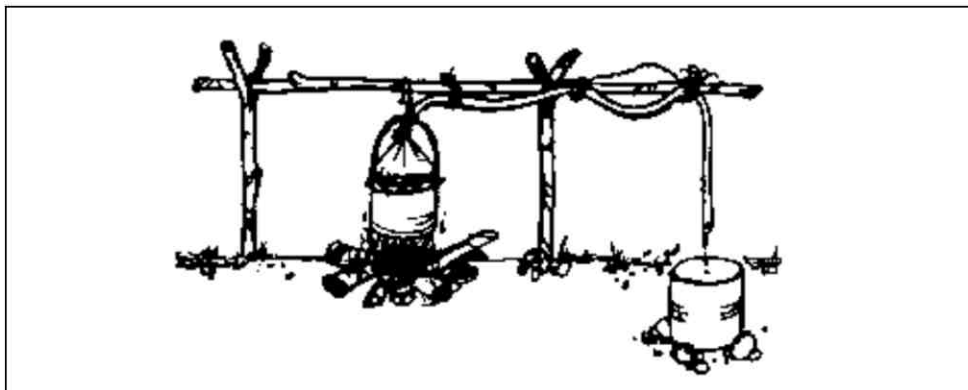


HAPPY BIRTHDAY!

*To any Club Members or their
family having a birthday in
July*



through the tube where it condenses and fresh water will drip from the end, into another container.



The Condensation Method Of Distilling Water

Another method is to simply bring water to the boil and catch as much steam as possible on a piece of cloth and then ring it out. Although this method works, it is not the most efficient.

You must remember that the steam is the fresh water and therefore you must trap the steam to get fresh water. Any improvised method will do even if you place an open container on the fire and bring it to the boil, and then arrange a small plastic 'tent' on top of it. The steam will strike the tent, condense and run down to your container or containers.

Note:

Alfoil or similar would make a seal around the container by folding it into a cone shape with the tubing attached to the small end of the cone and placing the large end around the container, secure ends of cone with wire to make the seal. Run the tubing through a cooling agent [water].

WATER PURIFICATION

You must always ensure that the water you drink will not cause internal infection as this will lead to further loss of fluid. You must purify any natural water that you drink by using a water filtration device, adding sterilization tablets such as Micropur Tablets or Puritabs, or by boiling it.

Note:

Salt water should never be drunk unless distilled.

Clarification of water

Drinking water should be as clear as possible. It can be left for twelve hours to settle or strained to remove suspended matter. One method of doing this is to use a canvas 'Mills Filter'.

An improvised filter can be made from the leg of a pair of trousers or a shirtsleeve. Into this place fine sand for one third of the filter, charcoal for the next third and fill to the top with gravel, small stones, etc. Hang the filter in a tree or similar and pour in the muddy water. It will take a little time but clarified water will seep through the filter and drip into a container placed underneath.

**Note:**

Remember that while more palatable, this water is not purified.

Sterilisation of water

Because the water is clear does not mean that it has no bacteria in it. To make sure of this you must sterilise any natural water that you drink. To sterilise water you can use several methods; the recommended method is to put in sterilisation tablets from your survival kit. The alternatives would be to boil the water or to use other chemicals that will neutralise any bacteria such as Condies Crystals or Betadine Solution from your first-aid kit. Condies Crystals only requires a couple of grains mixed to tincture the water. With Betadine use only minute drops to taint the water. [Permanganate of Potash see page 69]

Note:

It is extremely dangerous to use improvised water purification methods and you should ensure you have a reliable water purification strategy.

Portable Water Filters

These are designed for the world's diverse water conditions and usually combine a ceramic filter with activated carbon granules. Worldwide studies have shown, that bacteria accumulates in every activated carbon filter, which is why manufactures now put the ceramic filter after the carbon filter thus eliminating not only micro-organisms such as Giardia, Cryptosporidium, Salmonella, E-Coli and Cholera, but also some chemicals.

To operate the unit, the intake hose is suspended in the untreated water. The filter is held vertically and pumped until purified water begins to flow from the outlet. As bacteria and particles of dirt become trapped on the surface of the ceramic filter pumping will require greater effort. The filter should then be cleaned and not forced.

Note:

Most units do not desalinate salt water. You should check the exact capabilities and limitations of your unit with the supplier when purchasing.

Shelter

Extremes of heat and cold are the enemies of human survival and both these qualities are found in inland arid regions where very hot days can be followed by cold nights. In the past twenty years sixteen people have died due to excessive heat and thirteen have died due to excessive cold in Western Australia.

A shelter will provide you with protection from the elements, insects and animals. It is also a big psychological boost that will help you feel that you are managing. Determine what type of shelter you require and plan accordingly.

While building your shelter remember that keeping in the shade and moving as little as possible in the heat of the day can avoid heat stroke and loss of body fluid.

Using Vehicles as Shelter

Vehicles are a source of shelter as they provide protection from the sun, rain and prevailing weather during the day and the cold air at night. Tarpaulins, blankets or



branches can be used to keep direct sun from the vehicle and interior linings, doors, boot lids and bonnets can also be removed.

Foil Rescue Blanket

Space and/or rescue blankets are cheap, lightweight and an ideal item to assist in providing shelter. The reflective surface reflects the sun's rays from the person sheltering underneath.

Natural Shelter

If nothing else is to hand you will have to use bush materials, when constructing a shelter you should consider the following points –

1. Type of protection required.
2. Availability of materials.
3. Proximity of water.
4. Close to your emergency signals.

When you begin construction, use larger branches for your basic frame, as you will find a roof fairly heavy when it is wet and they will have to support it. Branches can be tied together using vines, strips of bark or sword grass. If you are near your vehicle, strip out wires to use for this.

Remember that your ability to improvise and see alternate uses for items that you may have available to you could mean the difference between life and death.

TYPES OF SHELTERS

Any survival situation will involve the construction of some form of shelter from the elements.

The need for shelter and the type of shelter should be identified in your survival situation appreciation. It is important that you base any decision to build a shelter on your survival plan.

Note:

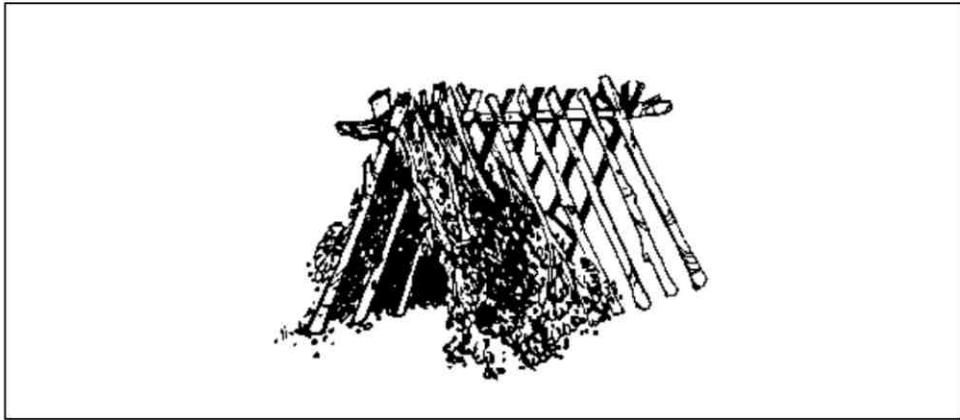
Be careful not to use items from your survival kit, which might have a higher priority of use.

Building shelters

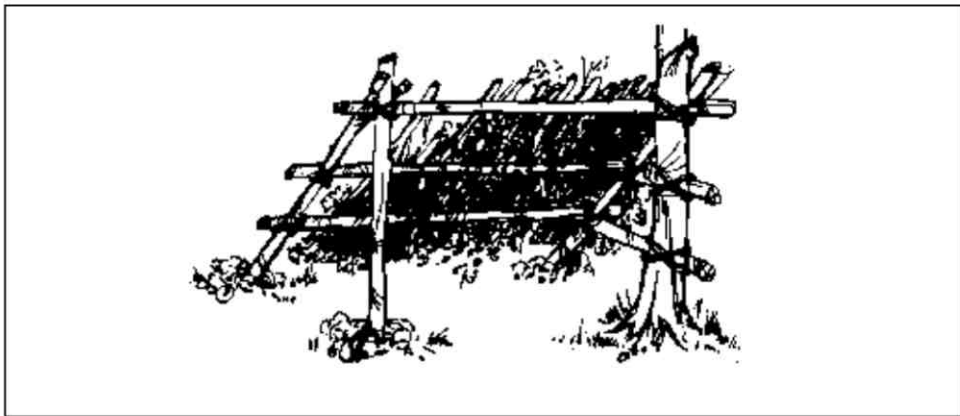
Your shelter will depend largely on what is available to use and what the conditions are. Common sense will guide you but be warned, a shelter takes a good deal longer to build than one imagines. If you can find something that will provide a part of a shelter such as a hollow log, then use it as the basis of your shelter, this will save time and energy.



Some fairly simple types of shelter, which you can build, with a minimum of effort include the following –



The A-Frame Shelter



The Lean-To Shelter



The Aboriginal Shelter

**Using a tarpaulin/overhang/hootchie for shelter**

A tarpaulin, overhang or hootchie can be a valuable aid to providing shelter from the elements as there is no limit to the uses it can be put to. Remember that today they are fairly lightweight and may be dropped to you by rescue aircraft.

In hot conditions they can be used solely as a base to protect from radiated ground heat when used in conjunction with any shelter designed to provide shade. They can also be used in hot conditions to provide deep-shade as the roof of a large A-frame shelter.

In wet, windy conditions they can be used to provide shelter using one end as a base and then using the remainder to provide an outer skin for waterproofing or simply using as a large A-frame with the edges pegged or held in place using rocks etc.

Note:

These items need not be used on their own as shelter but can be utilised to supply additions and improvisations to other forms of shelter you may build.

Roofing

If your vehicle is handy, you can pull out the head lining to use to make a waterproof roof. If not, then blankets, sleeping bags or even spare clothes can be used.

Thatching

Waterproofing and shade can be provided using a technique called thatching. This can be done by using materials such as palm fronds, leafy branches, tufts of long grass, reeds, sedges and/or long stalked ferns. A good method to employ is called “tuft thatching” using long, pliable tufts of grass, reeds or sedges. These are better used when dry or partly dry as they will not shrink and fall apart in windy conditions. To make a “tuft thatch” –

1. Gather the material into small sheaves or handfuls and bend the end of each sheaf over a batten or long stick.
2. Twist a few strands of the material around the sheaf a few times and push it through the bunched up material to hold the sheaf together.
3. Completed “tufts” are then slid along the batten to make a neat thatch.
4. Each completed batten is then lashed to the frame to provide a wall or roof as required when used to overlap completed battens.



Examples Of Thatching Using Tufts and Fronds

Use Of Debris

Once you have constructed the skeletal structure for your shelter in cold or wet weather you should consider the use of debris for protection and insulation. Over the framework heap a pile of light, soft debris. Leaves, grasses, brush, or any type of leaf litter will do.



The debris should eventually form a large dome shaped mound some 60cm thick over the structure. Remember the thicker the pile the better the insulation and the steeper the pitch the better the rain protection. On top of the debris add some bark slabs or moss to form a protective waterproof layer and to assist in keeping it together.

Low debris shelters built using this method are sometimes called 'oven shelters'

Warmth

FIRE LIGHTING WITHOUT MATCHES

In Western Australia in the past twenty years, thirteen people have died due to excessive cold. Many of these deaths could have been prevented had the individuals possessed the resources and skills to light a fire.

Fire cooks, warms, sterilises and acts as a signal if necessary. To start a fire requires an understanding of combustion. For combustion to occur requires the presence of fuel, heat and oxygen. Fuel may consist of; dry vegetable matter, dry animal manure, reactive chemicals, kindling and timber. Heat can be provided by friction, chemical reaction, spark or magnification. Remember that oxygen is the essential ingredient to produce flame from heat and fuel.

Always carry some form of fire starter with you on trips such as waterproof matches or lighter. If you do not have these then your skills should include at least one of the following methods. Remember that traditional methods of fire lighting require a high degree of patience and skill and should be learned and practiced in a training environment.

Tinder

Tinder is very important to fire lighting and care must be taken in collecting it to ensure it is dry and suitable. Commercial tinder is available and can be carried in your survival kit.

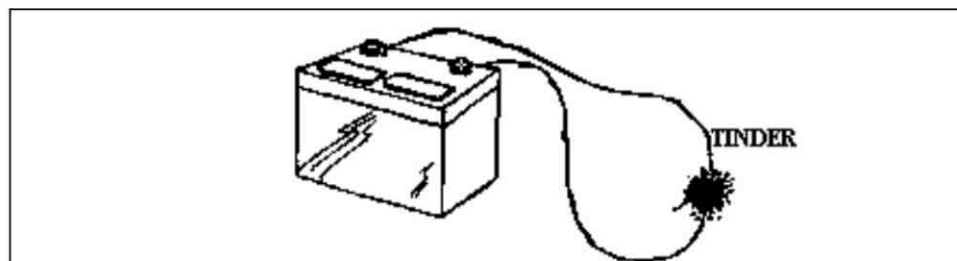
Some suitable sources of natural tinder are; dry root rot, animal manure, bulrushes, fluff from birds nests and crushed bark and/or grass.

Note:

Make sure that you have tinder prepared and ready when lighting fires.

Vehicle Method

Your vehicle has probably been fitted with a cigarette lighter. Use this to ignite a petrol soaked rag [outside the car]. If you do not have a lighter then remove the battery from the vehicle, pull out two wires from the vehicle and attach these to the terminals of your battery and run them away to the ground. When the ends are touched together they will spark and ignite tinder.



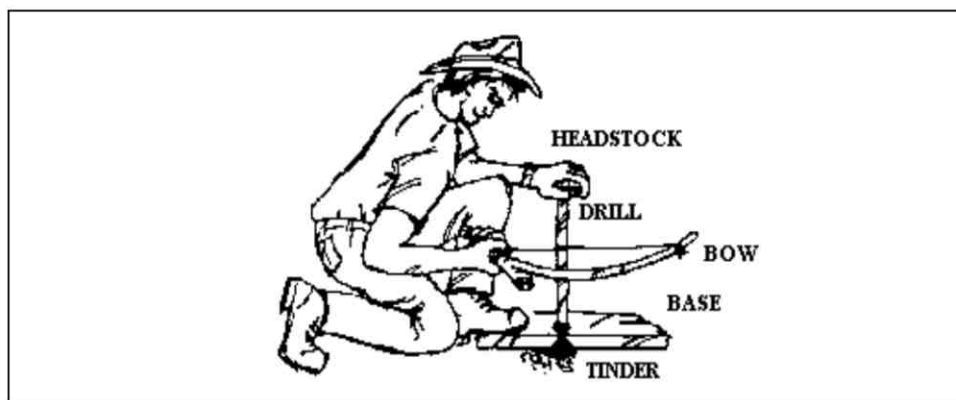
The Battery Method Of Fire Lighting

**Note:**

The gas produced by a battery is highly volatile and if exposed to a spark could cause an explosion. Make sure the fire is started away from the battery.

The Fire - Bow Method

This method is used by many indigenous people around the world and is also the most difficult of all the methods advocated. It basically involves using the heat caused by friction when rubbing two pieces of wood together to ignite the resultant sawdust [punk] and produce an ember. Western Australian aborigines used a derivative of the method by simply rubbing two pieces of wood together by hand using a circular or sawing movement. The fire-bow method is simpler as it employs mechanical advantage for a more efficient operation.



The Fire-Bow Method Of Fire Lighting

Component Parts of The Fire-bow

The base is a piece of dry, soft wood flattened top and bottom so it will sit on the ground. cut a small circular depression on one side of the top of the base and a small groove from this depression into the side of the base directly beside where the drill is to be used to allow the shavings or punk to fall onto the tinder.

The bow can be any branch of a tree and should be approximately 45cm to 60cm long. It can be 'L' shaped or straight but works best if flexible. The bow-string can be string, green-hide, leather thong, bootlace or nylon cord from your survival kit.

The head-stock is a piece of hardwood with a depression cut in to it to hold the top of the drill and allow it to rotate.

The drill consists of a piece of dry wood of soft texture 30 - 40cm long and as straight as possible. The diameter should be 1.5cm to 2cm, the drill sharpened to a point at both ends to fit into the starting groove of both the base and head stock.

Using The Fire-bow

To use the fire-bow take a turn around the drill with the nylon cord attached to the bow with the drill outside the bow [if you have used green timber for a bow the tension will be applied automatically, otherwise use your fingers to hold it tight].

Place the tip of the drill into the depression in the base and hold the headstock onto the top of the drill. Push and pull the bow to rotate the drill. The over-heated shavings [punk] will fall through the groove in the base onto the tinder. The small ember, which will form, should be held in the tinder and blown until it ignites.

**Note:**

One of the better types of wood to use for both the drill and base is the lower wooden portion of the flower stalk from the Balga plant [Native Grass Tree] [see edible vegetation page 43]

Torch Battery Method [6V]

A fire can be started by holding very fine steel wool from your tool kit over the negative terminals of a 6-volt torch battery and brushing it against the positive terminal.

The sparks produced should ignite the steel wool [make sure you have tinder ready].

The Lens Method

Strong sunlight focused through a convex lens can produce enough heat to ignite tinder. The lens can come from a magnifying glass [including the base of some compasses], binoculars, camera or telescopic sights from firearms.

Flint, Steel and Magnesium Blocks

Flint is a stone which if struck with a piece of steel produces sparks. Magnesium blocks with flint attached are available commercially for use as emergency fire-lighters.

These are used by scraping off shavings of magnesium with a knife blade then striking the attached flint with the back of the knife blade and directing the resultant sparks onto the shavings.

Some of the commercial fire-starters come with their own supply of tinder.

Chemical Methods Of Fire Lighting

While your survival kit may not contain a great quantity of chemicals your situation may produce some common agents that can be used to start a fire.

Condies Crystals [Permanganate of Potash] and Sugar

Condies Crystals [carried in some survival and/or first aid kits] can be used to start a fire by mixing in equal amounts with sugar [barley sugar can be used] and grinding them with the flat blade or steel butt of a knife blade. The result is a brief intense flame.

Condies Crystals and Brake Fluid

A brief intense flame is attained by adding small quantity of brake fluid to a teaspoon of Condies crystals. The resulting chemical reaction will produce a flame in approximately 15-20 seconds. The mixture should be left alone and not stirred while waiting.

Condies Crystals and Glycerine

Chemical reaction should produce a brief flame in approximately 15-20 seconds if a few drops of glycerine are added to a teaspoon of Condies crystals.

Note:

Methods of fire lighting using chemical reactions are subject to climatic conditions such as ambient air temperature and humidity. It is recommended that you practice different fire lighting methods to see which is best suited.

Remember! Never leave mixed chemicals unattended.



Food

LIVING OFF THE LAND

Although food is not as important as the other three requirements for survival it is necessary for a prolonged survival situation. Any available foods should be eaten sparingly, keeping in mind that it is better to have one meal a day than to nibble small amounts.

The average healthy adult can live for several weeks without food so this will give ample time to locate nourishment from natural sources if necessary.

Food sources

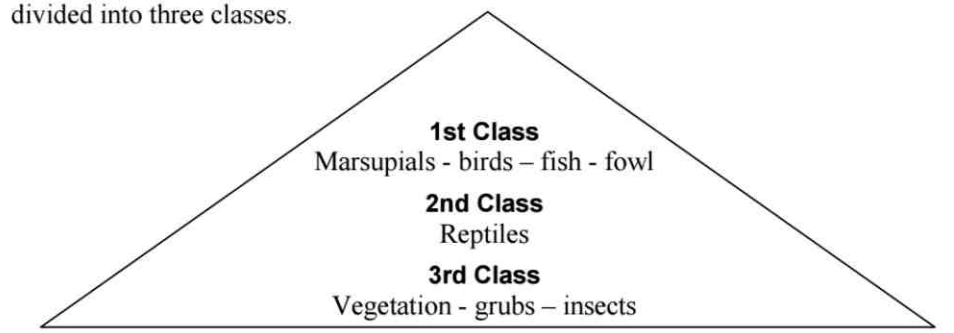
Sources of food available to survivors include; animals, bird life, marine life, insects, grubs and plant life. In considering natural sources of food, there are some important points to remember

- Most animals, bird and plant life are protected and should only be used for food sources in emergencies. Should it be necessary only kill what is needed for survival.
- The body needs fluid to digest food, so foods with high water content should be considered before others. If no water at all is available, then food should be avoided, particularly meat, which requires more fluid to digest than vegetation.
- You do not need to be a skilled hunter to obtain food. Even without weapons of any kind enough lizards, insects and grubs can be found to keep a person alive for several days simply by looking under rocks, dead branches, tree stumps and anthills.
- If possible all foods should be cleaned carefully by washing, and then cooked, thus lessening the chances of any infection or stomach upsets.
- Generally bush food is tough, fibrous, unpalatable, and to some, even nauseating; nevertheless it is food.

THE FOOD PREFERENTIAL

Most people when forced to live off the land will find it easier to try to eat food that reminds them of their normal diet at home.

Because early settlers in Western Australia were mainly British this heritage still shows in our choice of food and we tend to categorise our food preferences to what we recognise and feel comfortable with. For instance after eating snake when asked what it tastes like we will invariably reply –‘chicken’. Food preferences can be divided into three classes.





The Food Preferential

ANIMALS

The presence of any animal or bird life in an area is evident by tracks, droppings and traces of fur or feathers. If you have been lucky enough to find a waterhole used by animals it is a simple matter to sit under cover, down-wind from the water source and either shoot or snare the animals as they come to water.

Even by walking through the bush quietly during the day it is possible to surprise sleeping animals in creek beds, under shady trees and amongst rocky outcrops.

Some of the most likely animals seen in the bush include kangaroos, small marsupials, wild goats, donkeys, pigs, rabbits, snakes, lizards, frogs, sheep and cattle.

Some imagination and bushcraft skills are needed in knowing where to look, how to recognise tracks and how to snare the faster moving animals.

SNARING ANIMALS

It should be remembered that the use of traps and snares is illegal in Western Australia and must only be used in survival situations when your life is in danger.

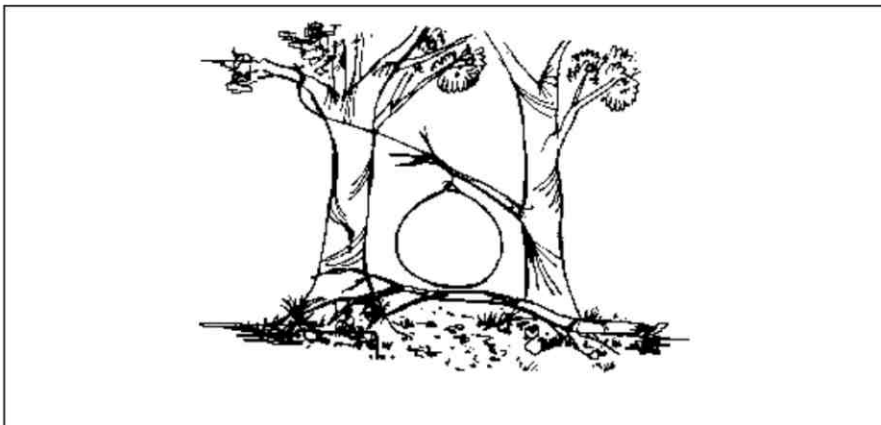
The Animal Snare

Without a firearm or manufactured animal trap most animals can be snared with a wire noose placed in a convenient position such as the entrance to a hole or above an animal path between two trees.

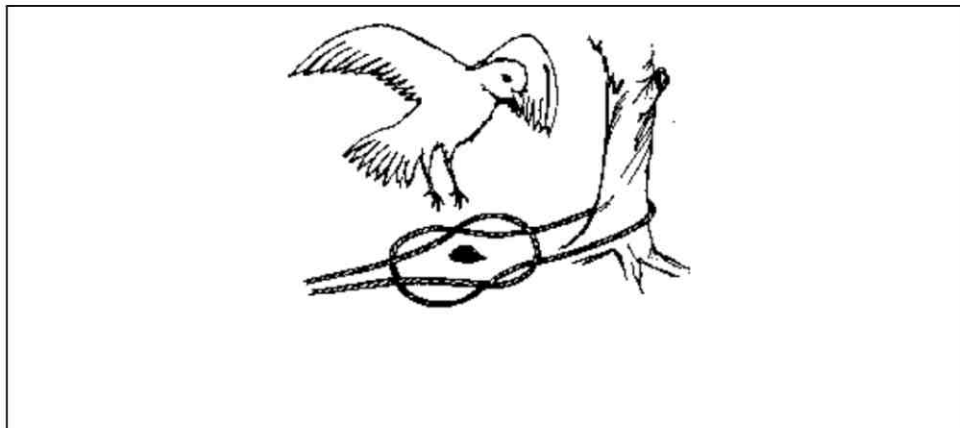
The noose should slide freely and the other end of the wire should be anchored securely to a tree or post. As the animal passes through, the noose tightens around the neck quickly killing it as it tries to pull free. This type of trap is generally successful at night when the animal cannot see the snare. Care should be taken not to leave any human smell on the wire.

Owing to the cruel nature of the snare, it should only be used when other methods fail.

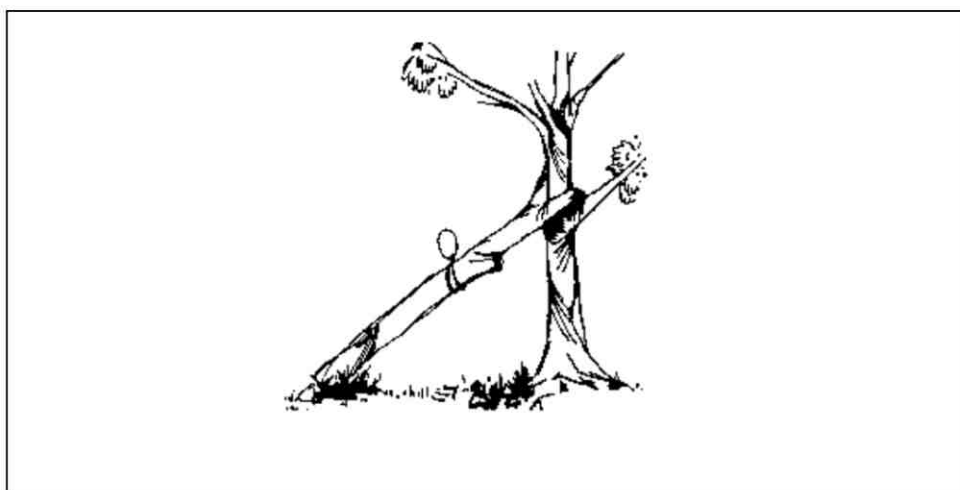
If setting a snare look for signs of fur around a tree's base or signs along a fence line to indicate where an animal has passed through. Animals will return to the same place to sleep and will continue to negotiate fences at the same spot.



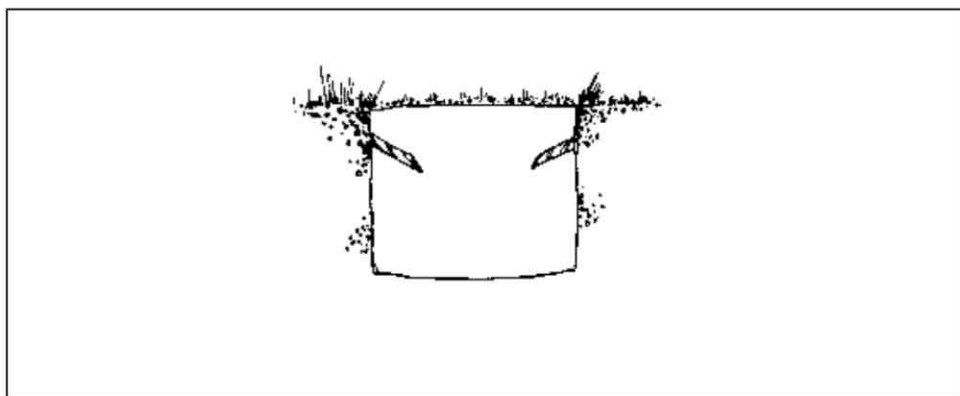
The Animal Snare



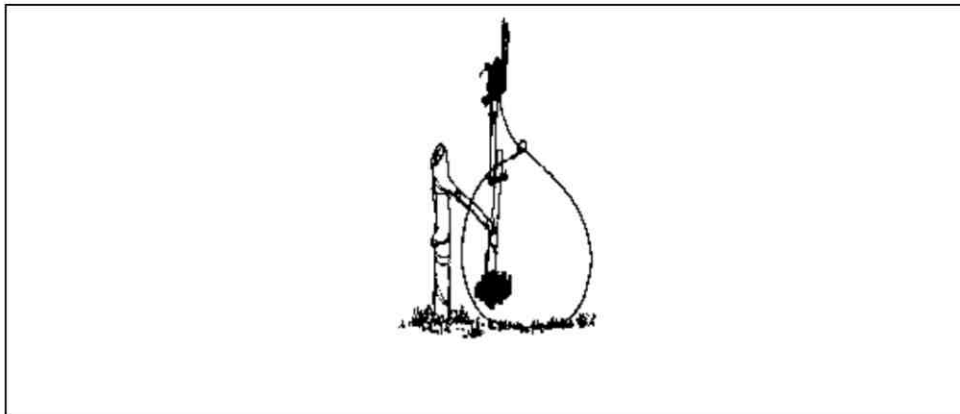
The Reef Knot Snare



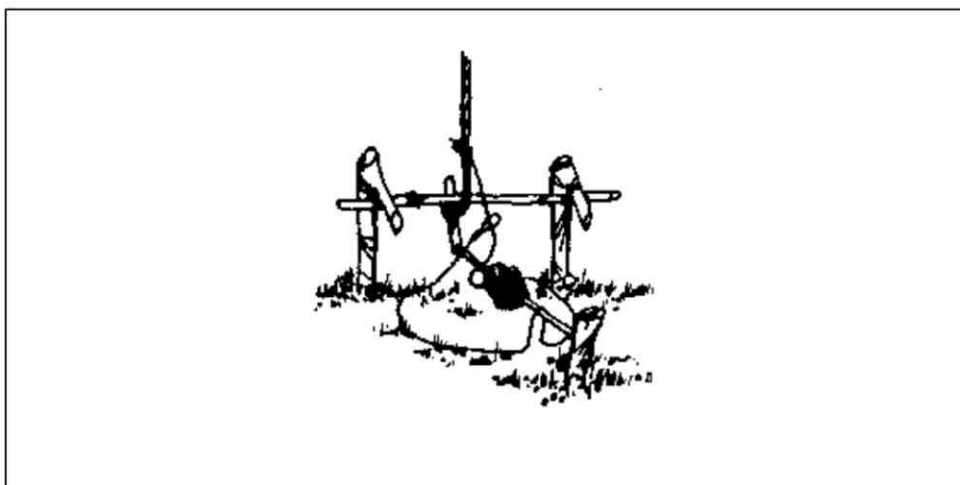
The Possum Snare



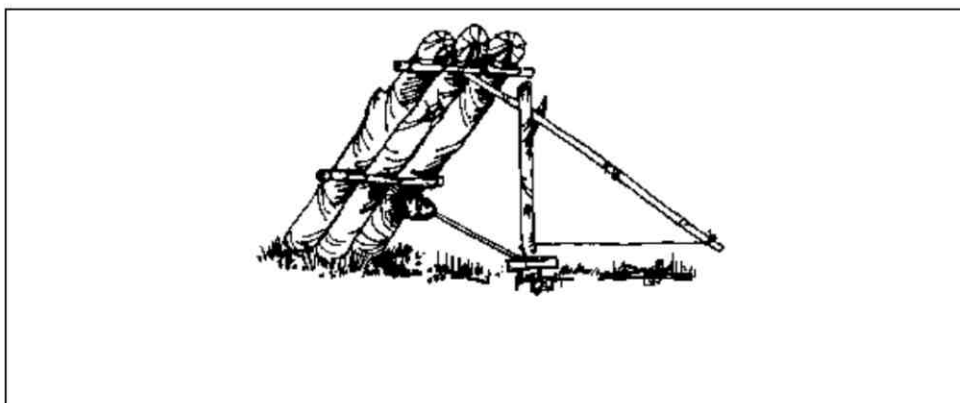
The Pit Trap



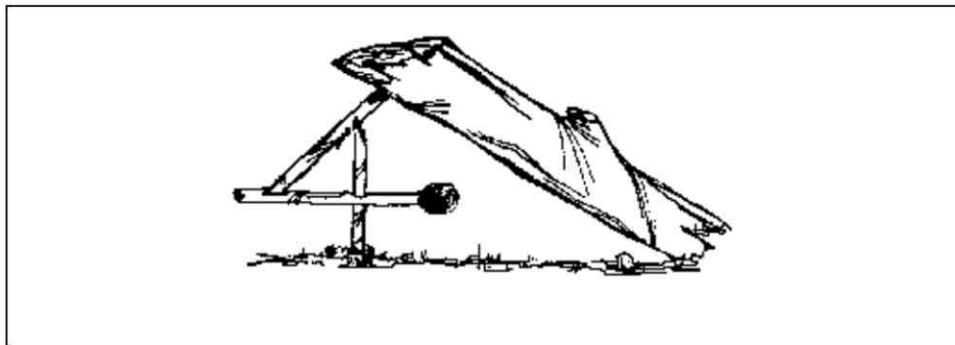
The Bait-Stick Snare



The Toggle Stick Release Snare



The Toggle Stick Deadfall

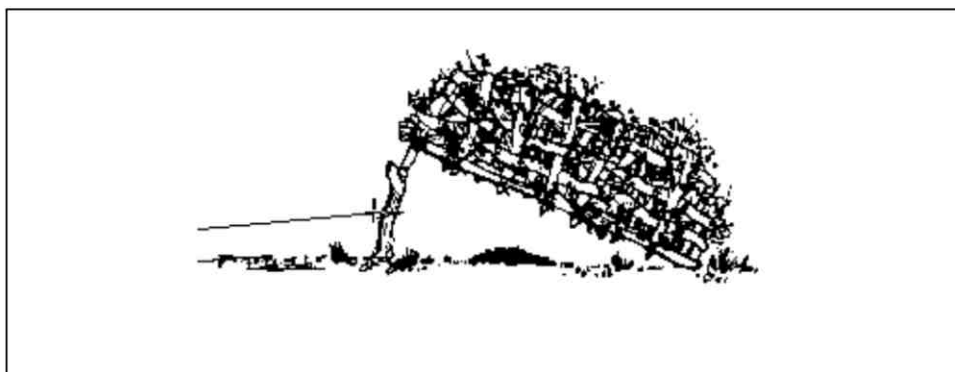


The Figure-Four Deadfall

Remember traps and snares are illegal in Western Australia and should only be used in survival situations when your life is in danger.

BIRD LIFE

Ground feeding birds can be trapped by placing grass or other bait under a cage made from wire netting or green sticks woven together. The cage is propped up with a stick that is pulled out by a hidden observer tugging a string as the bird walks under the cage. The cage falls, trapping the bird.



The Bird Trap

A fishing line can also be used successfully. Bait the hook with an insect, bread, or other edible matter; tie the line to a tree or stick where the birds frequent.

Birds are rather difficult to shoot or trap because of their flighty nature but you may be lucky enough to locate a nest, either on the ground or in the trees, containing eggs or young.

Most birds try to confuse intruders by flying away from their nest at the approach of any danger. This has the effect of leading the intruder in the wrong direction, thus protecting the eggs or young.

Emus are very common in outback areas and can be enticed towards bright objects waved by a person hiding behind a bush. As the bird's inquisitive nature leads it within metres of the object, the person can then step out and kill the bird with a suitable weapon.

When shooting or trapping, frequent a water source if possible. Stealth, not speed, is of great importance when shooting and patience at a water hole at dawn or dusk is usually rewarded.



MARINE LIFE

Fish are a valuable food source containing protein, vitamins and fats. All freshwater fish are edible. It takes skill to catch fish but by considering their feeding habits and following some simple methods you can be successful.

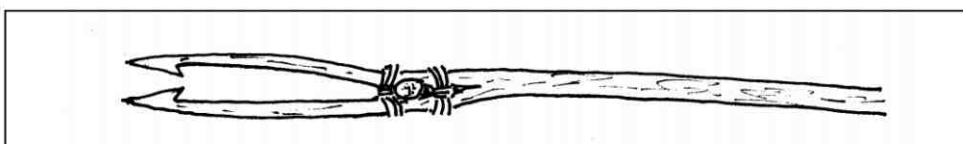
Where to fish

Fish frequent those places in the water where they are most comfortable and where they can feed. The ambient temperature of the area will affect these places. You should remember –

- If it is hot and the water is low they will seek shaded, deep water.
- In cold weather they will choose a shallow place where the sun warms the water and in lakes they will keep to the edges where the water is warmer.
- If the river is in flood they will seek slack water generally on the inside of bends or in small tributaries feeding into the main stream where the water may not be so turbulent.
- Fish and marine life like to shelter under banks or below rocks and submerged logs.

The Forked Fishing Spear

Fish can also be speared using a forked fishing spear. These are more effective than a single pointed spear at holding a speared fish and are made from a green sapling, split at one end and carved into two sharp prongs complete with inward pointing barbs. Before carving, separate the prongs with a wooden wedge then lash the two prongs together using cord from your survival kit. After carving the spear can be hardened over a fire.



The Forked Fishing Spear

Tidal Fish Traps

Fish can also be trapped near the water's edge by using a fence of upright sticks or rocks pushed into the sand close together and left in place. This type of fish trap is used by fishermen in tropical areas with extreme tides where netting is used in place of the sticks. The fish are trapped by the mesh of sticks or rocks and easily removed when the tide goes out.

Gathering Shellfish

A method of gathering seafood on the coast is by digging in the sand or turning over rocks for shellfish at low tide. This is how some fishermen collect bait for line fishing.

The Freshwater Crayfish Snare for Koonac, or Gilgie [*Cherax plebejus preissi*]

*Also called Yabby or Marron [*Cherax albidus*]*

A traditional method of catching these fresh water crayfish is to tie a small piece of meat to a length of cord or fishing line and throw it a metre or two into the water. In clear water you will see the crustaceans coming to the meat. Once they take the meat they will hang on stubbornly and can be drawn to the edge of the water and lifted out onto the bank.



Fresh water crayfish can also be caught by using a pole with a running loop of snare wire tied to the end and placing it over the marron from behind and dragging them out of the water.

The Basket Trap

Freshwater crustaceans can be caught in simple basket traps baited with animal entrails or decayed meat and left in position. They should be fitted with a funnel at one end and tied together at the other. It is important they be weighted down, staked in position or tied to the bank to ensure they are still there when you check them. To make a basket trap –

1. Cut a bundle of green sticks 1m in length and mark out a circle on the ground the size of the end of the trap. Make holes in the ground around the circle with a stick every 4cm and stand a stick from your bundle in each hole.
2. Weave around the bottom of the trap three times with a long piece of thin green stick and tie off with cord to keep it together.
3. Tie the top of the trap together with a piece of cord to form a cone shape and weave a length of thin green stick around the trap basket fashion.
4. Make a smaller similar cone with the narrow end open and place it inverted inside the large cone to form a lid and entry.

REPTILES

All reptiles are edible including venomous snakes [remove the head and portion of the neck to remove the venom glands]. Goannas being reptiles are fatty and oily so if you have to eat these, overcook them. Remember, care must be taken when catching venomous snakes and other reptiles, as their bite can be fatal or lead to infection.

Note:

Since 1983 thirty-nine deaths have been attributed to snakebite in Western Australia.

GRUBS

Witchetty Grubs

Witchetty grubs are found after examining for the characteristic borer holes and by digging up the surface roots of the Witchetty Bush [acacia kempeana] in the central desert area. They live on the dissolved sugars from the sap of trees, are highly nutritious and are high in calcium. Entrails should be removed by pulling the head and the tail apart.

Note:

Do not eat furry grubs or grubs with black showing through the skin and remember that while snails and slugs can be eaten they are an unlikely source of food as they favour wetter areas and there would probably be better alternate food available.

INSECTS

Insects and their larvae are often overlooked as a source of food even though they are widespread, a good source of nourishment, have a high food value, high fluid content and are easy to obtain. Fried termites and ant larvae are a rich source of food [100gms = 2,200kj].

**Termites**

In some overseas countries, maggots, grasshoppers and termites form part of the natural diet. Termites can be obtained by picking them up on the end of a wet fingertip after breaking open anthills or dead wood. The taste of termites and ant eggs is not offensive.

Honey Ants

Honey ants can be collected near the base of trees in the arid zone and on the branches in tropical areas. The fluid from their abdomens is good nourishment as is honey from wild bees.

Green Tree Ants

Found in the northwest in simple leaf nests sewn together by larval silk. Although very aggressive their bite is not considered dangerous. Green Tree Ants are a good source of Vitamin-C when crushed and added to water to make into a drink or crushed and added to food for flavour.

ANIMAL BUTCHERY

Most animals can be eaten although most of us have a preference for herbivorous animals such as cattle sheep, pigs, horses, rabbits and poultry. There is no reason however, that you cannot eat vermin in a survival situation.

Signs Of Disease

Check all animals for disease, the body should look well fed and be clean smelling. If in doubt a small piece of meat can be boiled in a covered pot, when the water is boiling if the vapours have a bad smell you should not eat the meat.

Do not eat birds when the flesh is flabby, purple, a green discoloration around the neck, stiff feet, collapsed eyes or a sour smell present. If you can pull out a rabbit's fur, if its eyes are enlarged and dull or its body cavity slimy it should not be eaten.

PREPARATION & COOKING OF GAME

The size and type of animal will determine your method of preparation for cooking.

Large Animals

Should have the throat cut to 'bleed' the carcass, hung up by the hind legs, the gut contents, head, and skin removed then cut into joints.

In a survival situation meat can be cooked by boiling, frying, grilling, baking or steaming depending on what resources are available.

Kangaroo

Kangaroo meat is very low in fat and very high in protein and iron. Because of its low fat content it tends to dry out quickly and must be cooked carefully. Cook it quickly by grilling over an open fire as steaks or kebabs.

Emu

Emu meat is very low in fat and high in protein, iron and vitamin C. It is red in colour and similar in texture to lean beef. The tenderness and texture of the meat enables it to be prepared in many ways. It is best cut into thin steaks and lightly grilled over an open fire.

Rabbits

Should be skinned, gutted and have the head and feet removed. They are best cooked by inserting a green stick in the body cavity and turning them over hot coals.

**Snakes**

Should have the head, skin and stomach removed and be cut into pieces. The meat is best grilled over hot coals.

Lizards

These are prepared simply by removing the head and gut contents. They are best grilled over hot coals with the skin left on.

Birds

Bleed the bird as soon as possible after death and have the head, feathers and the intestines removed. Birds can be cooked by wrapping them in foil from your survival kit, clay, large leaves or paperbark and placing them in the coals.

Fish

Fish should have the intestines removed and be cooked with the scales and skin on. They can be wrapped in foil from your survival kit, bark, leaves, mud or clay and cooked in coals.

Note:

Remember to wash all meat of blood before cooking, make sure that you wash all blood and meat from your hands after handling dead animals.

PRESERVING MEAT

The most popular methods used to preserve meat in a survival situation are by drying or smoking. It must be remembered that only fresh meat should be used to ensure protection against infection.

Drying meat

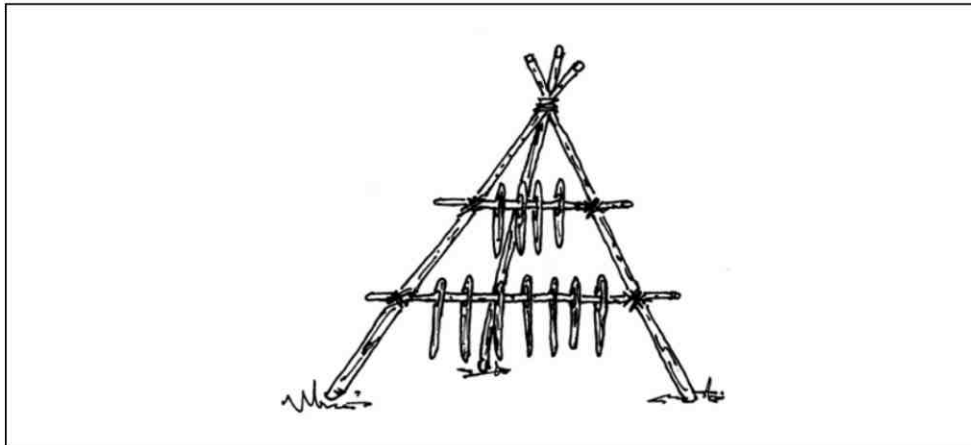
Drying meat is a good method for preserving it if you have more than you can eat immediately. It is also advantageous if it has to be eaten over a period while travelling on foot as the weight of the meat is reduced by approximately 70%. This is because the water content of the meat is removed in the drying process leaving behind the tissue containing protein and nutrients. Dried meat cut with the grain is known as 'biltong' and across the grain as 'jerky'.

The process for drying meat is –

- Construct a simple tripod frame to hold the meat strips.
- Cut the meat into thin strips and remove all fat and gristle as the fat will not dry and will encourage the growth of bacteria. The thinner the strips the faster water will be extracted. It is best to cut a small hole in one end of each strip of meat and pass a stick through the hole rather than folding the strips over the stick as this provides an area on the underside of the meat that will not dry and will harbour bacteria.
- Hang the strips in a sunny, breezy spot for 2-3 days to sun-dry it or place it alongside a slow burning fire to smoke it until the meat goes hard to the touch and dark in colour. When meat is smoked the smoke will solidify the protein content of the meat and stop decomposition and seal in any flavour.
- When smoking meat do not let the fire produce flames and remember that the best way to produce smoke is to use sawdust, wood chips or crushed bark as fuel for your fire.



- During the day you will need to keep flies, insects and scavengers such as birds, goannas, dogs, cats and rodents away from the meat. It is a good point to remember that any scavengers attracted to the drying or smoking meat may also be a source of food to be trapped or killed.
- At night all the meat strips should be taken off the drying-frame and wrapped in material to protect them from dew and moisture.



The Tripod For Drying/Smoking Meat

EDIBLE PLANTS

A vast number of plants that can provide food in an emergency occur naturally in Western Australia. However, many of them are hard to identify without expert help and many more have sharp or tangy juices that discourage people who cautiously taste them. It is recommended that when travelling around the state you should source information on edible and poisonous plants from locals, resident experts and local authorities relevant to their area.

PLANTS TO AVOID

The seeds of many of the native pea and bean family are highly poisonous. It is best to avoid these native plants even though garden varieties are good to eat. After all, if you are already working hard at surviving, you do not want to add illness to your misfortunes.

You should also avoid the palm-like plants. *Zamia* palm fruits contain poisons and so do the young shoots. Unless you are absolutely certain of the identity of the palms that you are about to eat they are best left alone.

Fungi are another group of plants best avoided. Although many of the fungi that are found in Western Australia can be eaten they provide little nourishment and there is no rule to eliminate the deadly species.

THE 'TASTE TEST' FOR PLANT EDIBILITY

Should you find vegetation that you think is edible you must carry out the taste test to reduce the chance of eating something that will harm you.

Choose young, healthy looking plants and remember testing must be done in order and the test stopped immediately if any discomfort or adverse reaction is experienced.

You should wait approximately 5 minutes between stages and remember that each stage of the 'taste test' must be done using a fresh sample of the plant being tested.

**LOOK**

Does it look like something you can eat? Look for poison indicators such as prickles or milky sap. Another indicator is any fruit that is divided into five divisions. Discussion with experts will indicate peculiarities specific to particular regions.

SMELL

Break open, crush it and smell it. Be wary of things that smell like almonds or peaches.

TOUCH

Rub on to a tender part of your body such as the inside of the wrists and wait approximately 20 minutes to see if a rash develops.

TASTE

Rub on the inside of the lip and top of the tongue, testing for flavour and reaction. The plant should be discarded as a food source if a sharp, stinging or burning sensation is present.

EAT

Eat a very small portion if all the above tests prove negative and wait for a few hours to see if there are any reactions. If there is no reaction then you may eat a larger portion, continue to do this until you are sure that even large quantities will not harm you.

Note:

Always carry out the taste test on anything that you cannot positively identify and remember should the part you have tested prove to be inedible then do not discard it as cooking may make it edible. If one part of a plant proves to be inedible then you should be prepared to test the other parts [roots, leaves, etc].

SOME COMMON TYPES OF EDIBLE VEGETATION**Australian Bluebells - [sollya heterophylla]**

A hardy rounded shrub or climber that rambles through adjacent trees and shrubs with edible, fleshy, blue-black fruits, which turn translucent when ripe

Banksias - [Banksia sp] & Grevillea [grevillea sp]

The flowers from the Banksia family contain large amounts of sweet nectar that can be sucked directly from the flower or stirred in water to make a refreshing sweet drink. For best results this should be done early in the morning when dew is present.

Balga - [xanthorrhoea sp]

Grows in the form of a native grass tree that is widespread and common in a variety of habitats, especially low-lying damp areas. The flowering stems have an edible gum and the white tips of the green leaves are also edible, this is quite sweet when eaten raw. The plant is killed when you remove this growing heart.

Berry Saltbush - [rhagodia baccata]

A spreading shrub that grows to 2m with short, grey-green leaves that grows near the coast in dunes and limestone outcrops. It produces small edible red berries that are very sweet when ripe. The leaves can also be boiled and eaten like spinach.

**Bloodroot Yams - [haemodorum sp]**

These plants consist of brown-black flowers on slender stalks and are common in the south of the state and grow to 2m. The bulbs are eaten raw or roasted. They are sweet, juicy and hot, somewhat resembling a very mild onion in flavour but with considerable bite.

Boab - [adansonia gregorii]

The nuts should be collected when mature but before they harden, the seeds and pith can be eaten raw or soaked in water, they have a taste like dried condensed milk.

Bracken Fern - [pteridium sp]

This and some other large ferns are edible while the green shoot is in the "fiddle head" stage. Although they can be eaten raw, they are more palatable when cooked, the underground stems although stringy are rich in starch and roast up well in the campfire.

Bush Tomato - [solanum diversiflorum]

These grey coloured shrubs grow to about 50cm and have prickles on the stem and leaves, the flowers are purple. The fruit when ripe are pale yellow with black seeds surrounded by pulp. The fruit is cooked in ashes, the seeds removed and the flesh eaten.

Bulrush - [typha sp]

These plants generally grow along the edges of lakes, swamps and large dams. The horizontal stems are rich in starch but need pounding to separate this from the strong fibres running through the plant.

Christmas Tree - [nuytsia floribunda]

A small tree that grows to 8m. The young roots are edible and are peeled and eaten they have a moist brittle centre that tastes like sugar. The flowers can be soaked in water to make a sweet refreshing drink and the gum can also be eaten.

Coastal Sword Sedge - [lepidospermia gladiatum]

This plant grows to 2m and grows in coastal sand dunes and woodlands in wet areas. They are identified by their long dark green sword-like leaves. The base of the stem is edible and can be eaten raw or roasted.

Desert Raisin - [solanum centrale]

A small shrub with purple flowers and soft leaves that usually grows to 30cm in Spinifex sand plains and dunes. The fruit is eaten raw when green-white to yellow-brown. When dried it has the taste and appearance of a dried sultana and can be stored.

Desert Kurrajongs - [brachychiton sp]

Identified by their boat shaped pods filled with shiny, yellow seeds. Use a stick to remove the seeds as the small hairs surrounding them are irritating to the skin. The seeds should be winnowed by pouring between two containers to allow the wind to carry away the prickly hairs then pounded and roasted with a little water to make porridge or roasted until black and then crushed and used like ground coffee to provide a drink.

**Desert Figs - [figus sp]**

Wild figs of one kind or another are found across much of Australia's inland. They grow as a large shrub to 4m, their glossy, green leaves are very distinctive and the red, pulpy, ripe fruits are excellent eating. Dry fruits can be collected from under the trees and ground into a paste which can be eaten raw or rolled into balls and stored for future use.

Emu Plums - [podocarpus drouynianus]

A low growing shrub found in the southern forests that yields a dark purple, edible fruit of good flavour. The attached green "seed" should be discarded.

Geebungs - [persoonia sp]

These shrubs or small trees grow to 2m and are found mainly in the south of the state. The pulp from the small green-yellow fruit is edible and tastiest when collected from beneath the tree; the skin and seeds should be spat out. These are also known by the unappetising name "snotty-gobbles".

Milkmaids - [burchardia sp]

Small plants growing to 30cm with white flowers maturing to pink with a brownish centre. The root tubers are edible and can be eaten raw or roasted.

Native Banana - [leichardtia australis]

Is a vine with greyish leaves, tiny flowers and white, milky sap. Even though milky saps usually indicate that poisons are present, these immature, large, greenish, pear shaped fruit can be eaten raw or cooked, once ripe only the yellow seeds are edible.

Native Yam - [dioscorea sp]

A climber that grows to 2m in low-lying ground among basalt and granite outcrops. The tubers are edible and are roasted, pounded and then eaten.

Pigface - [carpobrotus sp]

A succulent prostrate shrub has red-grey trailing branches that grow to 2m. They are found in sandy areas of the state near the coast. Although the water in their fleshy leaves is a little salty it can be purified. When the petals drop off the flowers the purple-red base is revealed and the juicy centre of seeds in a white pulp can be eaten.

Pigweed - [portulaca oleracea]

A succulent annual with red-brown stems lying flat on the ground these are widespread in arid regions. The leaves are high in vitamin-C and can be eaten raw or boiled like spinach. They can be used as a source of water if no trees are available for transpiration by placing them in foliage bags.

Quandongs - [santalum accuminatum]

A common medium tree growing to 6m that favours sand hills and sandy plain country. They are well known for their round, wrinkled seeds the roasted kernels of which are edible and quite nutritious. The bright red, outer flesh of the ripe fruits is also edible tasting somewhat like an unripe apple. A related species, the Native Plum [santalum lanceolatum] bears a tasty, dark purple fruit.

Ruby Saltbush - [enchylaena tomentosa]

A straggling shrub growing to 1m. The edible fruit is berry-like, small, green or bright yellow turning red when ripe. They are collected by shaking the branches over a container. The young leaves can be eaten after boiling in two changes of water to remove bitter soluble salts.

**Sandalwood - [santalum spicatum]**

A shrub that grows to 4m in areas of red loam or on granite outcrops. The fruit are spherical with a thin green or brown skin. The nuts contain a white kernel that is edible.

Wandoo - [eucalyptus wandoo]

A smooth-barked gum tree that grows to 30m the outer parts of the roots can be scraped off and eaten to provide a sweet, juicy delicacy. The flowers produce abundant nectar, which can be collected by soaking the flowers in water and then drinking the water.

Watercress - [rorippa nasturtium-aquaticum]

A trailing, herbaceous perennial found in fresh, flowing water. The leaves and stems can be eaten raw or cooked as a vegetable.

Water Lilies - [nymphaea sp]

These are common to the northern part of the state and are among the water plants that have edible tubers or potato like growths at the base of the stems, they taste best when roasted in the ashes of the campfire. The stems of the leaf and flower of the giant water lily have the texture of celery and can be eaten raw.

Wattle - [acacia sp]

These shrubs grow to 3m and are common in sandy and limestone soils. The hard black seeds are ground to a chalky white powder that can be eaten raw, cooked as a damper or mixed with water into a drink.

EDIBLE INSECT ACTIVITY ON PLANTS**Sugar Bread - [lerp scales]**

Small sap-sucking insects that feed on plant sap extract the nutrients they need and then excrete a crusty white substance on gum leaves known as lerp scales. These sweet tasting crusty particles can be eaten or dissolved in water as a refreshing drink and were an important source of carbohydrate to traditional aboriginal people

Mulga Apples - [insect galls]

These are insect galls and are the result of a wasp that burrows under the bark of Bloodwood and Mulga trees. The galls are approximately 2-3cm across and contain a small amount of fluid and an edible grub. The soft fleshy part of the gall and the grub itself can be eaten.



CHAPTER 3

Direction Finding

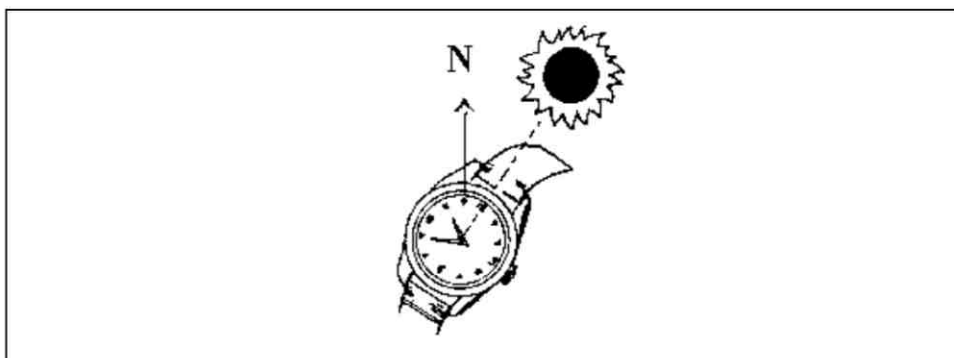
Sun Movement

The sun's position north or south of the equator is called declination. It is furthest north on June 21, crosses the equator on September 21, is furthest south on December 21 and re-crosses the equator on its way north on March 21. Any east-west line indicated when the sun crosses the equator on the 21 March and the 21 September will be accurate.

WATCH METHOD

To find north using your watch simply -

1. Stand holding your wristwatch horizontal with the figure 12 pointing at the sun
2. Bisect the angle between the hour hand and the 12 O'clock position
3. The line will indicate approximately north and is accurate within 5-8 degrees



Direction Finding Using A Wrist Watch

Note:

This method will not apply to areas north of the Tropic of Capricorn during the period of the midsummer equinox for your area.

TRADITIONAL BUSHMAN'S METHOD [KANGAROO WALLOWS]

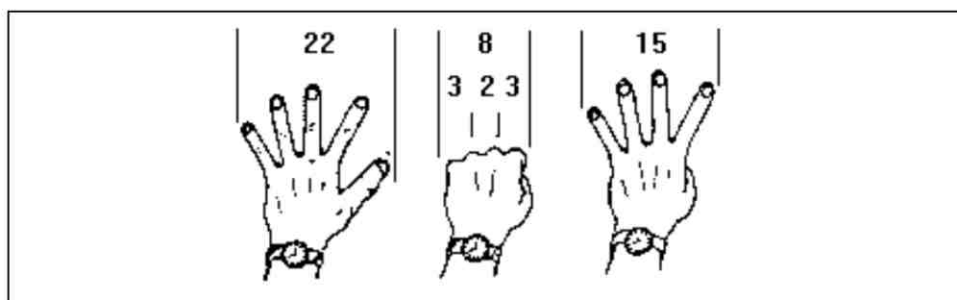
Early settlers often gained a rough estimate of south by remembering that kangaroos rested in areas of shade during the heat of the day. They were aware of signs of disturbed earth where the kangaroos scooped out a hollow in the shade of low bushes. As we are in the southern hemisphere the shade areas were always on the southern side of the bushes.

Note:

This method is still applicable and may provide an easy method of direction finding.

HAND SPAN METHOD

The sun crosses the imaginary north/south line [meridian] every day at noon and there are 24 hours between crossings of the meridian. During this time the earth revolves through 360° . It can therefore be said the sun travels from east to west at a speed of 15° per hour. To find north simply note the time and plot the sun from its present position backward or forward as the case may be to its noon position. The diagram below will give you a general indication of measuring degrees using your hand span. You can experiment with this method and increase accuracy by measuring sun movement with your hand and then measuring it with a compass for comparison.

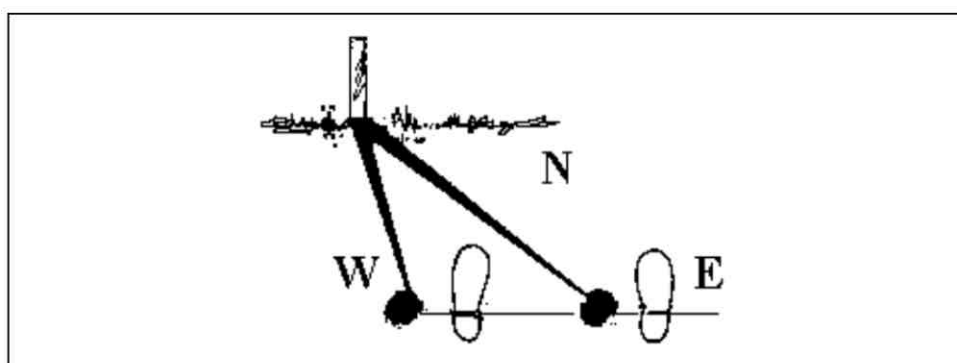


The Hand-Span Method Of Measuring Sun Movement By Degrees

THE SHADOW STICK

To use the shadow stick method -

1. Push a stick vertically into the ground
2. Place a stone at the end of the shadow
3. After a wait of 20 minutes place another stone at the end of the shadow
4. A line drawn from the first stone through the second will be a west-east line
5. Face the stick with your left foot between the stones and your right foot past the stones on the line drawn and you will be looking north
6. This method is accurate within 2-3 degrees [is more accurate when taken over an hour]



The Shadow Stick Method Of Direction Finding

Note:

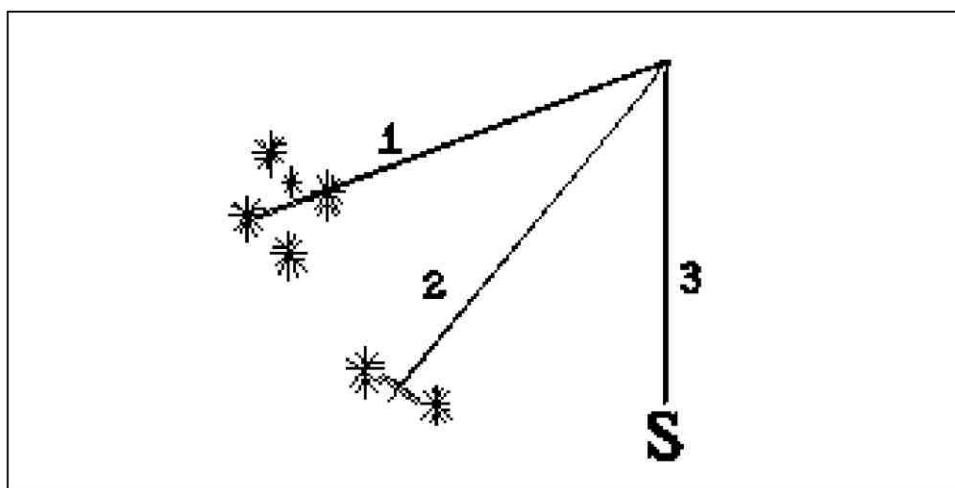
In midsummer in areas north of the Tropic of Capricorn the shadow stick will be behind you.



THE SOUTHERN CROSS METHOD - AT NIGHT

The Southern Cross can be used to indicate south at night by –

1. Extending an imaginary line through the long axis
2. Locating the two pointers and bisecting them at right angles with another line.
3. Where these two imaginary lines meet drop a line straight down to the horizon
4. This will indicate south [approximately]



Direction Finding At Night Using The Southern Cross

NAVIGATING AT NIGHT WITHOUT A COMPASS

You will find it very easy to navigate using the stars, particularly in the more arid regions of Western Australia.

You will need to establish where north or south is then draw a earth compass on the ground by drawing a line on the ground indicating north - south, bisect this line with another line at 90° , this will show east and west. You now have your earth compass.

Once you decide in which direction to travel, you can stand on your makeshift compass and face the direction you intend moving. Look for a bright star or better still, a group of stars that are in the required direction and move towards them.

Try to select stars that are not right on the horizon as you will lose sight of these when moving around trees.

Remember that stars move from east to west in the same manner as the sun and you will have to allow for this at 15° per hour.

Note:

Stop periodically and check your direction by drawing your earth compass on the ground again.

Some time ago I reported that I bought a mobile phone signal booster and apart from using it at home I had not had the chance to test it in the wild until travelling to the 4WD Association Gathering. These devices are available from a few suppliers, I bought mine from PK Technologies in Port Kennedy wholly because they are local.

<https://www.pktechnology.com.au/product-category/mobile-boosters/page/3/>

The unit is a CEL-FI ROAM 3G/4G/5G portable pack which comes in a smallish case with a shark fin antenna. It works for me rather than a car installation kit as I can use it in the house or caravan as well as in the car. I am using the booster with a 3G/4G external antenna mounted on the car which I will need to upgrade to a 4G/5G antenna eventually.

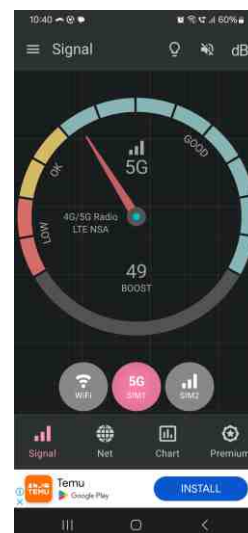
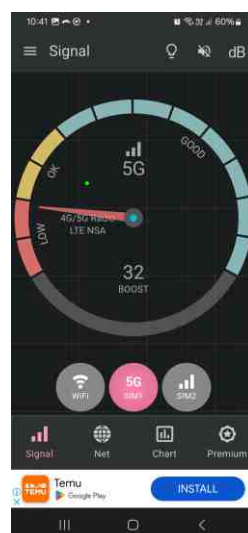


The booster will not give you signal if there is none available but it will boost a weak signal and keep your connection into the fringe areas potentially filling in the patchy areas such as in the Telstra coverage screenshots below.



Your phone must be close to the output antenna for best results. The mobile signal app screenshots below were taken near Quindanning, a known patchy area, of the signal difference with my phone close to the booster and about a metre away from the booster. I assume a proper 5G antenna may give a bit of improvement on these results.

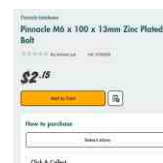
Brisey



Wanting to gain a bit more room in the ute tub I decided to make a shelf for the back seat for the fridge, which posed a few problems for strapping it down securely.

Most newer cars have an ISOFIX mounting system in the back seats which is designed for anchoring baby car seats so I thought this could be utilised. Browsing online I couldn't find any suitable adaptors so I came up with an idea using common stuff available from Bunnings.

The platform was a straight forward square of chipboard covered with carpet and a spacer to sit level on the seat squab



Next was to make the hooks.

I used a 6mm J bolt to hook around the ISOFIX hook, some aluminium hollow tube for the spacer and some 6mm nutsert rivets fixed in the ends of the tube and a bit of aluminium to clamp the spacer to the ISOFIX hook

Brisey





DESTINATIONS - PLANNING & PACKING PREPARING PHYSICALLY FOR 4WD ADVENTURES

You don't need to be an Olympian, but some degree of fitness will help you have fun. Although modern 4WDs make relatively light work of ploughing through sand, breasting creeks, climbing rocky tracks and conquering long stretches of corrugated roads there's still a need for the vehicle occupants to have degree of 'match fitness'. Margot Mora spells out a gentle fitness regime for all of us.



Prep is crucial for long-distance 4WD travel. It's understood that your vehicle must be in peak condition; you need all the necessary camping and navigation equipment; and you need a well-planned itinerary. But what about the drivers and passengers? Are all of you ready to manhandle the mechanical magic carpet carrying you along rugged Outback tracks on your next adventure?

Why being in shape matters on a 4WD trip
Long-distance 4WD travel in Australia isn't for the faint-hearted. It requires concentration and stamina to navigate challenging tracks and roads during a lengthy trip into the wild, plus some degree of fitness to set up and pack away camping gear; to enjoy walks to scenic venues; and, inevitably, to extricate a bogged vehicle and R&R flat tyres.



4WD travel in a well set up, climate-controlled vehicle might initially seem passive – after all, you spend hours just sitting behind the wheel. But there's much more to it:

Driving fatigue: Even with excellent driving skills, long hours of concentration, vibration, and muscle tension take a toll on your neck, back, and shoulders. Driving fatigue can also be fatal.



Camp setup and pack-down: All your camping equipment and supplies aren't going to pack and unload themselves. You'll be lifting, crouching and twisting as you're hauling gear, often in hot or windy conditions.

Bushwalking and exploring: One of the main reasons for a 4WD adventure is to see nature close-up. Even short walks to gorges, waterfalls, or lookouts often involve uneven terrain, loose rocks or sand, requiring some level of fitness and stamina.

Recovery situations: If you get bogged, you'll be digging, winching, or pushing. It's not the time to discover that manual labour leaves you feeling like your back is broken. Ditto for lifting and changing heavy spare wheels.



If you're not physically prepared, you're more likely to suffer aches, strains, or worse, an injury that cuts your trip short.

Getting in shape will boost your concentration skills, fatigue resistance, stamina and endurance. If you do enough 4WD trips, sooner or later, you'll encounter an emergency situation, when being in good shape means you can operate as an asset, not a liability.

No, you don't need to be an Olympic athlete to enjoy 4WD touring, but you must be reasonably mobile, strong enough to handle your equipment, and fit enough to recover quickly from long days.

Start with mobility and flexibility

If you're not a hard-training young whippersnapper, extreme adventures like 4WD travel probably leave you with some stiffness: hips, hamstrings and lower backs are common culprits.

Improving your mobility makes everything on an outdoor adventure easier. Mobility training reduces the risk of injury, eases muscle pain, fast-tracks recovery, helps build muscle and improves strength.

Following are a few simple daily mobility-boosting stretches and we've taken a lead from Celeste Barber's glamour-mocking videos by having Allan Whiting 'model' the routines. (He's now an octogenarian, but managed to look semi-comfortable doing them!)





Hip flexors: Get into a lunge position with your upper body straight and push your hips forward and down to stretch the back leg's hip flexor. This helps your body cope with long sitting sessions.



Chair twists: This will help with lower back mobility. Sit on a stool with your knees at 90° to your feet, hip-width apart. With the back of your hand on the opposite knee, slowly twist your head and body towards the knee. Hold the position for 30 seconds and repeat with the other side.



Hips and hamstrings: Standing with your feet shoulder-width apart, squat as far as possible. Keep your hands flat on the floor and try to straighten your legs. These exercises are great for bending and lifting.

Build Functional Strength

Functional strength is what it sounds like. It's the strength to be able to lift and carry jerry cans, handle spares and recovery gear, set up camp and pack or unpack heavy equipment, and dig your vehicle out of boggings. Strength-training exercises help build muscles that make everyday movements easier. It's also important to build balanced strength by training all muscle groups; otherwise, weaker muscles can over-compensate and get injured. Focus on strength training that mimics real-life movements applicable to 4WD life.





Bodyweight squats: This builds strength for climbing and lifting. With feet just more than hip-width apart, bend your knees and lower your body so your thighs are in line with the floor, keeping your entire body tight. Return to a standing position and repeat.

Step-ups (with or without a pack): Good for handling steep bushwalking terrain.

Push-ups (wall or floor): Help with upper body strength.



Planking: Builds core stability and protects your back.

Deadlifts: This exercise is excellent for building strong glutes and hamstrings and mimics lifting heavy gear.



If you're not in great shape, start slowly, with two or three short sessions per week. Even modest strength improvements can have a great impact in the bush.

Improve Cardiovascular Fitness

Cardio exercises have multiple benefits, including increasing stamina and strength, fighting off viral infections, strengthening the heart and lowering blood pressure and blood sugar levels.

Some moderate cardio training can help you recover more quickly and keep your energy levels up, making your trip more fun. You want to enjoy your time at each stop, not just set up camp and have to head to bed. Here are some low-impact activities:

Walking or hiking: Try hilly terrain if you can.

Cycling: Excellent for building leg strength and endurance.

Swimming: Great if you have 'dodgy' joints, because they become weightless when floating.

Rowing machines or elliptical trainers: Ideal for full-body, joint-friendly workouts.

Aim for 20-30 minutes, three or four times a week. If you're huffing and puffing walking up a flight of stairs, you'll also feel it climbing to a lookout in the NT.



Of course, you can always opt for more rigorous exercise. Alan Whiting has been practising and teaching traditional Japanese art, Tenjin Shin-yo Ryu, for many years and still mentors his senior students.

Train Like You Tour

As your departure date gets closer, try to simulate the movements and activities you'll be doing on your 4WD trip.

Pack a daypack and go for a hike.

Practice setting up and packing away your camp.

Load and unload your vehicle. This will also help you figure out the most space-saving ways to pack your equipment.

Test your recovery gear. If you've never used your jack, winch or sand ladders, practice in a safe spot. It's surprising how physically demanding recovery can be, especially in soft sand.

Focus on Your Overall Health

Getting in shape by exercising will be a massive advantage for managing your daily activities, but it's also necessary to be in optimum health.

Eat a balanced diet and get into the habit of drinking enough water daily. Research shows that men should consume 3.7 litres of fluids daily – including water, other fluids and the water content of food – and women 2.7 litres, so make sure you keep yourself hydrated. Doing so will also help your muscles recover faster after exercising, and you'll feel less depleted.

Get Fit and Hit The Road

A long-distance 4WD trip through the Australian Outback is one of the most incredible life experiences, but it's not without its physical challenges. By getting into shape, you'll cope better and enjoy it all the more. Taking that steep track to the lookout will be a breeze, helping with a recovery won't break your back and setting up camp quickly won't finish you off for the day.

So don't wait until the day before your departure to start thinking about your fitness. Your future self, parked beside a remote billabong with a cold drink in your hand and no backache to complain about, will thank you for it.

Margot Mora is a versatile writer who covers everything from business to personal growth. She crafts insightful content for entrepreneurs and freelancers, while also sharing her passion for travel, self-development and relationships through widely published articles.



Home > Blog > Expert Advice

Your Guide To Mud Driving in a 4WD

The temptation to drive your 4X4 straight through a muddy section rather than going out of your way to avoid it is hardwired into many of us.

Michael Ellem from Offroad Images



Michael Ellem

Aug 09 2024



I've got a saying: "Mud is for millionaires!"

There's a reason this saying came about—driving in mud can get seriously expensive. I've learned the hard way over the years, with alternators failing, brakes wearing out, and various components getting wrecked on different vehicles, usually because of mud.

Mud gets into everything, acting like a mix of wet and dry sandpaper. It can destroy coatings, seals, and pretty much any component it touches.

But let's be honest, it's also a lot of fun.

The temptation to drive straight through a muddy section rather than going out of your way to avoid it is hardwired into many of us. The thrill of testing your 4WD's capability is front and centre in most 4WDers' minds. And when your mates or kids are egging you on... well, you just have to go for it!





Until it all goes wrong, and you get stuck... We've all been there, and if you haven't yet, as a 4WDer, it's probably only a matter of time.

So, let's take a minute to figure things out and see what you can do to reduce the risk of getting bogged down in the mud.

The first thing I need to stress is the importance of good tyres and proper tyre pressures. It's absolutely crucial to have your vehicle set up with tyres that match the kind of driving you'll be doing.

Most people wouldn't walk across a muddy track barefoot, worried about slipping and sliding all over the place. Though, I have to admit, I do know a few people who would!



A good set of off-road tyres should be a top priority for anyone planning to venture off-road. And if you expect to spend a fair bit of time in the mud, it's definitely worth investing in mud tyres.

Over the years, we've tested numerous tyres and have found the BFG KM3s to be particularly impressive. While primarily a mud tyre, the KM3s have proven to be exceptionally versatile, performing well across various terrains including sand, rock, and even on bitumen. We've run several sets on our 79 Series for nearly 300,000 kilometres, as well as on our older 60 Series, affectionately known as "the Sandy 60," and on my wife's Suzuki Jimny. Throughout this extensive use, not only have we avoided punctures, but these tyres have also consistently handled challenging muddy conditions with ease.



Adjusting your tyre pressures in the mud gives you a longer footprint at each corner, providing better traction and allowing the tyre to flex its tread over slippery terrain. This lets you steer in the direction you want, rather than being at the mercy of the track's hidden obstacles. A standard tyre, on the other hand, is more likely to slip around and follow the track's path.

Before tackling a muddy hole like the one in this image with my mate Deano from 4X4 Australia, it's a good idea to check the depth using a stick from the side of the track.



So, what exactly should you be looking for when approaching a section of muddy water?

Firstly, consider the depth. Are the wheel tracks deeper than you're comfortable driving through? Will your vehicle be able to cross this muddy section without water getting inside?

Next, check the depth in the middle of the track. Could you end up getting hung up on your diff or transfer case? This can be a real problem, as the tyres will lose downforce if the weight is supported by the underside of your vehicle.

Lastly, think about the base where your tyres will be travelling. Is it a hard base with decent traction, like gravel, or is it a thick, sloppy mess?



If it's a thick mess, you'll likely find it much tougher going as you travel through, so it's worth reassessing the depth at the edges and the centre of the track.

You should also check for obstacles in the water. Sometimes, people who get stuck will use logs or rocks in the wheel tracks to gain extra height and traction. These hidden obstacles could damage your vehicle or, at the very least, restrict your mobility as you try to make your way out.



Preparation is key when travelling through deep mud. It makes sense to have your recovery gear within easy reach—the last thing you want is to get stuck and then think, "Hmm, where's the snatch strap and shackles?"



You might want to attach the strap to the recovery point beforehand and coil the remaining length on top of your vehicle's bull bar, securing it with a bit of electrical tape. This way, if you do need it, someone can quickly grab the strap, pull it free from the bar, and start the recovery before muddy water gets into your vehicle. Another good tip is to quickly wipe down all your door rubber seals to ensure they're sealed against water getting in if you find yourself bogged. Now, not all mud is created equal. Be especially cautious on salt lakes, where the mud can be bottomless. In these areas, running lower tyre pressures is crucial to spread the load across the surface and improve traction.



When you get home after your trip, don't just clean the outside of your vehicle. Take the time to clean the parts you can't see, especially underneath the vehicle. These components will thank you for the extra care, you'll face fewer servicing costs, and you'll feel proud of your investment.



But hey, if you're going to show off and demonstrate just how awesome your 4WD is, make sure you do it in style and have someone snap some photos for you!

"Cheers"

Michael Ellem | Offroad Images



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What modifications need to be engineered to be legal?

When it comes to modifying your 4X4, it's easy to get caught up in the excitement of new upgrades.



Pat Callinan

Nov 28 2024



When it comes to modifying your 4X4, it's easy to get caught up in the excitement of new upgrades - the bigger tyres, the suspension lift, or the bar work that makes your vehicle look like it's ready to conquer the Simpson Desert. But here's the thing: not all modifications are created equal, and some will need to be signed off by an engineer to keep your 4X4 legal. While the rules and requirements vary from state to state, some modifications almost always need engineering approval, no matter where you're based.

The penalties for skipping this step can be steep. We're talking fines, defect notices, or worse - a rejected insurance claim after an accident. Let's take a look at the most common 4X4 modifications that require engineering and why it's crucial to tick the legal boxes before hitting the tracks.

1. Suspension Lifts Over 50mm

The holy grail of 4X4 mods—getting your rig higher for better clearance and a tougher look. But as soon as your suspension lift goes beyond 50mm, you're likely in engineering territory. The reason? Lifting a vehicle changes its centre of gravity, which affects stability and handling. A poorly executed lift can lead to decreased handling, especially when cornering or navigating uneven terrain.

Here's where state laws come into play. In NSW for example, you're allowed up to a 75mm lift without engineering through a combination of tyre diameter and suspension lift, so a 25mm suspension lift and 50mm lift from the tyres would be legal(ish). Anything above 75mm needs engineering sign-off.

In Victoria, the rules are similar, but that 75mm has to be a combination of suspension (max 50mm) and tyres (max 25mm). Queensland has the same 75mm rule as Victoria with a 50mm limit for anything with Electronic Stability Control (ESC). You can bump this up to 125mm with engineering. NT will let you go up to 100mm over stock without needing engineering, while our mates in SA, WA, ACT, and Tassie are all capped at 50mm lifts before they'll need to get engineering sorted.

It's worth mentioning though that it's not just the springs that can cause issues here. In most states the tyres count towards the lift too so if you're anywhere close to the limit it's worth double checking with a local engineer. An engineer ensures that the components you've installed (springs, shocks, control arms) work together safely and that your rig still meets Australian Design Rules (ADRs).



2. Tyres Larger Than 50mm Over Standard Diameter

Bigger tyres are often the first modification for many 4X4ers, giving your vehicle improved traction, clearance, and that iconic off-road stance. But fitting tyres more than 50mm larger than your factory size is another modification that typically needs to be engineered. Larger tyres can impact speedometer accuracy, braking distances, and steering geometry - all safety concerns that need addressing.

An engineer will confirm the basics, like ensuring your tyres fit safely within the guards, won't rub against suspension components, and won't compromise the braking system. They'll also check that your drivetrain can handle the additional strain. Ignore this step, and you could be looking at fines, defect notices, or trouble with your insurer if something goes wrong.

3. GVM Upgrades

Gross Vehicle Mass (GVM) upgrades are popular for those planning heavy touring setups, like decked-out canopies or simply loading up with camping gear. A GVM upgrade increases the legal weight your 4X4 can carry, ensuring you're not overloading the chassis, suspension, or brakes. However, this is a significant legal change and always requires engineering approval.

The upgrade typically involves installing heavier-duty shocks and springs, sometimes chassis reinforcing, or even upgraded differentials. An engineer will test the setup to ensure your vehicle can safely handle the extra weight under all conditions. Without this approval, your 4X4 could be deemed unroadworthy, even if it seems to handle the load fine behind the wheel.

4. Pre-Rego Mods: Why It Pays to Start Early

When you get your 4X4 engineered is just as important as what you get engineered. Having a brand-new vehicle modified before it even hits the road can save you a fortune and simplify things if you ever go to sell it. If you're planning significant modifications, such as chassis extensions, portal axles, or other heavy-duty changes, consider doing them before your 4X4 is registered.

This is known as the Second Stage of Manufacture (SSM) process. Under SSM, the modifying workshop can make changes under their engineering umbrella, ensuring your vehicle complies with Australian Design Rules (ADRs) and remains legal nationwide, not just in the state where your engineer is signed off. You'll benefit from lower costs and less red tape compared to getting the same modifications approved on a registered vehicle. It's worth asking your workshop if SSM is an option for your build.

5. Seat Upgrades

Upgrading your 4X4's seats is a popular way to boost comfort and support for long hours on the tracks, especially in an older vehicle. But there's a hidden risk - how those seats are mounted. Even if the seat itself is ADR-compliant, there's no guarantee the mounts holding it in place are strong enough to withstand a crash. This is where an engineer's expertise becomes critical.

Think about it: a poorly mounted seat could turn into a deadly projectile in an accident. An engineer ensures that your seats and mounts are made from proper materials, are correctly installed, and can withstand the forces involved in a collision.



6. Bull Bars and Brush Bars

Not all bull bars need engineering, but if you're installing a custom setup or something that deviates from ADR-compliant designs, you might need approval. Bull bars and brush bars affect how your vehicle behaves in a crash, particularly with airbags and crumple zones. If the bar isn't designed with these safety systems in mind, it could prevent the airbags from deploying properly.

An engineer will check that your barwork is mounted correctly, doesn't obstruct vision, and meets all ADR requirements. This is especially important if you're running a setup that includes brush bars connecting to your side steps, as these can change the structural dynamics of your vehicle.



7. Chassis Modifications

Any change to your chassis—whether it's lengthening, shortening, or adding additional cross-members—will need engineering. Chassis modifications are sometimes done for custom tray setups, GVM upgrades, or even chassis extensions for a longer wheelbase. These changes are highly regulated because they directly impact the structural integrity of your 4X4.

Engineers will assess the materials used, the quality of the work, and how the modifications affect the overall strength of the vehicle. Poorly executed chassis modifications can lead to catastrophic failures on the road or in the bush, so this isn't a step to skip.

8. Brake Upgrades

Upgrading your brakes is a smart move if you've increased your vehicle's weight, swapped engines, or added larger tyres. However, modifying or replacing brakes with anything other than factory-spec parts usually requires engineering approval. This is because your braking system must meet strict performance standards under ADRs. An engineer will test your brakes under load to ensure they perform safely, whether you're towing a trailer or tackling a steep descent. It's not just about stopping power—it's also about balance and preventing brake fade under heavy use.

Why Engineering Matters

The legal side of 4X4 modifications isn't just about avoiding fines or defect notices - it's about safety. Engineering approval ensures that the modifications you've made don't compromise your vehicle's handling, braking, or crash performance.

Getting your modifications engineered might feel like a hassle, but it's a small price to pay for peace of mind. After all, the last thing you want is for your dream vehicle to become a liability - on or off the tracks. Check your state's regulations, keep your modifications legal, and enjoy the confidence that comes with knowing your 4X4 is up to code.

Keep the shiny side up!

Pat



Home > Blog > Camp Cooking & Recipes Trailblazer Pad Thai

On a recent trip with Pat Callinan, our Underwriter-by-day, Chef-by-night, Sam, cooked up a storm...



Club 4X4 Insurance
Mar 06 2024



Ingredients:

200g rice noodles
1 red chili, finely chopped (adjust to taste)
4 cloves garlic, crushed
1 tablespoon finely chopped lemongrass
3/4 cup shallots, finely chopped (divided)
3/4 cup fresh coriander, chopped (divided)
1 tablespoon sesame oil
1 chicken breast, thinly sliced
1 jar pad Thai sauce
Crushed peanuts (for garnish)
Lime wedges (for garnish)

Method:

Begin by boiling water in a pot. Once boiling, immerse rice noodles in hot water for 6-8 minutes or until they reach a tender consistency. Drain and rinse under cold water; set aside for later use.





Prepare the aromatic base by combining the red chili, crushed garlic, and finely chopped lemongrass. Finely chop the shallots and coriander, reserving half for later use. In a pan, heat sesame oil over medium heat. Sauté the aromatic mix until fragrant. Add the thinly sliced chicken breast to the pan and cook until lightly colored.



Pour in the jar of pad Thai sauce and stir to combine. Add half of the chopped shallots and half of the coriander to the pan, stirring to incorporate. Introduce the pre-soaked rice noodles to the pan and toss until well coated in the sauce. Heat the entire mixture until warmed through.



To serve, use tongs to twist the noodles into bowls. Garnish each serving generously with the remaining shallots and coriander.



Sprinkle crushed peanuts over the top and serve with lime wedges on the side for squeezing over the Pad Thai. Enjoy your Trailblazer Pad Thai!

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4X4 ASSOCIATION GATHERING





4WD Association Gathering Albany

I left for Albany on the Thursday to miss the long weekend traffic giving me a quiet trip down only stopping at Williams for a fuel topup and the Mount Barker bakery for lunch.

On the Friday I drove out to Torridirrup National Park to look at the touristy things. The sea was calm so I didn't get to see the big waves crashing onto the rocks or the Blow Holes erupting. On the way back to the caravan park I visited the ANZAC Centre and fortifications at Mount Clarence. The Power's and Burns' had arrived and set up by the time I returned so the rest of the afternoon and evening was spent socialising. The Warry's arrived later that night.

On the Saturday morning the Association officials and some of the Albany club members were discussing the trips for the next day. There were 5 trips originally including Gull Rock, Cosy Corner to the Wind Farm, West Cape Howe and two trips to Cheynes Beach but later that day the West Cape Howe trip was cancelled due to a prescribed burn. After signing up for the Cosy corner trip and a chat we all had our own missions for the day. Dinner that night was provided by the Association giving us a choice of a Mexican food truck or a menu from the local cafe. Entertainment was provided by a local band "The Shanty Men" singing everyones favourite sea shantys. We Peel clubbies had a great spot under a tree until the rain got too heavy encouraging us to move to somewhere with a bit more shelter close enough to still hear the music.

Sunday was trip day with everyone mustering at 8.30 for the trip briefing. Our plan for the day was to travel in convoy to Cosy Corner and air down, easy sand tracks and a shallow water crossing followed by crossing the Torbay Inlet mouth. In reality the water crossing was over our tyres (up to the bonnet of the Jimny that was with us) and the Torbay Inlet was flowing into the ocean. The tracks to Torbay Inlet were easy enough with pleasant views to the ocean, Someone radioed that there were a couple of Orcas off shore but no one else saw them. At the inlet plan B was enacted so onto a steep lumpy track to exit the beach. The Jimny was having a lot of trouble climbing this track and had to be winched. The alternate way consisted of about 10 Km of bitumen making a slow trip with soft tyres eventually reaching the tracks again stopping at a carpark overlooking Mutton Bird beach for a toilet break. Mobile again onto more sand tracks to our lunch stop somewhere near Hanging Rock (no not the one in Victoria but we did have a picnic) with a great view of Port Hughs. It was during this stop that the Jimny owner discovered that 4 wheel drive was not being engaged when asked to, so a quick repair was done. After lunch we followed some more tracks leading through the Wind farm and finally back to the gravel to air up for the trip back to the caravan park.

Monday saw the caravan park near empty as everyone left for home, so having an extra day to myself I visited Gull Rock national park, Narnarup Beach, briefly as it was flooded right up to the carpark, then Two Peoples Bay.

The Gathering weekend turned out to be very good with somewhere around 40 members and families from various clubs attended, and a lot of work put in by the Association and the Albany 4x4 Club.

Brisey



TRIPPING OUT



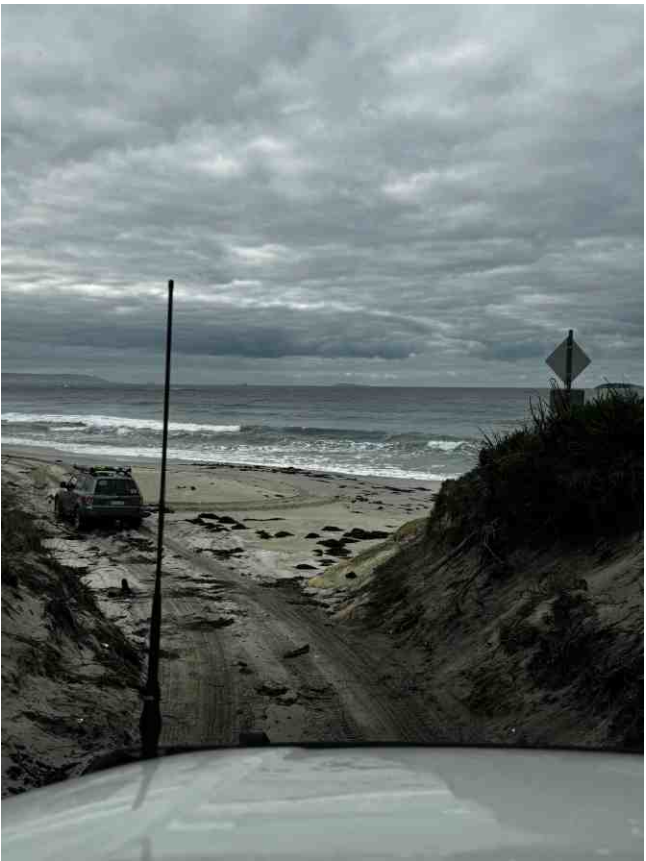
4X4 ASSOCIATION GATHERING



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4X4 ASSOCIATION GATHERING



WESTONIA WILDFLOWER WANDER

When:

Kings Birthday Weekend Friday 26 September to Tuesday 30 September

Where:

Westonia Caravan Park Corner Kaolin Street and Wolfram Street Westonia. Check in time 2.00 PM

Accommodation:

Caravan, camper trailer, tent or swag at the caravan park.

Rooms may be available at the Westonia Tavern 90467012 phone after 4.00 PM

Caravan Park:

Caravan site \$25.00 per night Tent site \$15.00 per night.

[Caravan Park](#)

Westonia Tavern:

[Westonia Tavern](#) 90467012 phone after 4.00 PM

Bookings and payments:

At the next General Meeting 26 March please add your name to the trip sheet include if you need a caravan or tent site.

If you can't make it to the next General Meeting please email me peel4x4magazine@gmail.com include if you need a caravan or tent site.

After the next General Meeting I will make a tentative booking with the caravan park for those that are on the trip sheet plus a few extra sites.

Payment can be made at the Shire Office in Woolfram Street or to the onsite caretaker.

If you wish to stay at the Westonia Tavern please organise your own booking as a deposit will probably be required

Fuel:

Carrabin, corner Great Eastern Highway and Westonia Road
Westonia, unmanned credit card site.

What to expect:

Saturday 27 September as some people may be arriving a walk around town and visit the museum in the morning then a 30 Km return drive to Boodalin Soak and Sandford nature reserve after lunch to look for wildflowers. Dinner at the pub for anyone interested

Sunday 28 September an early start for a 300 Km return drive to Baladgie Rock, Yanneymooning Reserve, Elachbutting Rock and Beringbooding Rock to look for wildflowers.

Monday 29 September an early start for a 170 Km return drive to Weira Nature Reserve (2 sites), Eaglestone Rock and Talgomine Reserve to look for wildflowers.

Tuesday 30 September journey home via Bruce Rock and York





KENNEDY RANGES AND BEYOND

TRIP LEADER: DUANE BUCKENARA AND MAX MILBANKE

PART 1: KENNEDY RANGES AND MOUNT AUGUSTUS

MEETING TIME: 10.AM SUNDAY AUGUST 10

DURATION: APPROXIMATELY 7 TO 8 DAYS

MEETING PLACE: BP SERVO MUCHEA (TOP END OF TONKIN HIGHWAY)

PART 2: MOUNT AUGUSTUS TO KARIJINI

DURATION: UP TO 2 WEEKS

PART 3: KARIJINI TO EXMOUTH

PROVIDING PHONE SERVICE IS AVAILABLE INTERESTED PEOPLE COULD BE KEPT UP TO DATE WHEN THE 2ND AND 3RD PARTS WILL BE COMENCING AND A MEETING PLACE CAN BE ESTABLISHED.

CAMPER TRAILERS AND OFFROAD CARAVANS TO BE TAKEN AT YOUR OWN RISK



Mystery Day Trip Saturday 28th June Steven Power Medium	Lake Perkolilli Thursday 2nd October to Monday 6th October Mark Skeels Medium
Bring a platter / curry night. Saturday 5th July Julie Power Social	Mandurah Boat, Caravan, 4WD & Camping Show Thursday 9th October to Sunday 12th October Information Only
Myalup Fishing Trip Saturday 19th July Jacob Yardley Medium	Koorda Drive-In & Karrara Ranges Friday 18th October to Saturday 25th October Mark Skeels Medium
Peel 4x4 Club Annual General Meeting Venue Total & Permanent Disable Veterans of Western Australia Clubrooms Saturday 26th July Peel 4x4 Club Committee Social	Sandy Cape Swag Trip Saturday 18th October to Sunday 19th October Hugh Burns Medium
Kennedy Ranges & Mt Augustus Saturday 10th August (for approx.. 2 weeks) Max Milbanke / Duane Buckenara Medium	Lancellin Dunes Day Trip Sunday 2nd November TBC Medium
Karajini & Exmouth Following on from Kennedy Ranges & Mt Augustus trip Duane Buckenara Medium	Perth 4WD Show Thursday 6th November to Sunday 9th November Information Only
27th to 31st August Dowerin Mark Skeels Medium	Lennard Track Overnighter Saturday 22nd November to Sunday 23rd November Gary Mayes Medium
Wildflower Day Trip Sunday 14th September Peter & Donna Light Medium	Peel 4x4 Club Christmas Party Saturday 13th December (TBC) Peel 4x4 Club Committee Social
Whitegum Farm Saturday 20th September to Sunday 21st September Jacob Yardley Medium	
Westonia Wildflower Wander Kings Birthday Long Weekend Friday 26th September to Tuesday 30th September Brian Tanner Easy	