



MAY 2025

Edition 298

NEXT TRIPS

**WA4WDA Gathering May 30
to June 2**
Mystery Day Trip June 28
Curry Night July 5
AGM July 26



Repco discount details
Aids To Survival Bushcraft and Survival Guide
Hema Nav update details
Pros and cons of bigger tyres
What is low range
Dwellingup weekend trip report
Powerline trip photos
Nullabor Muster trip photos

Next Meeting
28/5/25

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CLUB CONTACT DETAILS

POST OFFICE BOX 8233

WARNBRO WA 6169

<https://peel4x4club.com>

Club Email: peel4x4club@hotmail.com

Secretary: secretarypeel4x4club@outlook.com

Treasurer: peel4x4.treasurer@gmail.com

Magazine Email: peel4x4magazine@gmail.com

2024—2025 COMMITTEE

President Gary Mayes

Secretary Julie Power

Treasurer Hugh Burns

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

28/5/2025

GENERAL MEETING VENUE

Secret Harbour Surf Lifesaving Club
(Downstairs)

Doors open 7.00 pm

Meeting starts 7.30 pm

NEXT COMMITTEE MEETING

11/6/2025

COMMITTEE MEETING VENUE

The Burns' home

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.



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



OFFICE BEARERS (One shall not hold two or more positions of Office Bearer)

Association = Peel 4 x 4 Club

Rules = Constitution

CHAIRPERSON

Shall preside at all meetings of the Association and preserve order, so that business may be conducted in due form and with propriety.

It is the duty of the chairperson to consult with the secretary regarding the business to be conducted at each committee meeting and general meeting.

The chairperson has the powers and duties relating to convening and presiding at committee meetings and presiding at general meetings provided for in the constitution.

VICE PRESIDENT

Shall assist the chairperson in the performance of their duties, and shall exercise the powers and perform the duties of the chairperson in the absence of the chairperson.

SECRETARY

The Secretary shall conduct all day to day matters of the Association.

Dealing with the Association's correspondence;

Consulting with the chairperson regarding the business to be conducted at each committee meeting and general meeting;

Preparing the notices required for meetings and for the business to be conducted at meetings;

Unless another member is authorised by the committee to do so, maintaining on behalf of the Association the register of members, and recording in the register any changes in the membership, as required under section 53(1) of the Act;

Maintaining on behalf of the Association an up-to-date copy of the rules, as required under section 35(1) of the Act;

Unless another member is authorised by the committee to do so, maintaining on behalf of the Association a record of committee members and other persons authorised to act on behalf of the Association, as required under section 58(2) of the Act;

Ensuring the safe custody of the books of the Association, other than the financial records, financial statements and financial reports, as applicable to the Association;

Maintaining full and accurate minutes of committee meetings and general meetings;

Carrying out any other duty given to the secretary under the rules or by the committee.

TREASURER

Ensuring that any amounts payable to the Association are collected and issuing receipts for those amounts in the Association's name;

Ensuring that any amounts paid to the Association are credited to the appropriate account of the Association, as directed by the committee;

Ensuring that any payments to be made by the Association that have been authorised by the committee or at a general meeting are made on time;

Ensuring that the Association complies with the relevant requirements of Part 5 of the Act;

Ensuring the safe custody of the Association's financial records, financial statements and financial reports, as applicable to the Association;

Coordinating the preparation of the Association's financial statements before their submission to the Association's annual general meeting;

Providing any assistance required by an auditor or reviewer conducting an audit or review of the Association's financial statements or financial report under Part 5 Division 5 of the Act;

Carrying out any other duty given to the treasurer under the constitution or by the committee.

Shall be responsible for all monies of the Club and keep all associated records.



The Treasurer shall circulate to all financial members a printed financial statement at the annual general meeting.

The Treasurer shall present a written report of the Club finances to all general meetings.

The Treasurer is responsible for the club raffles.

ORDINARY COMMITTEE MEMBERS

INSURANCE OFFICER

Shall maintain and hold records pertaining to public liability and vehicular insurance and attend Association meetings as required.

TRIP CO-ORDINATOR (S)

Shall be responsible for the co-ordination of all trips; and shall allocate the dates of trips, keep a written log of all trips conducted, and attend Association meetings as required.

ENVIRONMENTAL OFFICER

Shall be responsible for dealing with environmental issues as they arise and attend Association meetings as required.

MAGAZINE EDITOR

Shall produce and distribute the Club magazine at the general meeting each month.

PROPERTY OFFICER

Shall hold all property donated or purchased by the Club.

They shall maintain a log detailing all property taken by members, date taken, and date returned.

They shall have the Club property maintained in good order. Defects are to be tabled at the next Committee meeting which shall consider, and if necessary, authorise any expenditure for the repair or replacement.

ASSOCIATION DELEGATE (S)

Shall attend Association meetings and represent the Club's best interests and report back to the Club as necessary.

WEBMASTER

Shall maintain and update the club website and social media pages.



5/1/25, 10:37 AM

Gmail - FW: Repco Discount



Brian Tanner <peel4x4magazine@gmail.com>

FW: Repco Discount

1 message

Peel 4x4 Secretary <secretarypeel4x4club@outlook.com>

Wed, Apr 30, 2025 at 10:37 AM

Hi All,

As discussed at the General Meeting last week, please see below for how to access the 20% trade discount at Repco.

Kind Regards,

Gary Mayes



President – Peel 4x4 Club

0401 446 134

Hi All

After many months talking with my Regional Manager and other management at work and completing necessary paperwork.

I am pleased to announce that the WA4WDA has had the association trade discount approved at Repco as of **1st April** all association members can access this discount at any Repco Store.

Albany 4wd club members will be able to access it from the 8th of March giving me time to iron out any issues with the processing of the discount before it becomes available to all WA4WDA Members

To access this all you have to do is go into Repco and say its on the **WA4WDA** account **Account # 7134922** and use your last name and club as purchase order number.

All purchases must be paid for at time of purchase

Regards

Brad Bell

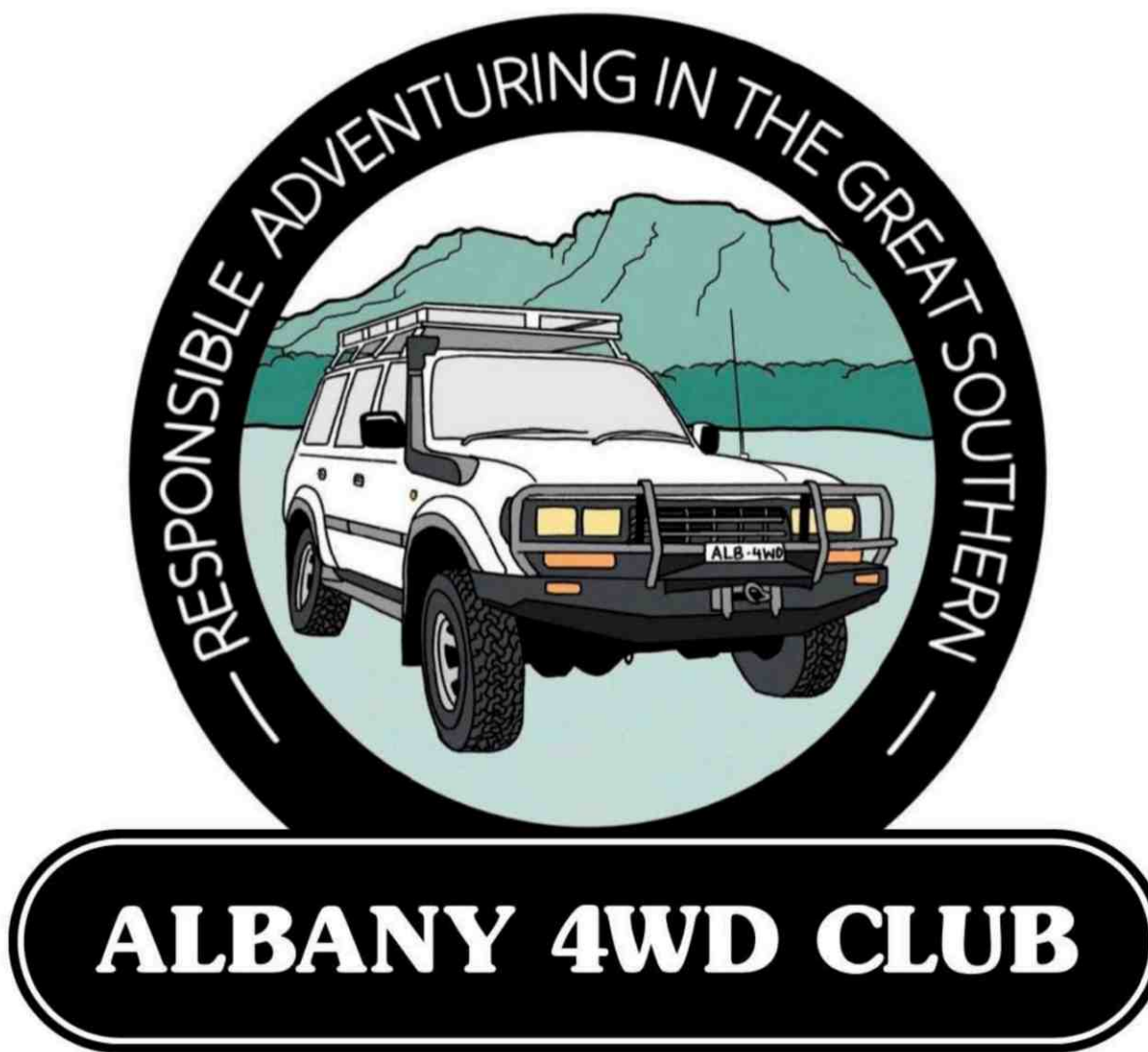
Repco Albany 430



Secretary

WA4WDA Delegate

Albany 4wd Club (Inc)





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*

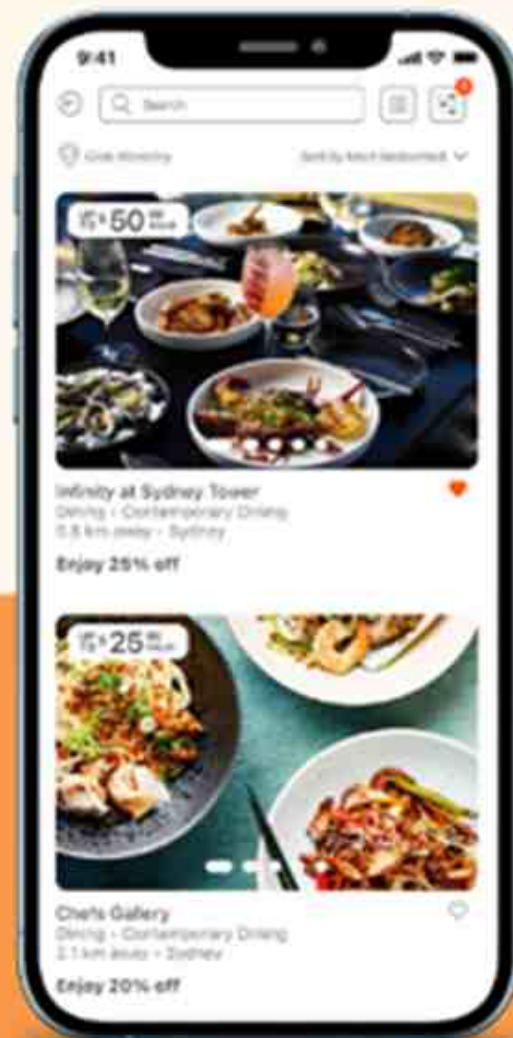
12 months		24 months	
Pay	Save	Pay	Save
\$70	\$50	\$120	\$110
We receive		We receive	
\$14		\$24	

*T&Cs apply.

The savvy
way to give back

Buy today and 20% of the purchase price
goes directly to our fundraising cause.

Support us now



At the suggestion of one of our members I have learned how to hyperlink the page numbers in the contents to go straight to the page you wish to read with a simple click, but such is life there are conditions and limitations. I have tested the function on my laptop and phone and have found that the links will not work in PDF preview mode when you open from within the email. On my laptop I downloaded the magazine and opened it with my favourite PDF reader then the link worked when I clicked on the page numbers with the mouse.

It was a little bit more involved with my phone (android) I tapped on the magazine attachment in the email to open the preview then at the top right corner I tapped on the three dots.

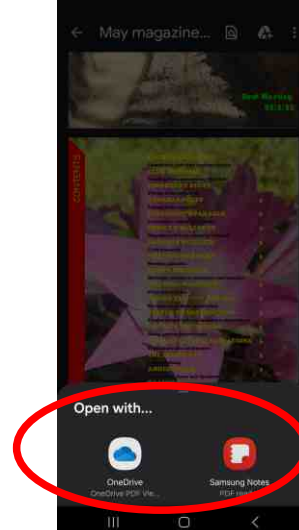


I then tapped on "open with" then tapped on the app to open the PDF. It worked nicely with both Google Docs and Samsung PDF reader on my phone. Sorry for Apple users you are on your own.



So once the magazine is loaded in your PDF reader of choice, scroll to the contents page then tap or click on the page number adjacent to the heading of the page you wish to read and you will be magically taken to that page.

That's not all folks here is the steak knives, at the top left corner of the page there is, what I really hope looks like a button, labelled with an up arrow. Click or tap on this to return to the contents page





The Aids To Survival guide was produced by the WA Police Department as a guide to remote travel. This handbook consists of 120 pages of essential reading to anyone interested in semi remote travel as we sometimes do.

There will be a selection of pages published in each magazine over the next six months until the whole book is done. If you don't wish to wait for the the complete set of pages please let me know and I will send you the complete book.

Brisey

WA POLICE ACADEMY BUSHCRAFT & SURVIVAL GUIDE

AIDS TO SURVIVAL



AGENDA - GENERAL MEETING OF THE PEEL 4X4 CLUB

Date: Wednesday 28th May 2025

Venue: Secret Harbour Surf Life Saving Club



MEETING OPENING:

1. TRIPS SINCE LAST MEETING:

2. CONFIRMATION OF MINUTES FROM PREVIOUS GENERAL MEETING:

3. BUSINESS & ACTIONS FROM THE PREVIOUS MINUTES

4. PRESIDENTS REPORT: (Gary Mayes)

5. SECRETARYS REPORT: (Julie Power)

6. TREASURERS REPORT: (Hugh Burns)

7. INSURANCE OFFICERS REPORT: (Dave Knudsen)

8. PROPERTY OFFICERS REPORT: (Jacob Yardley)

9. ENVIRONMENTAL OFFICERS REPORT: (Chris Jones)

10. DELEGATES REPORT: (Vacant)

11. MAGAZINE EDITORS REPORT: (Brian Tanner)

12. WEBMASTERS REPORT: (Gary Mayes)

13. TRIP COORDINATORS REPORT: (Steven Power)

14. GENERAL BUSINESS:

- Raffle
- Silent Auction

15. TECHNICAL:

16. NEXT MEETINGS:

GENERAL MEETING –

COMMITTEE MEETING –



AGENDA - GENERAL MEETING OF THE PEEL 4X4 CLUB

Date: Wednesday 28th May 2025

Venue: Secret Harbour Surf Life Saving Club



DELEGATES MEETING –

16. MEETING CLOSURE:



GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 23rd April 2025

Venue: Secret Harbour Surf Life Saving Club



Meeting Opened: 7:35pm

Safety Briefing.

ATTENDEES & VISITORS. As per attendance register.

APOLOGIES / PROXIES. As per attendance register.

1. TRIPS SINCE LAST MEETING

- 13th April. All Grain Beer Brewing Day. Trip Leader: Gary Mayes
- 24th April. Nullarbor Muster. Tent / Swag Trip. Trip Leader: Mark Skeels

2. CONFIRMATION OF MINUTES FROM PREVIOUS GENERAL MEETING – 26th March 2025

Chairperson Gary Mayes has signed & accepted the previous minutes.

No objections as to the accuracy of the minutes.

3. BUSINESS FROM THE PREVIOUS MINUTES

- Gary was to send through a description of the Property Officer role to Jacob. **COMPLETE**
- Gary to provide details of Treasurer role to Hugh. **COMPLETE**
- Gary to arrange membership invoice for Ian & Ann Arbuthnot. **COMPLETE**
- Tax returns need to be completed by 31st March 2025. **OUTSTANDING**
- Gary to transfer files to Secretary laptop. **Started, but OUTSTANDING**

4. PRESIDENTS REPORT (Gary Mayes)

- 1st May, fire pits allowed to start being used again (Mandurah council anyway).
- AGM Coming up. Saturday 26th July. Please consider nominating for positions.

Business for the President:

- No business for the President.

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

- Nothing to report.
- No mail reported.

Business for the Secretary:

- No business for the Secretary.

**GENERAL MEETING OF THE PEEL 4X4 CLUB****General Meeting Minutes**Date: Wednesday 23rd April 2025

Venue: Secret Harbour Surf Life Saving Club

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

- CREDITS: \$82.55 – Ian & Ann Arbuthnot Membership Fees.
- DEBITS: Nil
- PENDING: Nil
- CLOSING BALANCE (23/04/2025): \$4845.37

Business for the Treasurer:

- No business for the Treasurer.

7. INSURANCE OFFICERS REPORT (Dave Knudsen)

- Nothing to Report.
- Gary reminded everyone that vehicle insurance is compulsory, and a club requirement – even if only Third Party, Fire & Theft.

Business for the Insurance Officer:

- No business for the Insurance Officer.

8. PROPERTY OFFICER (Jacob Yardley) (Apologies)

- Nothing to report. Club property is now in the possession of the Property Officer.

Business for the Property Officer

- No business for the Property Officer.

9. ENVIRONMENTAL OFFICERS REPORT (Chris Jones) (Apologies)

- Nothing to report.

Business for the Environmental Officer

- No business for the Environmental Officer.

10. DELEGATES REPORT (Vacant) Mark Skeels attended

- The WA4WDA have their 75" TV (TCL Model 75P8M) up for sale. If anyone wants it, make an to the Association Secretary.
- May the 4th is a cleanup and relocate stuff day at Karrakin, due to demolition taking place. The Association has purchased a 20' container, and stuff from the store room in the building requires sorting and transferring. Also a patio needs to be removed. Start 0830 and finish around 1030-1100.
There may be a chance to join in a car boot sale same day at Karrakin for camping stuff and whatever...more info by email later.
- Peel has 7 sites booked for the Gathering in June. The Association requires people numbers by 17th May to sort out catering on the Saturday night. Please notify the Association Secretary, or let Gary Mayes know.

Business for the Delegate

- A question was asked in regards to how claim the REPCO 20% discount. Gary has followed up with the WA4WDA.



GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 23rd April 2025

Venue: Secret Harbour Surf Life Saving Club



11. MAGAZINE EDITORS REPORT (Brian Tanner)

- The new layout for the magazine is now complete.
- Brian mentioned that he had received a suggestion from a member to make the contents page interactive; whereby if you click on the item in the contents page, it takes you to that particular item.

Brian saw this as a challenge, and accepted it. Check it out in the next magazine.

Business for the Magazine Editor

- No business for the Magazine Editor.

12. WEBMASTERS REPORT (Vacant / Gary Mayes)

- Nothing to report.

Business for the Webmaster

- No business for the Webmaster.

13. TRIP COORDINATORS REPORT (Dave Knudsen in lieu of Steven Power)

- 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

- Ray Warry mentioned that he will lead a trip over the ANZAC Day weekend to Wandoo.

14. GENERAL BUSINESS

- Gary reminded everyone of the Double Demerits over the Long Weekend.

15. TECHNICAL SEGMENT

- No technical segment tonight.
- Gary did however mention that the next Technical Segment may be about Trip Planning, which may hopefully help people to feel more confident in leading a trip.



GENERAL MEETING OF THE PEEL 4X4 CLUB

General Meeting Minutes

Date: Wednesday 23rd April 2025

Venue: Secret Harbour Surf Life Saving Club



NEXT GENERAL MEETING: Wednesday 28th May 2025. Secret Harbour Surf Life Saving Club.
Downstairs. Doors open at 7:00pm. Meeting starts at 7:30pm.

NEXT COMMITTEE MEETING: Wednesday 11th June, 2025. Hosted by Hugh & Debbie.

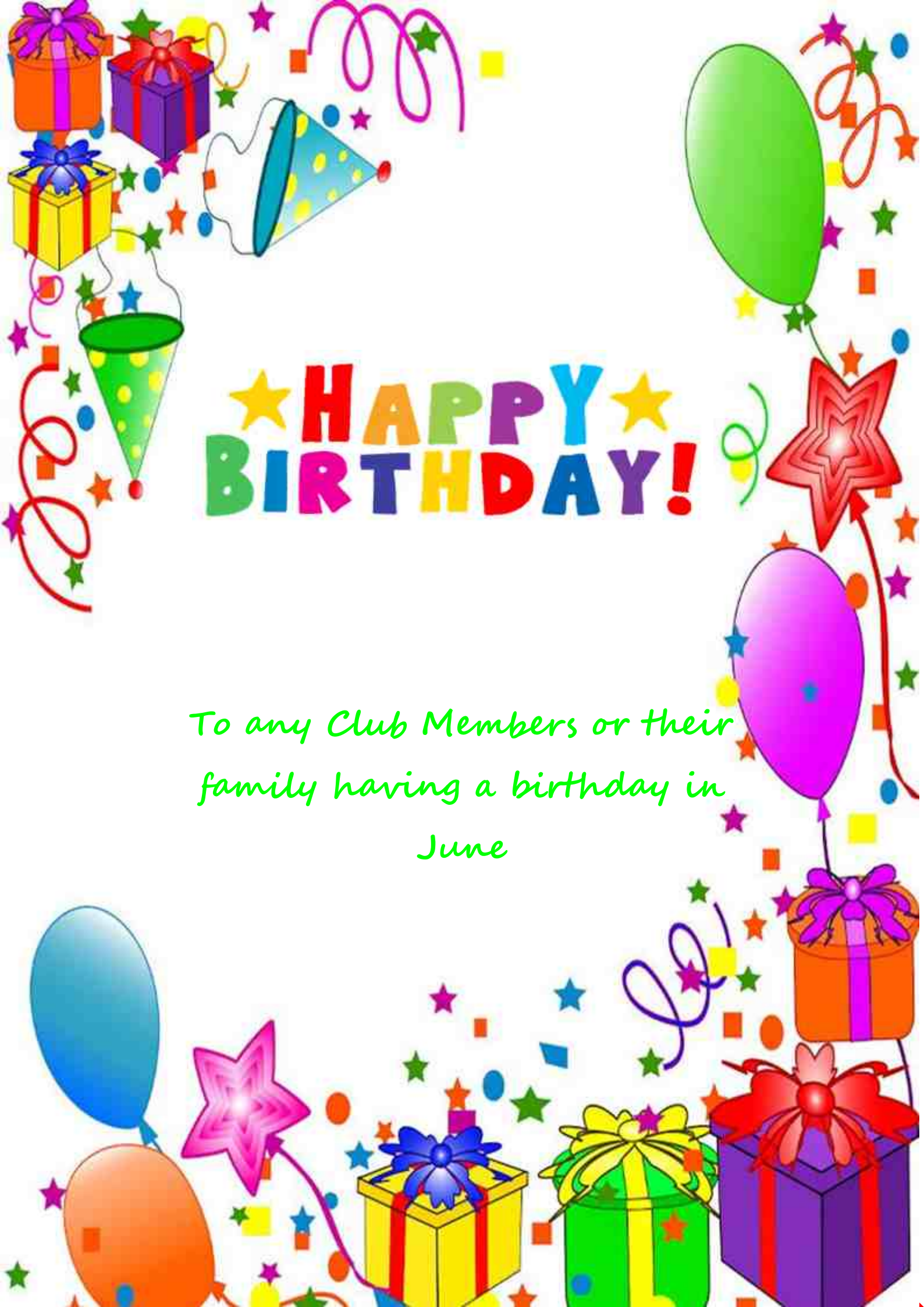
NEXT DELEGATES MEETING: Monday 19th May 2025. Gosnells RSL Hall. Starts at 7:30pm.
Meeting closed at: 8:30pm.

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

Gary Mayes

Peel 4x4 Club Chairperson

Date: 28/04/2025



**HAPPY
BIRTHDAY!**

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



WA POLICE ACADEMY BUSHCRAFT & SURVIVAL GUIDE

AIDS TO SURVIVAL



**This book is Dedicated to
Sergeant Albert Ernest O'Meagher APM.**

Albert O'Meagher [Bert to his friends] has dedicated his entire life to help others. After serving in the Royal Australian Navy Bert joined the Western Australian Police Force. In keeping in his love for service to this country and his roots firmly in the bush he worked with Police Youth groups and later with the Duke of Edinburgh Award through WA Police Cadets. The standards he achieved with the youth and Awardees is recognised world wide.

For over three decades Bert has been a trainer at the West Australia Police Academy. Bert challenged everyone to achieve beyond their perceived ability and saved many a young recruit from mediocrity and failure.

Somewhere along this journey Bert's metamorphous into a "Bushcraft & Survival Guru" was recognised and the Bushcraft & Survival Unit was established. Bert has always been a perfectionist and the Bushcraft Unit continually evolved, each time rising like the Phoenix, offering excellence of training and life saving advice throughout the country.

For those of us who have had the honour of working with Bert and being invited into his family the rewards have been unwavering loyalty, deep respect, friendship and trust.

Albert Ernest O'Meagher is a true legend.

Twenty Fifth Edition [First Issued 1979]

June, 2007

This book is a Western Australia Police Publication and is available free of charge to individuals from their local Western Australia Police Station. Organisations or groups requiring larger quantities can access and download this publication from the Western Australia Police website –

<http://www.police.wa.gov.au/RecruitingandTheAcademy/pdf/aids22.pdf>

The book is offered as an ongoing service in the interest of community safety. The contents are not subject to copyright and there are no restrictions on copying in any form by interested individuals and groups.

In keeping with the mission of the Western Australia Police Service to work in partnership with the community to create a safer and more secure Western Australia by providing quality police services. We invite comments, affirmations and suggestions for possible inclusion in future editions in an endeavour to improve this publication. Comments may be forwarded to the Principal of the Western Australia Police Academy.

A copy of this publication has been deposited in the Australian National Library.
ISBN: 0-646-36303-4



Introduction

Aids To Survival is a Western Australia Police Academy publication initially written and compiled by Sergeant Bert O'Meagher APM, Officer In Charge, Bushcraft & Survival Training Unit at the Western Australia Police Academy in collaboration with First Class Constable Dennis Reid and Dr Ross Harvey, M.B, B.S. D.Obst. R.C.O.G. A.C.C.A.M.

The Bushcraft & Survival Training Unit was introduced to provide members of the Western Australia Police Service with the necessary knowledge and skills to carry out their duties in Outback Western Australia and to enable them to co-ordinate or participate in emergency operations and advise on Outback safety. In keeping with the WA Police Service mission to provide a safer and more secure Western Australia the Unit was concerned with the education of interested community groups and individuals.

Originally the book was produced to provide members of the Western Australia Police Service with a locally produced source of reference for use in training and for dissemination to the public. To this end the book has proved to be extremely successful, this being the 25th edition with over 440,000 copies being distributed since its introduction in 1979. It is now available on the Internet under the WA Police Service website.

The book is required reading for several community groups, youth organisations, education institutions and industry trainers throughout Western Australia. Contents have been provided to Royal Flying Doctor Service WA] for inclusion in their publication, Safety & Survival Handbook.

A dedicated group of community minded individuals and organisations have contributed information and items over the years and their efforts and contributions are much appreciated. Contributors include - Peter Bindon, Vern Delgado, Arthur Connor, Graham Brammer, Ronele and Eric Gard, Richard Lushey, Ric Clifford, John Evans, The Duke of Edinburgh's Award [WA], The Royal Lifesaving Society [WA], St John Ambulance [WA], Red Cross [WA], Bureau Of Meteorology [WA], Australian Communications Authority and Sergeant Phil Ramsay [WA Police]. Diagrams were originally drawn by Western Australian Government Print Artists and updated as required.

Staff at the Western Australia Police Academy Bushcraft & Survival Training Unit who have contributed to the book include; Senior Constable Paul McKee, Senior Constable Ian Thomson, Senior Constable David Stark, Senior Constable Douglas Fleetwood, Senior Constable Glen Blackwell and Senior Constable Shaun Jackson.

Thanks are also extended to students of classes conducted by the Western Australia Police Academy Bushcraft & Survival Training Unit and members of the community of Western Australia who have provided valuable comment and feedback.

MG (MAL) SKEFFINGTON APM
ASSISTANT COMMISSIONER
PROFESSIONAL DEVELOPMENT

July 2007



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CHAPTER 1

Safe Outback Travel

Adequate preparation before undertaking a journey or accepting employment in the outback will lessen the chance of jeopardising human life. There have been many cases where loss of life has resulted from a lack of foresight into the problems involved. The WA Police Service in its mission to create a safer and more secure Western Australia provides a service which is responsive to community needs and is willing to act as a first point of call for Safe Outback Travel. Members of the public are encouraged to discuss their trip plans and post notifications with local police.

PRIOR PREPARATION & PLANNING

There are a number of things to be considered before starting to pack for your trip, these are known colloquially as the 'Rule of P' and are linked to the premise that -

Prior Preparation and Planning Prevents Poor Performance.

Equipment Required

The equipment you are taking must be serviceable and sufficient for the trip. Allow additional equipment if in doubt. Maps should cover the entire area of the trip.

Radio Communications

For close range communication between vehicles a citizen band UHF or VHF radio may be used, however for long-range radio communication a HF radio is essential, these can be hired from communications suppliers at reasonable rates. Whilst travelling in the outback it is good practice to set up a communication schedule with the Royal Flying Doctor Service and contact them daily advising them who you are and where you are.

Satellite/Digital Telephone Communications

It is now possible to ensure telephone communications in the outback with the introduction of a system of satellite /digital telephones that allow the user to call on his/her satellite /digital phone and be connected automatically to a satellite system with no time delay if in an area not covered by a digital network. This system has a saturation system of satellites that download to ground stations and ensure instantaneous voice communication with no time delay between sending and receiving.

Terrain to be covered

A map study should be done to ascertain –

- Whether it is accessible by vehicle
- Where the fuel and water sources are located
- What is the best route
- What alternate route could you use if necessary
- What aids to navigation will you have
- What positions of evacuation are available
- Where are the local inhabitants

**Use of Maps**

The Western Australian bush is very monotonous with very few landmarks and a lack of signposts on outback roads. Be wary of spoken directions as they can be misinterpreted and the wrong track easily taken. In the absence of an official map, try to obtain a rough map drawn on paper with as many landmarks as possible indicated showing the necessary distances. Mark your position on the map as you proceed so you can pinpoint your location at any given time. Do confirm your position at every opportunity.

Weather Conditions

The weather must be considered as many road conditions vary according to the local rainfall. You should be aware of the changes of season in the area of your trip; this will ensure that you are going at the best time of year. Check with police or local authorities after rain as many outback roads can be closed.

Time allowance

You should consider carefully the time and space you are allowing for your trip.

Considerations should include -

- When are you leaving?
- How long will it take?
- Where do you propose stopping to camp?
- When will you arrive?
- Have you allowed a safety margin in case of minor mishaps?

Learn about the country

You should learn as much about the country you are to travel, as possible. This will assist you if you have to survive in it.

Things to study would be –

- Dangerous animals and reptiles
- Insects, flies and mosquitoes
- Prickle bushes and any poisonous or discomfiting plants
- Any edible wild foods and bush tucker
- Available water sources
- Caves, mine-workings, holes and local problems
- Diseases to guard against

Notifications

Before leaving on a journey through remote areas always notify a responsible adult in the form of friends, relatives, station owners or police of the following information –

1. Estimated time of departure [ETD]
2. Proposed and alternate routes
3. Estimated time of arrival [ETA]

Note:

Don't forget to notify those concerned once you have safely completed the journey.

**VEHICLE SELECTION**

Selection of a suitable vehicle for safe outback travel will rely on the load that you are going to carry.

As well as major items of fuel, food and water you may also be carrying camping equipment, cooking gear, vehicle spares, tools, recovery equipment, an extra spare tyre and passengers.

If you choose to travel 'off road' you will need to be sure your vehicle can withstand the harsh and rugged conditions you will encounter.

VEHICLE PREPARATION

Your vehicle will not only be your means of transport but if you are travelling 'off road' it will be your home and of course your biggest aid to survival should something unforeseen happen to you. As such it must be in first class mechanical condition.

If you are not a mechanic it is best to take the vehicle to one who specialises in this type of vehicle. Explain the nature of your trip and have them go over the vehicle from top to bottom. Short courses in vehicle maintenance are offered by most community, TAFE Colleges, etc.

Roof Racks

To carry the intended load you will probably need to install a roof rack. Buy only from a reputable manufacturer who specialises in your type of vehicle.

Under Body Protection Plates

These are considered necessary by some people for rocky creek crossings, etc. They can be a problem in Spinifex country as after only a few kilometres' Spinifex packs tightly under the plate and creates a definite fire hazard.

Roo and Scrub Bars

These are not essential items for off-road travel but they can be good value should you be unlucky enough to hit a kangaroo or other large animal.

Spinifex Protection

Some Spinifex grows to a height of nearly 2m and the seeds can be drawn into the radiator. At least 3 layers of fibreglass wire netting should be placed over the front of the vehicle.

Fire Extinguishers

It is good planning to carry at least 5 litres of water in a plastic garden spray for Spinifex and grass fires as well as an extinguisher suitable for electrical or fuel fires.

Tyres

It is important to discuss your tyres with your local tyre dealer before your trip. Ensure you have the right tyres for the task. Eight ply radials are recommended as a minimum for off-road use. Two spares plus an additional 2 tubes should be carried.

Wheel Rims

It is easier to change a tyre on a split rim than on a pressed safety rim or alloy rim so stick with the standard steel split rim if possible otherwise a specially designed bead-breaker should be carried for removing tyres from rims and replacing them.



Recovery Equipment

A valuable accessory for getting out of bogs is the exhaust jack. This is a blow-up heavy duty rubber/canvas bag, which is placed under the vehicle and inflated by connecting it to the exhaust pipe with the engine running. Its purpose is to jack up the vehicle on any surface.

Winches

Types of winches range from hand, electric or power take off. If you have a winch fitted to your vehicle make sure you know how to use it. Some simple safety rules include -

- Always use a sling around an anchor point rather than forming a loop.
- Never place your hands within 1m of the drum if the winch is operating.
- Always leave six turns of cable on the drum.
- Run the engine when using an electric winch.
- Do not pull if the cable is more than 15° to either side.

Dual Battery Systems

When operating in the outback each battery should be used individually on a daily basis. When making camp for the night the appropriate drill should be used to ensure that the alternate battery is fully charged and will start the vehicle in the morning. The battery used for overnight use [refrigerator, etc.] may go flat.

Fuel

Long-range fuel tanks are an excellent idea but make sure yours is fitted in the approximate centre of the vehicle between the chassis rails. Use the rear tank first to equalise load. If you do not have a long-range tank then 20 litre jerry cans are an excellent method of carrying fuel. If you carry jerry cans make sure they are metal or designed to carry fuel and use tie wire on all caps to prevent spillage.

Water

Allow 4 to 5 litres of drinking water for each person per day while travelling. If you have built in water tank fitted with an external tap it should be fitted with a tap guard and the tap itself lock-wired when moving.

Emergency Pack

Enough spare food, water and blankets should be included to allow for any unforeseen delays. Emergency rations should last at least three days on top of your planned trip. A three-day emergency pack for each person should consist of –

- 6 ready-to-eat meals in cans [or other]
- 4 litres of water
- Foil emergency blanket [also used as a signalling device]

Vehicle Loading

The loading of the vehicle is critical and the vehicle's centre of gravity kept as low as possible always. Get in the habit of checking whenever you stop.



VEHICLE AWARENESS

The development of electronic [computer] engine management systems for modern diesel engines has forced a change in the way diesel 4WD owners operate their vehicles. The reservations a lot of people had with the development of computer engine management systems in petrol-powered 4WD vehicles in the early 90's were in most cases largely unfounded. What was required then and now with the modern diesel is driver education.

Gone are the days when all a diesel 4WD owner had to worry about with a water crossing was keeping the air intake out of the water. In effect these new generation 4WD diesels, because of the electronics, have to be treated like petrol-powered vehicles. Contact your local dealer or 4WD service centre and have them point out the location of the vulnerable points [electronic] under the bonnet of the vehicle.

Remember a clean engine is less likely to short out. To prevent condensation [a problem for any electrics] clean the engine bay when the engine is cold with low-pressure cold water.

Once these vulnerable or sensitive components are located suitable precautions can be taken. The location of the main computer is usually under the seats or behind the front left or right inside kick panels, near your feet.

A word of caution with these computer managed 4WD's for those who traditionally fit their own radios and other electrical accessories. Finding the nearest live wire or earth and connecting to it is fraught with danger. If the pick-up wire is part of the computer management hardware that carries signals and mixed voltages you could unknowingly cause expensive irreparable damage.

Note:

To prevent damage have any electrical accessories fitted by a professional.

Jump-starting is no longer a matter of connecting any set of jumper leads between vehicles. Your leads should have a surge protector fitted to prevent a possible voltage spike, which will damage most computers.

Most 4WD vehicles with computer management systems will have an emergency limp home mode that comes into play when the engine management system has been adversely affected. Although the extent of operation will vary from vehicle to vehicle road speed will be limited and cruise control, traction control and other non-vital functions will be disabled. Visually, a dashboard-warning icon will be displayed telling you which system has been disabled.

The benefits gained from computer engine management systems for diesels such as more power, better fuel economy and lower fuel emissions should not be jeopardised by a driver's level of ability or lack of knowledge and understanding of the vehicles systems and components.

Note:

As a new owner you should take the time to study the owner's manual and consult with your dealer or 4WD service centre before you venture off road.

**VEHICLE CHECK LIST**

The following items should be checked at the end of each day. This procedure should be conducted as part of your everyday routine and should never be neglected.

1. Check engine drive belts
2. Check engine oil levels
3. Check coolant levels
4. Check fuel filter [if possible]
5. Clean air cleaner
6. Clean radiator fins
7. Check brake fluid levels
8. Check clutch fluid levels
9. Check power steering fluid level
10. Check engine for oil leaks
11. Check engine for coolant leaks
12. Check transmission for oil leaks
13. Check differential for oil leaks
14. Check all steering rods for wear and cracking
15. Check all joints for wear and cracking
16. Check all tyre pressures
17. Check all tyres for damage
18. Check battery levels
19. Check chassis rails for cracks
20. Tighten all mounting bolts, etc.

**VEHICLE TOOL KITS**

A comprehensive tool kit should be carried and should be suited specifically to your vehicle. Suggested items include -

Vehicle Tool Kit

Screwdriver, 200mm	Oil Filter
Screwdriver, Phillips	Insulating tape, roll
Pliers, general purpose	Alligator clips, electrical
Pliers, long nose	Electrical wire, roll 3mm
Spanner, adjustable 200mm	Tyre levers and wheel brace
Tyre pressure gauge	Wheel brace
Set metric spanners and sockets	Feeler gauges, set *
Small hammer, hacksaw and blades	Fan belt and Power steering belt
Spark plug socket *	Contact points* and Spark plugs*
Set of radiator and heater hoses	Jumper leads
Tyre pump, hand or foot operated	Grease, 500gms and Epoxy resin
Condenser and Coil *	Fuel filter
Funnel	Masking tape
Can of aerosol de-wetting agent	Rubber vulcanising tape
Brake fluid, 500ml	Plastic tubing, 8mm
Engine oil, 5L and Gear oil, 500ml	Paint brush
Trouble light	Magnet
Araldite fixative	Electrical fuses, set
Bead-breaker & tyre re-fitting tool	

Note:

* Diesel vehicles do not require these items.

VEHICLE RECOVERY EQUIPMENT

If you travel in the outback "off road" at some stage you are going to encounter sand dunes, claypans, salt lakes and rocky creek beds. You are eventually going to become stuck and a complete vehicle recovery kit should be carried.

Vehicle Recovery Kit

Recovery equipment carry bag. Ground sheet. Leather gloves. Long handled and short handled shovels. Axe [medium size]. Winch [hand or fully fitted electric]. Snatch strap 9m based on 4WD size 8,000kg – 11,000kg – 15,000kg. Tree trunk protector 3m [12,000kg]. Recovery bridle. Drag chain 8mm diameter, 5m long [8,500kg]. Bow shackle 2.35T. Bow shackle 4.75T. Marlin spike. Snatch block. Centre pull recovery adaptor for fitting to tow bar. Vehicle jack with base plate [300x300 recessed marine ply]. Hi-lift jack [remember to fit jack lift points]. Air jack [Bull bag]. Air compressor.

**OFF-ROAD DRIVING TIPS**

Whether you intend travelling to the Pilbara, the Kimberly or out to the Bight the locations may be vastly different but the off road driving principles remain the same. Your trip can be safer and free from costly damage to your vehicle by following these driving tips -

- First of all find out the overhang distance of your vehicle. This is the distance from the front of your vehicle to the first point you see on the road in front of the vehicle. The point in front of the vehicle is calculated with you seated normally in the driver's seat. You will be surprised at how far this overhang distance extends to the front.
- As the road is constantly changing you must learn to search ground quickly and make decisions on wheel placement early. Search the ground in a rectangular pattern looking from the front as far out as possible on the drivers-side wheel track and then back in towards the vehicle along the passenger-side wheel track.
- Lower your radio aerial to prevent damage or fit one with a spring base.
- Identify and avoid any object that can damage the tyres or under-body components of the vehicle such as stumps, sharp rocks, or deep potholes. At times it may be better to drive a wheel over a large rock rather than have the vehicle straddle it. By doing this you raise the vehicle's differential ground clearance and you prevent possible under body damage by hitting rocks. Assist with this by learning the location of the front and rear differentials in relation to where you as the driver sit.
- Remember where applicable to lock your free wheeling hubs or central differential.
- It is a good idea to lower your tyre pressure to around 80% of your highway running pressure. This will give the tyres a little more flex and grip to mould over rocks and loose gravel rather than causing the wheels to spin and lose traction, which would occur if the tyres were left at the hard highway running pressure.
- When driving in soft or sandy conditions the lowering of tyre pressures can prevent bogging. Tyres can be lowered to a minimum pressure of 16psi in both split and safety rims. Tyres must be re-inflated immediately after traversing the obstacle, failure to do so will lead to tyre damage.
- Where you are going up or down a steep hill always engage low range on the transfer case. For those vehicles that don't have a low range capability be very careful to assess the terrain so that you may safely negotiate it.
- For those auto transmission 4WD vehicles select low range and lock the gear lever in low gear whenever descending a steep off-road track.
- Drivers of manual 4WD vehicles should remember that depressing or riding the clutch off-road is fraught with danger. If you stall or stop the vehicle on a descent you can restart in low range with the vehicle in gear. Simply turn the key on and do not depress the clutch. Cover the brake pedal and be ready to apply brake pressure if the vehicle surges forward [common with fuel-injected vehicles]. This ensures you are under control at all times with the engine running and gears engaged. Don't ride the brakes but feather them as required to slow the rate of descent.



OUTBACK TRAVEL CODE OF ETHICS

Outback travellers should consider themselves as caretakers of the land and ensure that their actions do not add to the degradation of the landscape.

- Do make sure your vehicle is in sound mechanical condition and equipped with all necessary fuel, food, water and spares needed to complete the journey.
- Do have the ability to communicate with the outside world either by radio, satellite phone or global positioning system e-mail.
- Do tell someone of your intentions. Notification of your time of departure, intended route, campsites and estimated time of arrival at your destination may be posted at local police stations.
- Do camp in designated campsites or in natural clearings if none are available.
- Do observe fire restrictions, clear around fire areas and extinguish all fires.
- Don't break or cut live branches from trees and shrubs for fires or campsites.
- Don't leave garbage in the bush. Carry garbage bags with you and remove your waste.
- Do stay on existing tracks and endeavour not to create new tracks or short cuts.
- Do clear fallen trees or logs if possible rather than driving around them.
- Don't camp near stock troughs or in water catchments.
- Do carry maps, information on terrain, track and weather conditions, navigation equipment and set escape routes.
- Don't travel off-road at night. If you must travel at night use only 50% of the speed you would use during the day and do not attempt rocky ground, mud patches or deep water crossings.
- Do know your vehicle controls so you know where they are in an emergency.
- Do know the length and width of your vehicle for negotiating difficult terrain.
- Don't infringe on the privacy of aboriginal people or any settlement and be aware that permission must be obtained to cross aboriginal reserves and communities.
- Don't carry firearms on pastoral leases without permission from the lessees.
- Travellers from outside Western Australia must obtain a temporary firearms permit from the nearest Police Station on entering the state.



CHAPTER 2

Outback Survival

While the chance of the average individual becoming lost or stranded in Western Australia is remote, there are people every year who find themselves in unexpected outback survival situations where they are forced to battle the elements to survive.

For some, who are fitter than most and having sufficient strength of purpose and possessing the propensity for making the best of a poor situation, the task will be a lot easier. The majority of the general public unfortunately are not gifted in this way.

Survival Defined

Survival is defined as staying alive and in the outback is a day-to-day proposition with each day being broken into two parts, day and night.

The First Rule Of Survival

The first rule of survival is 'Don't Panic'.

The Survival Mnemonic

The word 'survival' is an aid to what you should do. You must memorize what each letter signifies and remember that some day you may have to make it work for you. It is a good tool for helping you focus and avoid immediate panic.

- S** Size up the situation
- U** Undue haste makes waste
- R** Remember where you are
- V** Vanquish fear and panic
- I** Improvise
- V** Value living
- A** Act like the locals
- L** Lean on your basic skills

BASIC REQUIREMENTS FOR SURVIVAL

There are four basic requirements for survival; they are –

- | | | | |
|----------|------------|-----------|---------|
| 1. Water | 2. Shelter | 3. Warmth | 4. Food |
|----------|------------|-----------|---------|

Generally the priorities will be as listed, however, in some situations you may alter them to suit; for instance shelter may be number one priority if water is available.

Prior Planning and Preparation

Adequate preparation before undertaking an outback journey or outdoor activity will lessen the chance of jeopardising human life. Unfortunately there have been too many cases where loss of life has resulted from a lack of foresight into the problems involved.

If you have advised someone where you are going and how long you intend to stay a search will no doubt be conducted for you if you are overdue. Your task will be to use the knowledge and skills you have to stay alive until found.

The Rule of 'P'

Prior planning and preparation prevents poor performance
--



ACTIONS BY SURVIVORS

While a survival situation will be a traumatic experience for most people the effect it will have will depend on circumstance. For instance a person suffering a vehicle breakdown in spring in the southwest of Western Australia will have a different reaction to a person who suffers a similar breakdown in mid-summer in the Great Sandy Desert.

Stress and Survivors

Stress is defined simply as 'reaction to pressure'. Unforeseen events or overload situations that arise can put a strain on our ability to cope and make us feel out of control. It is this feeling of not being in charge of a particular situation that we label as stress.

Stressors

Stressors are events that cause stress. The most common stressors to survival include heat, cold, thirst, hunger, fatigue, isolation, fear, and uncertainty, lack of control, injury, illness and death.

Reactions To Stress

There are natural reactions to stress that need to be recognised, expected and for which strategic interventions need to be implemented. Signs that indicate stress include –

Fear Anxiety Guilt Anger Panic Aggression Depression

Do not over-react and remember, too much stress leads to 'distress' resulting in anti social behaviour, angry outbursts, difficulty making decisions, unwillingness to accept responsibility, inability to get on with others and eventual withdrawal from the group.

Coping With Stress

In order to cope with stress, you must; keep your emotions in check, stay as physically relaxed as possible, take constructive action and use common sense.

Initial Critical Reactions In Unexpected Survival Situations.



- S Stop:** Calm down, keep your emotions in check, recognise that you are in a survival situation, adopt a positive attitude and remember that your life and the lives of others who are relying on you to do your share are at stake.
- T Take stock of your situation:** Stay physically as relaxed as possible and ask yourself; how much water do you have and how will you procure more, what shelter from the elements is needed, will you need a fire, how much food do you have and what is available?
- O Organise your thinking:** Get your thoughts on track and take constructive action by employing the survival mnemonic, recognise any survival stressors that are present and overcome any attitude assumptions [*She'll be right. It will never happen to me. If anything does happen, my instinct, faith and/or inner strength will get me through, etc*].
- P Plan for your survival:** Make an honest appraisal of the situation, use common sense and remember that your physical strength and emotional resources are strongest in the first three days of survival.



Survival Situation Appreciations

The six elements to a survival situation appreciation are –

1	2	3	4	5	6
Review the situation	Determine your aim	List the factors affecting your survival	Identify all courses open to you	Select the best course of action	Make a plan

SURVIVAL PLANS

The Survival Plan is the final process by which you or the group have chosen to stay alive. It is the final result of your appreciation and should be based on the facts at hand that have been subject to thorough and systematic thought and/or discussion. It needs to be prepared in a systematic way and re-examined regularly. It must be accurate, brief but clear, contain all necessary information and most importantly be capable of being carried out.

Layout of survival plans

Plans need to follow a logical sequence to ensure all aspects are covered. The five headings covered by the plan should include –

- S** Situation
- M** Mission
- E** Execution
- A** Administration & Logistics
- C** Command & Communications

SITUATION [brief description of what has happened]

This is a brief description of factors known and assumed from what has happened and should include the following details -

Human resources

What skills are available within the group? Does anyone have any survival knowledge? Is there anybody in the group with professional or specific capabilities? Does anyone have any disabilities or limiting health conditions?

Water

What water do you have? Is it likely to rain? Is there any water available in the area? What equipment do you have for storing water, carrying water and water procurement?

Shelter

What prevailing conditions do you need to shelter from? What can be improvised to provide shelter? What items do you have that can be used to build shelters?

Warmth

Do you have matches or a cigarette lighter? Can you identify any alternative methods of lighting fires? Can you gather enough fuel to sustain warmth for a period of days?

**Food**

What food do you have? Is there any food available in the area? What equipment do you have for hunting, gathering and storing food?

Location

What is your present general location?

Direction

Can you indicate north, south, east and west?

Rescue

How do you expect to be rescued? What direction do you expect rescue to come from? How will you signal rescuers? What is available to build rescue signals?

Equipment

What equipment do you have and what can be improvised?

MISSION: [overall objective of what you hope to achieve]

A clear, concise, single purpose statement, of the overall outcome to be achieved. In all survival situations the Mission Statement is: **To: Stay Alive.**

EXECUTION [what you are going to do in order to achieve the mission]

Should contain details of your best course of action and how the mission will be accomplished. It must include a general outline together with details of roles, tasks, methods, boundaries and special equipment. If possible people in a survival situation should remain with their vehicle or aircraft and if on foot establish a camp as soon as practicable. If in a group task leaders should be elected and teams nominated for each of the following requirements -

Water

Develop a control and distribution plan for any available water and discuss and implement water procurement strategies and methods to be used.

Shelter

Conduct an audit of useable items available; nominate a shelter-building team to determine the type of shelter or shelters required and methods of construction.

Warmth

Identify ways of staying warm and develop strategies and procedures to cope. Nominate a team responsible for gathering fuel, identifying any available accelerants and identify suitable fire lighting methods.

Food

Develop a control and rationing plan of available food and discuss and implement food procurement strategies and methods.

Direction

Locate north and construct an earth compass.

Location

Locate your position relative to identifiable landmarks and easily recognisable features and set boundaries for movement outside the camp area.

**Rescue Signals**

If in a group elect a task leader, develop rescue strategies, build and maintain rescue signals and implement the 24 hour manning of fires and emergency signals.

Co-ordinating Instructions

Details common to all members of the group providing a standard by which elected leaders can maintain control and group members maintain focus. They include details of timings, movement, navigation and actions-on for injuries, lost persons and death[s].

ADMINISTRATION & LOGISTICS [what is needed and what is available]

Details of food and water available with distribution and consumption arrangements along with dress standards and equipment requirements should be detailed.

COMMAND & COMMUNICATIONS [who is in charge and details of signalling]

If in a group the elected group leader and those in charge of the various tasks must be known and agreed to by all. The agenda for group meetings should be set along with timings for task completion. Those responsible for manning emergency signals and fires should be nominated.

WAPS Bushcraft & Survival - Personal Survival Kit

These personal survival kits have been designed to assist in managing unexpected survival situations in remote areas by ensuring that survivors have the means to provide the four basic requirements for survival. They come in a compact hip-belt pack and should be carried with you at all times when away from your base camp or vehicle.

Some thought should be given to selecting items normally carried to allow for future improvisation; bootlaces and hat bands can be replaced with cord, neck scarves with netting, watches worn, compasses placed on key rings, matches and a whistle carried.

Survival Kit Contents

- Survival kit with belt - Can be used for first-aid slings, carrying items and shelters.
- Water bottle - Flexible with a capacity of 1 litre, filled with drinking water.
- Water bottle cover - Clarifying filter, carry bag.
- Survival Knife - Lightweight, double-edge blade with spear point suitable for cutting, slicing, skinning, hacking, chopping, digging and grinding.
- Plastic bags - Ground sheet, raincoat, shelters, carry bags and water collection.
- Foil rescue blanket - Shelter, warmth, water collection and signalling aid
- Nylon cord - Shelter building, weapons, traps and snares.
- Fishing gear - Fishing, shelters, traps and snares.
- Elastic rubber tubing - Slingshot, gidgee, drinking straw, traps and snares
- Canvas tape - First aid, shelter building and repairs to gear.
- Netting - Fishing, traps and snares, carry bag.
- Alfoil - Cooking, water collection, containers and for distillation.
- Signalling mirror - Lightweight, small, strong, signalling aid.



- Magnetic compass – Direction finding.
- Waterproof matches / Disposable lighter - Fire-lighting and signalling.
- Water purifying tablets - Water purification.
- Barley sugar - Energy food source.
- Notepaper and pencil - Keep diary, record plan and write messages.

WAPS VEHICLE/AIRCRAFT EMERGENCY PACK

This emergency pack is designed to provide each person with the basic requirements for survival for the three-day period following a vehicle breakdown or air emergency. There should be one pack carried for each person. It should be carried in your vehicle or aircraft at all times and it must be easy to access in the event of an emergency.

Emergency Pack [per person]

- Water bottles rigid or collapsible - Complete with 4 litres of drinking water.
- Foil rescue blanket - Shelter, warmth, water collection and signalling aid.
- Food - 6 ready-to-eat meals in cans, bars [or other].

Water

THE IMPORTANCE OF WATER TO SURVIVAL

In Western Australia, people do die after becoming lost or having their vehicle break down in the remote and arid areas of the state.

In the past twenty years, 44 people have perished in WA due to excessive heat, thirst and exposure. Many of these deaths occurred because of poor survival techniques. The average person can expect to survive without water for 2-5½ days depending on the climate and what they try to do. Some individuals have perished within hours of becoming lost.

You must conserve any water you have, including that in your body. Water is required to replace fluid that is lost, so by conserving body fluid you will require less water intake. Reduce your food intake until your water supply is assured, as fluid is needed to digest food.

TIME FRAME FOR SURVIVAL [TFFS]

Research has indicated there have been cases where in ambient temperatures of 37°C and above, survivors have stayed in the shade at all times, followed good survival principles and survived for the following periods when in possession of the nominated amount of water.

No water	1 litre	2 litres	4 litres	10 litres
2-5½ days	6 days	6½ days	7½ days	11½ days

HOW FLUID IS LOST FROM THE BODY

Fluid is lost from the body by perspiring, breathing, urinating, vomiting, crying and talking.

Perspiring

Perspiration is a mixture of salt and water with the amount of salt varying from person to person. It is a normal bodily process that has a cooling effect as moisture evaporates from the skin surface. A person resting in the shade when the temperature

is 35°C would lose about 2 litres of fluid in a 24-hour period. It is important to keep activity down to a minimum and conserve existing body fluids as any rise in body temperature can see losses in excess of 1 litre of fluid per hour resulting in dehydration.

Urinating

Is also a normal bodily process and cannot be prevented. However, it should be held as long as possible to slow down this fluid loss from the body. On no account drink urine unless it has been distilled. You could apply it to the skin surface with a sponge, in the hope that it will reduce your body temperature.

Vomiting

Stomach problems can generally be avoided by not consuming spoiled or potentially harmful unknown native foods.

Crying

Stressors in survival situations may cause crying and should avoided, however it may be difficult to convince a child of this.

WHEN TO CONSUME WATER IN A SURVIVAL SITUATION

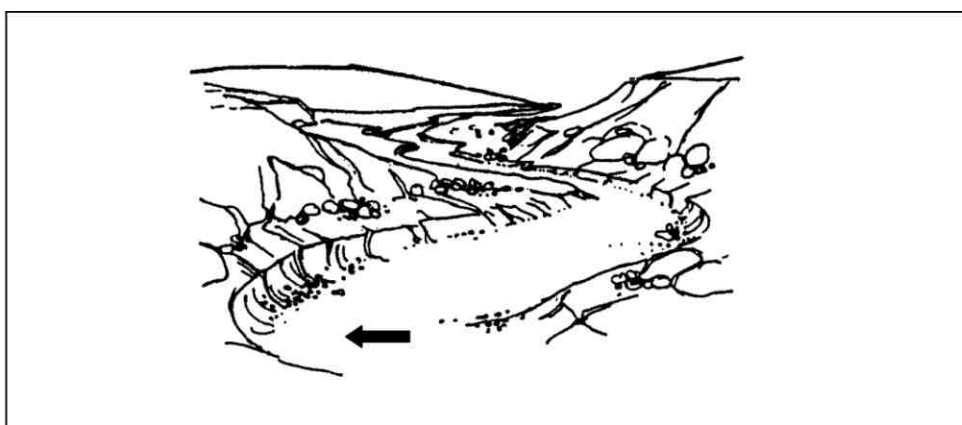
You should always drink to replace fluids lost from your body, however if you are unable to locate or procure water and are limited to the water in your survival kit it should be consumed in small sips to replace some of the fluid lost to your system. This one litre of water will increase your time frame for survival by up to half a day.

METHODS OF WATER PROCUREMENT

Your first efforts in a survival situation should be directed towards establishing a good water supply. Initially you should look for ground water using the following methods.

Creek beds

Are easily discernible in dry areas because of the relatively green vegetation and taller trees following the course of the creek. Unless there has been recent rain in the area the creek bed will probably be quite dry. You may be lucky enough to locate damp sand or mud at the bends of the creek or by digging in the creek bed at a likely spot. Water can be extracted from the damp sand or mud by soaking a rag in soil and wringing out the water into a container.



Where To Dig In Creek Beds For Water



Rock Formations

If there is any water seepage from the ground, it is usually to be found near rock formations, where the country is rugged and undulating. It may also be found in some apparently dry areas. Rocky areas are ideal for rain catchments. Rain soaks very quickly into the soil, whereas it can lie in pools on a rocky surface for some time.

Salt Lakes

After rain has fallen, the top 3mm of a salt lake is fresh water. It can be siphoned off by using a grass straw or tubing from your survival kit.

Windmills

These have been erected on most farms and stations throughout the state at such locations as wells, dams and soaks. These can be seen from a long distance and usually have animal tracks leading to them. Check the water at these mills has not gone salty.

Animal Trails

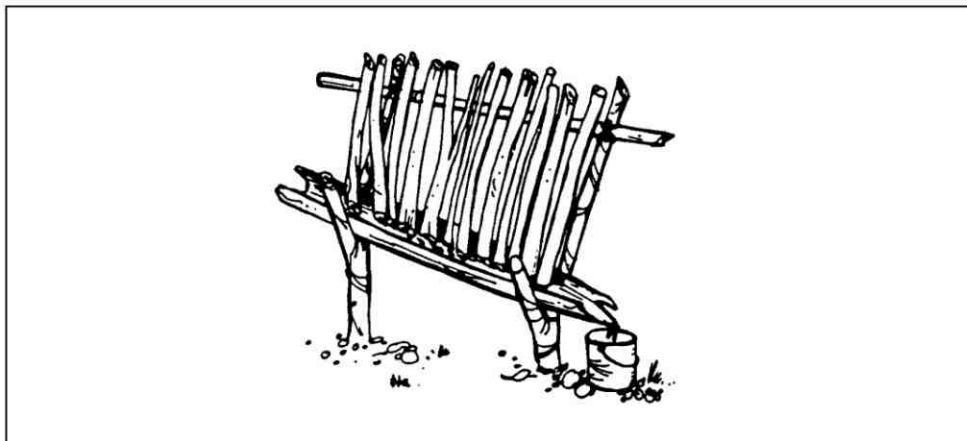
Animals need water the same as humans and they will travel great distances regularly each day, leaving trails to the water source. Where a large number of trails converge together, it would indicate that the water was not far distant.

Water seepage

Sometimes water can be found close to the surface in natural springs and soaks or at the base of cliffs and rock-piles where vegetation appears to be thriving.

Tree Roots

In the early morning before the heat of the day, the roots from trees such as the boab, kurrajong, wattle and some gums can be cut into short lengths, stood end-on with their thickest ends down in a container allowing the fluid to drain. It is best to use roots that are easily obtained with a minimum of effort. The ideal location for this is in creek beds and washouts where parts of the roots are already exposed or near the surface. Remember that the roots from trees growing in gullies will contain more water than trees growing on hills.



Draining Water From Tree Roots

Certain Trees

Some trees such as the boab, desert-oak, she-oak and paperbark store water. Water will collect in the crevices of some of these trees after rain, in blisters under the bark in others such as the paperbark and in the sapwood under the bark of the boab. A length of rubber tubing can be used to siphon water from crevices and the water from blisters and under the bark of some trees can be extracted by cutting a 'V' through the bark and collecting the escaping water in a container.

Note:

Chewing the sapwood of trees is not recommended as it may aggravate thirst.

Coastal Water Sources

You can obtain drinking water by digging high up on the beach above the tidemark or behind the first sand hills. It tastes brackish and should only be used in small quantities.

Dew

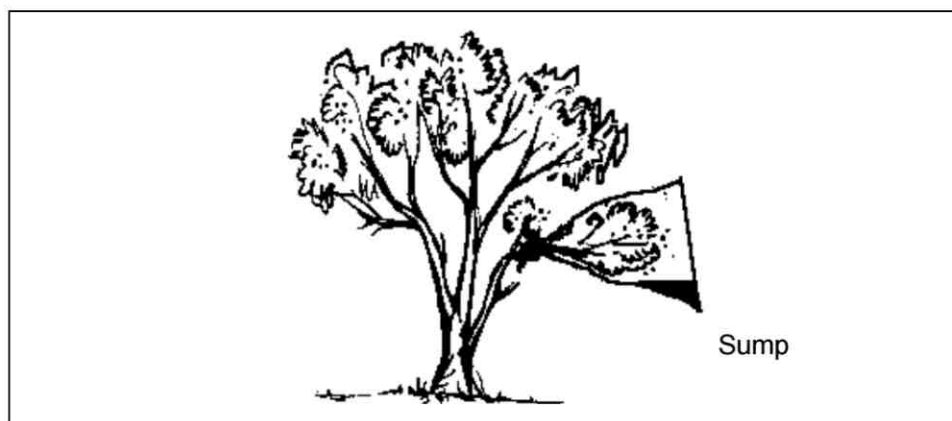
The collection is tedious, but of some value in heavy grassland. Tie clumps of grass or cloth around ankles and walk around in dew-drenched grass at dusk or dawn. Squeeze moisture into a container and repeat. If you have a vehicle, wipe down the vehicle with a cloth and collect the dew in a container. You can also dig 'dew holes' and line them with plastic to collect the dew.

Foliage Bags

If there are no large trees in the area you can break up clumps of grass or small bushes and place them inside the bag, the same effect will take place as in transpiration. Make sure you follow the guidelines and provide a sump and remember to replace the foliage at regular intervals when water production is reduced.

Transpiration Method

Water can be obtained by placing a clear plastic bag over the leafy branch of a non-poisonous tree [you must 'taste-test' the foliage] and securing the bag with tape at the end of the branch. Seal any holes with tape, band-aids, etc. The action of the sun on the plastic will cause water to be drawn from the leaves and run to the lowest part of the bag. Do not disturb the bag to collect the water, simply cut a small hole in the bag then reseal it. The leaves will continue to produce water as the roots draw it from the ground.



The Transpiration Method



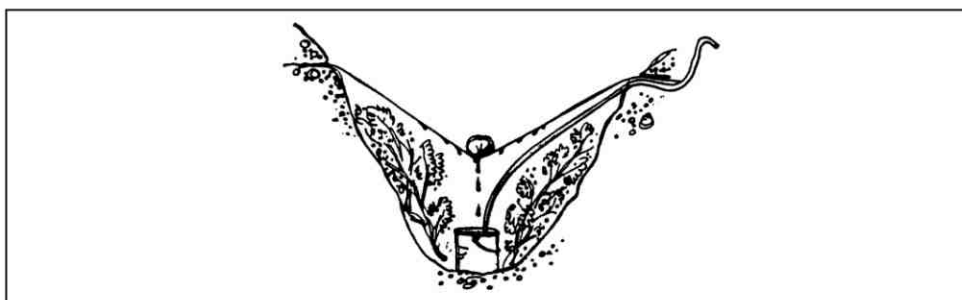
The water should be drained off every two hours and stored. Tests indicate that if this is not done the leaves stop producing water. Probably the heavy concentration of moisture-laden air reduces the effectiveness of the sun. Ensure these bags receive maximum sunshine at all times. Exposed roots can be tested for water content prior to bagging the tree. Soft pulpy roots will yield the greatest amount of liquid for less effort.

Note:

A piece of cord can be tied around the bottom of the bag to form a sump and will stop sticks, leaves and insects from contaminating the water or blocking the tapping hole. It will also stop alkalines leaching from the foliage into the sump.

The Desert Still

Dig a hole approximately 1m x 1m x 60cm deep, line the hole with non-poisonous vegetation and place a container in the centre with a piece of rubber tubing leading from the container out of the hole for use as a drinking straw. Cover the hole with a clear plastic sheet and seal around the edges with soil from the hole. The plastic sheet should be weighted with a stone placed in the centre so it forms an inverted cone to allow condensed water to run into the centre on the underside of the plastic and drip into the container.



The Desert Still

The desert still method will work without the drinking straw, however to collect the water the edges of the plastic must be lifted allowing moisture-laden air to escape. The foliage will need to be replaced when water production falls off. Care should be taken that the plastic sheet does not touch the foliage as this will prevent the condensed water from running into the container. Additional fluid such as salt water from salt lakes, urine, etc. can be added to the hole.

Note:

This method while efficient has the disadvantage of requiring a lot of effort and subsequent loss of fluid from the body through perspiration and therefore is not recommended in areas where the transpiration bag can be used.

Distilling Sea Water

If only salt water is available a distilling plant can be made. You will have to improvise and use containers that can be found or that you may have. First you require a container of seawater and material to seal the container to prevent steam from escaping. Push one end of the tubing or rubber hose through this seal material and check to see that the seal remains intact while blowing into the loose end of the tubing. Place the container onto a fire and bring to the boil. Steam will be forced



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HOME / HEMA NEWS / LATEST HEMA NAV SOFTWARE UPDATE AVAILABLE FOR YOUR DEVICE

Julija Posted on 29 March 2025

New Hema Nav update available: 30,000km of tracks updated

Words Julija Zivanovic and Robert Crack Pics Supplied

Our proprietary navigation system Hema Nav — which for the first time combines Hema's award-winning Explorer Map with interactive turn-by-turn navigation — was launched in December 2024. Since then we've introduced a couple of key updates, with the latest major release now available. Keep reading to learn more.



There's nothing we love more than sharing good news with our Hema Maps community — and this one's a biggie! You may remember in December last year we released our brand-new Hema Nav platform — available on our HX-2, HX-2+, AMHxD3 and (soon to be rereleased) NS1000 devices — which was proudly developed by our passionate team.

Since then, we've had a couple of important updates to the software and now we are thrilled to bring you the third major update of Hema Nav. This is all part of our ongoing updates to the software and map content, aligning with the latest data and functionality as they're developed and released.

Keep reading to discover the added benefits and how you can update your device.

If you don't own a device that runs Hema Nav, we recommend our HX-2+ Navigator — Hema's latest GPS navigator.



What's new?



This isn't just any update — it marks the third major improvement since the December 2024 release. This update brings more powerful features along with a major map update, including:

Track usage and navigation: Track usage and navigation have been functionally separated to enhance user experience and minimise driver distraction. This change allows users to interact with the app more intuitively, making it easier to focus on the road while accessing essential features.

Multi-waypoint track: Added functionality for multi-waypoint tracks, including waypoint order and markers for better route planning. This feature allows users to customise their routes with specific waypoints, improving navigation accuracy and convenience.

Cartography enhancements: Improved map design and accuracy, including refined geographical details, updated road and track styling and enhanced visual clarity for better user navigation.

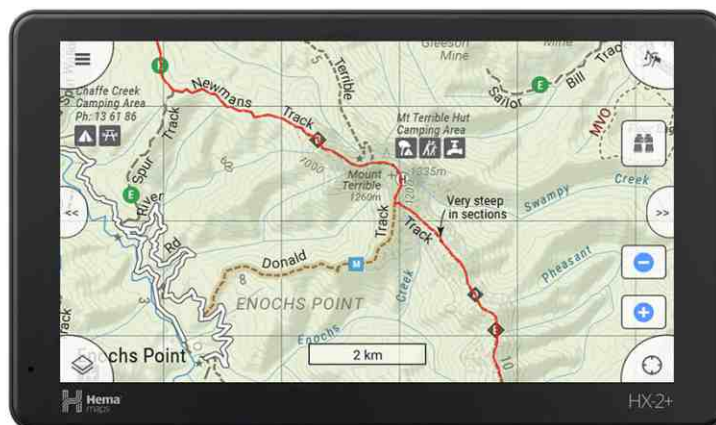
Updated map data for Australia: This release incorporates the latest comprehensive map data for the entirety of Australia including 30,000km of updated Hema roads and tracks, ensuring users have access to the most accurate and current navigation tools and geographical information. From updated road networks to refined points of interest, this new edition is designed to provide seamless navigation and enriched details both for local and remote areas across the country.

New maps for NZ: New Zealand map data is now available.

User Interface (UI) and functionality improvements: Addressed various interface and functionality issues to improve overall performance and user experience.



How to update



For those who have already updated to the Hema Nav software, updating is easy, just make sure your device is:
Fully charged

Connected to a reliable wi-fi network

Then follow the Update prompts and let Hema Nav take care of the rest.

If you're still running the previous software, it's time to level up. This update is only available with the Hema Nav software — so make sure you've made the switch to enjoy all the latest benefits. You can learn how to install Hema Nav at <https://kb.hemamaps.com/hx-2-hx-2/-how-to-install-the-new-software>

Need a hand?

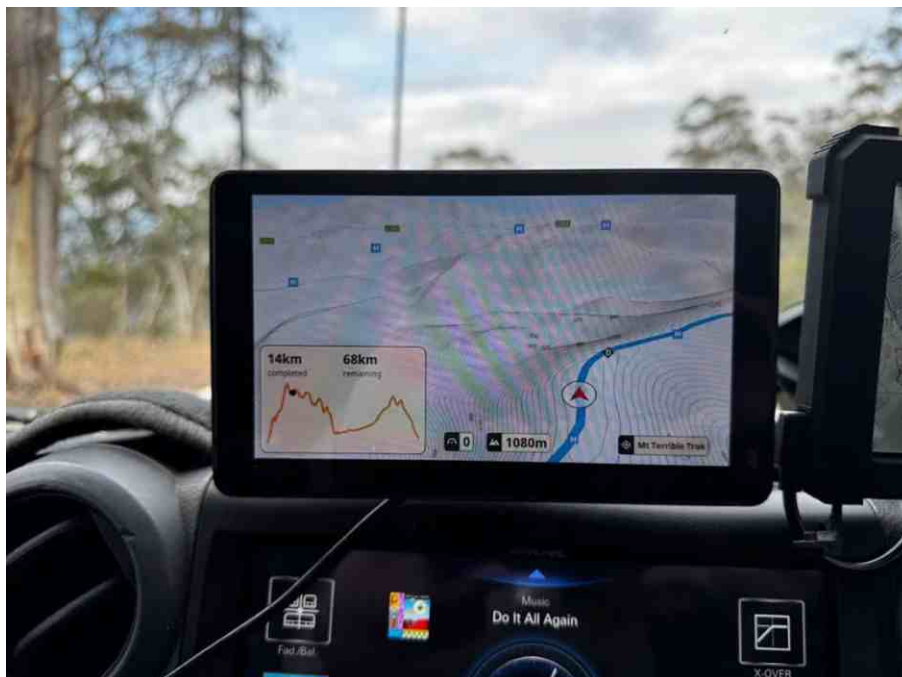
If you require further assistance to update your device, we've got your back.

Further literature on Hema Nav and all things tech can be found on our Knowledge Base website. <https://kb.hemamaps.com/new-hema-nav> You can also open a support ticket with the team at <https://kb.hemamaps.com/kb-tickets/new> to ask for help.

Otherwise, if you would like to speak to one of our team, reach out to our customer service team on 07 3340 0000 (9am to 5pm AEST/AEDT) or info@hemagroup.com.au with any questions you have.



Further guidance



Want to master your Hema Nav experience? Then join our free live online training sessions, Hema University <https://hemamaps.com/pages/hema-university-v2?srsId=AfmBOorGRDh0VHZgaN22vzIBrKRqO6QcSUKn3TJsd2siMHfy3TfEIUa->, designed to help you get the most out of your device.

You can register for Hema U <https://hemamaps.com/pages/hema-university-v2?srsId=AfmBOorGRDh0VHZgaN22vzIBrKRqO6QcSUKn3TJsd2siMHfy3TfEIUa->

Here's to smoother tracks, smarter navigation and plenty more offroad adventures ahead.

Related articles

Hema Nav Launch and Hema Cloud

<https://hemamaps.com/blogs/hema-news/hema-nav-launch>

What is Hema Nav?

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HX-2+ built with Hema Nav — offroad navigation, reimagined

<https://hemamaps.com/pages/hx-2-plus-gps-navigator>



TESTED TO DESTRUCTION

I haven't tested this product nor am I affiliated with the brand, it has been popping up on my FB feed lately.
If this product is as good as it is made out to be, at under \$30, it could be worth having in the toolbox as a temporary way to get mobile if you get a staked sidewall especially if you have used your last spare tyre. There are local stockists.

<https://www.gluetread.com.au/>

Brisey



DESCRIPTION SPECS APPLICATIONS

- ✓ RISK FREE GUARANTEE
- ✓ ASSEMBLED IN us AMERICA
- ✓ FREE SHIPPING

The External Patch Kit was designed to patch slices or punctures anywhere on your tyre. Sidewall or tread area, the External Patch Kit allows you to repair a damaged tyre in the field without removing the tire from the vehicle!

For off-road use only.

DESCRIPTION SPECS APPLICATIONS

Pressure Strength: 40 PSI
Bond Strength: 5,000 PSIPatch
Durometer: 75
Initial Cure Time: 30 Seconds
Full Cure Time: 10 Minutes

DESCRIPTION SPECS APPLICATIONS

- Repairing sidewall damage
- Repairing a sliced tire
- Repairing a punctured tire
- Replace a damaged valve stem
- Repair a puncture in the tread area
- Adding extra protection to areas of a tire that are worn
- Covering cord
- Covering a bulging tube
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Julija Posted on 13 April 2025

The pros and cons of bigger wheels and tyres on your 4WD

Words John Hughes Pics Supplied

Join us as we interview John Kulikowski — wheel and tyre guru from Bob Jane T-Marts — on how changing your wheel/tyre size can affect your four-wheel driving adventures.



(Credit: Capture Factory)

Four-wheel drive manufacturers usually select OEM tyres and rims based on cost and around-town, on-road performance. There are a variety of reasons why 4WD owners may wish to change their tyres and rims. Let's say it upfront, aesthetics plays a big part. Chunkier tyres just look tougher and swapping out rims is a popular way to personalise a rig. But there are a bunch of functional reasons to consider changing tyres and even rims. A big part of the decision when changing wheels is: "Should I go bigger and if so, how much?"

We enlisted the help of John Kulikowski, wheel and tyre guru, from Bob Jane T-Marts to answer a bunch of questions for us.



**JH: What are some of the functional reasons for changing tyres?**

JK: There are a lot of good reasons to change tyres. I think the top reason is standard road tyres simply aren't as strong as light truck construction (LT) tyres. Any reputable all-terrain or mud tyres (we'll collectively call them offroad tyres for simplicity) will have an LT rating with a heavier-duty construction. This makes offroad tyres much more resistant to punctures and they have higher load ratings. This can give you a greater safety margin for jobs like towing and it can be an actual legal requirement if the vehicle has had a GVM upgrade — a modification to a vehicle to enable it to carry higher loads legally.

Offroad tyres have stronger side walls which means the tyre can cope with running at reduced pressures in offroad applications. Obviously, offroad tyres have more aggressive tread patterns that give them better traction off the bitumen, but worse on the bitumen. Mud tyres generally win out for pure offroad applications, but all-terrain tyres are often the best compromise for people touring or just want a stronger tyre for day-to-day use.

**JH: Why would you change rims?**

JK: A GVM upgrade may require rims to be changed over to ones with higher load ratings, just like we already mentioned with tyres. Also, modern 4WD vehicles often have large-diameter rims with low-profile tyres. While the overall wheel size is big, this is not ideal for offroad applications for a couple of reasons. A low-profile tyre doesn't provide much buffer between the ground and the rim. If you hit a rock or similar a bit too hard, it is more likely to damage the rim. One of the reasons we reduce tyre pressures offroad is to increase the tyre contact patch with the ground for increased traction. A low-profile tyre has very limited ability to increase its contact patch when running lower pressures. A solution is to switch to a smaller-diameter rim to enable a higher-profile tyre to be fitted.

JH: What are the pros of larger-diameter tyres?

JK: The bigger you go, the easier it is to roll over obstacles. Think about how a little stone can stop a skateboard wheel but a big MTB wheel can roll over a gutter. A taller tyre also lifts your chassis higher which improves the ground clearance of your differential etc. A suspension lift does not achieve this as it only lifts the body higher relative to the chassis. We already mentioned a larger diameter/higher profile provides more buffer between the rim and ground — this also helps to provide some extra 'suspension' for a more comfortable ride. It's also worth pointing out that a taller tyre profile rather than tyre width gives you an increased contact patch with the ground when you lower tyre pressures. This is because the tyre/ground contact patch gets longer when it is deflated but doesn't get much wider.



(Credit: Matt Williams)

JH: What are the cons of larger-diameter tyres?

JK: Here's a little bit of maths and physics. A larger diameter means you also have a larger radius (distance from the centre of the hub to the outside edge of the tyre) and a larger circumference (length of the tyre if you could roll it out flat). A larger radius is the same as a longer lever. It takes more energy to make the longer lever begin to turn. This means you burn more fuel with taller wheels, and it may feel like the car lacks power. It is also harder to get the larger wheel to stop once it gets going which increases braking distances. In extreme offroad conditions, this extra leverage can put more stress on the drive train causing components to fail. An example is if a wheel lifts in the air and is spinning fast and it comes to an abrupt stop when it comes back down on the ground the extra leverage has an increased chance of breaking a CV or other driveline components.

A larger circumference means for one revolution of the wheel, the car travels further. In other words, the car now has a higher gear ratio, which has a few knock-on effects. You will be travelling faster than your speedo shows because it works on rotation sensors in the transmission calibrated to the standard wheel diameter. Taller gearing will mean you are travelling faster when you are relying on locking into a lower gear and engine braking down a steep hill. Your car may struggle to hold top gear at cruising speed as it is now too high for the engine to power it at a comfortable rpm. This can be more evident under heavy loads such as towing.



We already mentioned that a taller tyre raises the body of the car, which is good for ground clearance, but it also raises the centre of gravity of the car. This makes the car less laterally stable increasing body roll, and in extreme cases, increasing the chances of the car possibly rolling.

A larger-diameter tyre, particularly if it is an offroad-oriented tyre, will be heavier than a smaller tyre. This increases rotational mass which also has the same result of taking more energy to start and stop the wheels turning. Finally, a heavier wheel contributes to a higher unsprung weight which makes it harder for your suspension to react to bumps in the road which can contribute to a less comfortable ride. (It's also worth pointing out, even if you stick with the standard-size tyre but switch from a standard road tyre to an offroad tyre, it is likely to be heavier which will impact rotational and unsprung mass.)

**JH: What are the pros of wider tyres?**

JK: Wider tyres give you more contact patch on the ground for increased traction on and off road. But as we touched on before, most of the gains from decreasing tyre pressures for offroad applications come from having a larger-diameter tyre rather than a wider tyre. They also increase the distance from the outside edge to outside edge of the tyre which improves stability in lateral rolling which can provide better and safer handling on and off road.

JH: What are the cons of wider tyres?

JK: Wider tyres have greater rolling resistance offroad because they need to push more dirt/sand/mud out of the way while rolling along. They are also heavier than a standard-width tyre so, again, it will impact on rotational mass and unsprung mass as we mentioned earlier. Wider tyres protrude out further from the hubs which can 1) put more stress on parts such as wheel bearings and 2) cause the tyres to poke out from the body, which becomes a legality issue according to Australian regulations.

**JH: How big is too big?**

JK: I have covered a lot of stuff here that makes it sound like taller or wider tyres are scary and unsafe. The reality is many people increase tyre sizes slightly and it improves their offroad experience. Because there are so many variables, I can't give you a one-size-fits-all answer to how big is too big. Fortunately, our Bob Jane T-Marts stores have a wealth of practical experience fitting larger tyres to cars. They can work through important things like choosing tyre sizes to avoid them rubbing on parts of the car or poke outside the wheel guards.

Also, very importantly, there are laws relating to maximum wheel diameters and widths.

JH: What are the legalities?

JK: This is a bit messy because there is a national regulation but then there are state regulations that sit on top of that, and the regulations vary from state to state. In general, it is possible to increase both the diameter and width of tyres by a limited amount without having the vehicle certified by an engineer. On 4WDs, tyre diameters can be increased up to 50mm and tyre widths can be increased up to 50% without the need for engineering certification. There are other variables that can come into play. Different states have different limits on the overall height a 4WD can be increased by whatever means — suspension lift/body lift/taller tyres. So, for example, if a state has a limit of an overall lift of 50mm and you already have a 50mm suspension lift, you can't run taller tyres. Also, the wheel track comes into play. To prevent taller or wider tyres rubbing on the car it may be necessary to change to rims that stick out further (negative offset). Changing the offset changes the wheel track and there are limits on how much you can change the wheel track, so this could be your constraint in changing tyre size.



You see a lot of 4WDs today with wheels and tyres extending beyond the body of the car due to the incorrect offset wheel being put on the vehicle. This is a legal requirement that is often overlooked by most owners and retailers.

The wrap

When you start asking questions you realise there is a lot to understand when considering bigger wheels. It can all seem a bit too hard, but the reality is many people enjoy the benefits of upsizing. The trick is to be smart about it and use the expertise of reputable retailers such as Bob Jane T-Marts.

Learn more at bobjane.com.au or give them a call on 13 26 25.



[Home](#) > [Blog](#) > [Expert Advice](#)

What is Low Range and When Should I Use It?

Simply put, low range gears provide the drivetrain with an easier effort of moving a vehicle through challenging environments.

Michael Ellem

May 28 2024



One of my recent articles for Club 4X4 received quite a few positive messages sent through to our Instagram page. The topic provided information about 4WD Systems, and the response highlighted to me how this style of article really helps 4WDers understand their vehicles. One message created the concept for this article: understanding Low Range and when you should use it. This one is for you, Geoff, who has sent me a number of questions.





Firstly, what is low range?

Simply put, low range gears provide the drivetrain with an easier effort of moving a vehicle through challenging environments. The engine exerts the same force, but the vehicle moves forward at a reduced speed. This controlled pace allows the vehicle to navigate obstacles more easily, steadily, and with reduced chances of wheel spin.

Most people understand the concept of a pulley system used to lift heavy objects. Let's compare the effort required for your vehicle to climb a hill to that of lifting an item to a ceiling using a rope and pulley system. If the item is too heavy to lift, a pulley can halve the effort required to lift it successfully. Although more rope is pulled through the pulley system and the item ascends slowly, the task can be accomplished with less effort.

Similarly, the difference between high range and low range in your 4WD is akin to a pulley system, with the gearing reducing the engine and transmission effort by more than 2 times.



Why do we use low range?

Modern 4WDs possess enough power to tackle steep terrain in high range gearing without much difficulty, or so it may seem to the driver. These vehicles feature sophisticated traction control systems and ample power, creating the illusion that everything is effortlessly managed.

But what truly occurs when driving in high range on steep terrain?

While some may find using high range gears on steep off-road hills acceptable, low range gears are incorporated into 4WDs for a specific reason: to ease the negotiation of steep terrain for both the driver and the vehicle.

The reduction of stresses on the drivetrain when utilising low range is significant.

Continuously working hard and applying more energy through the transmission can quickly lead to overheating, particularly with automatic transmissions. We've observed instances where a vehicle appears to climb a hill successfully in high range, only for the warning light to illuminate, halting its progress.

It's important to remember that the low range system in your vehicle can travel at over 40 km/h. For most drivers, this speed far exceeds what's necessary on steep and rough 4WD tracks. In contrast, when running in high range, you might only use 1st through to 3rd gears, with the



spacing between these gears often resulting in the vehicle struggling more frequently as the incline changes.

As a 4WDer, becoming familiar with your vehicle is key, and with time, you'll learn to recognise when low range should be used, often by simply listening to your vehicle.



Do I only use low range when climbing steep hills?

That's an excellent question. While low range is indeed invaluable for climbing, it's equally useful for controlling the vehicle during descents. If you were to descend a steep off-road track in high range, you'd find yourself constantly relying on the brakes all the way down. Aside from prematurely wearing out your brakes, particularly in rugged terrains like the High Country, excessive braking can lead to significant heat buildup, affecting other drivetrain components such as bearings and seals. We've discussed this before. At the bottom of a hill in areas with steep terrain like the High Country, you'll typically encounter water crossings. However, because the surrounding components are extremely hot from braking, crossing these water sections can lead to issues as the cold water quenches the hot metal components of the differentials and axles, potentially causing seal failures. Water ingress into bearings and oils can quickly lead to problems for either the current trip or the next one.

Using low range while traveling downhill on steep 4WD tracks not only provides the driver with more control when negotiating obstacles, but it also reduces the need for extensive braking, as the engine assists in slowing the vehicle's forward movement. By selecting 1st gear in low range and simply idling along, you'll find that engine braking effectively slows your forward progress, requiring minimal braking from the driver. Of course, the effectiveness of this depends on factors such as engine displacement and vehicle gearing. In some cases, you might even need to accelerate slightly to aid the vehicle's forward movement.



Best of all, you will be less stressed, and your vehicle will experience less wear and tear when you arrive at the bottom of the hill. Moreover, that river crossing we know will be waiting at the bottom of the hill is no longer a concern for your drivetrain, as the components will likely only be warm when driving through the river.

A quick tip on this: if you know your drivetrain is hot from driving a distance at speed and you encounter a water crossing, take the time to let your vehicle cool down before driving through it. Step out, take some photos, and allow everything to cool down a bit to avoid potential damage from rapidly cooling all these mechanical components in a cold-water crossing.

Do you use low range when on the beach?

While there are many beaches around Australia where you might be able to drive some sections successfully without airing down your tyres at all, usually, you will need to deflate them to prevent getting bogged. Airing down before getting stuck is typically easier than trying to remedy the situation after getting bogged and then letting your tyres down anyway. The goal of deflating your tyres is to make your beach trip more enjoyable and hassle-free.

The same situation applies to high and low range gearing. You might be able to drive along a section of hard sand on a beach in high range for many kilometers. However, it's usually at the beach exit where the softer sand becomes rutted or rough, increasing the risk of getting stuck.

Picture this: you're cruising down the beach successfully in high range, but when you turn uphill to exit the beach, the vehicle starts to struggle. The gearbox shifts from 3rd gear down to 2nd gear and then 1st gear before losing momentum, bogging down to the sidesteps and blocking the exit for other users. This moment can be extremely frustrating and potentially embarrassing for the driver.

This scenario can happen to even the most experienced 4WDers. We all get complacent sometimes!



Hopefully, you might already be thinking of the answer to avoid this from happening... that's right, by taking the time to stop for a few seconds and change down to low range before exiting the beach, this situation might have been avoided.

The vehicle might run through gears up to 4th in low range to reach the exiting speed, but as it slows, it will downshift gears to 3rd and then 2nd gears... but if it's still struggling, it still has another gear to grab.

Returning to the scenario of the vehicle struggling in 1st gear high range and then becoming bogged. 1st gear high range is like 2nd gear low range, so when the vehicle begins to struggle in 2nd gear low range, it can downshift to 1st gear, hopefully still moving forward and exiting off the beach.

Can I use low range at the boat ramp?

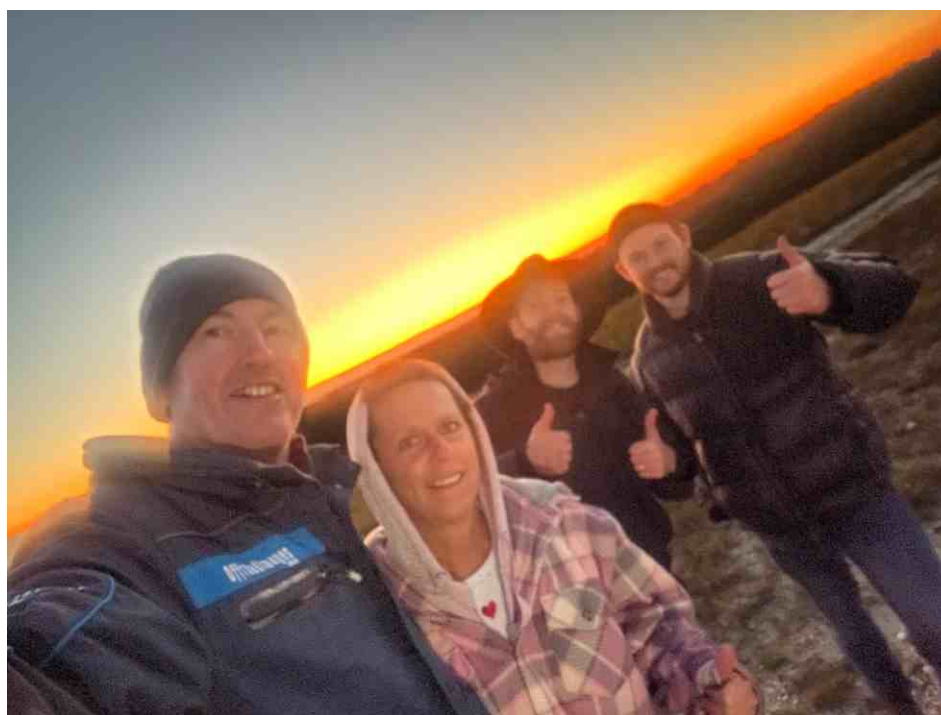
Another tip for using your low range is at a boat ramp. However, this requires careful consideration. Towing a boat in and out of a boat ramp can be challenging in slippery conditions, but low range 4WD could help prevent the situation of potentially ending up in the water. This is probably obvious as the added traction and engine braking can make things easier. But it's crucial to only use the system in a straight line and avoid driving around the car park with your 4WD system engaged, as this could damage the drivetrain. I have seen this happen many times with people forgetting they are in 4WD and driving on hard bitumen surfaces with great traction. So, if you are going to engage your vehicle's 4WD system in these locations, avoid using it in situations where you are turning to prevent differential wind-up. Reserve its use for the straight line exit out of the boat ramp, and disengage 4WD before continuing in the car park.

It's all about making things easier for you and the vehicle. Selecting the right gear is crucial to ensure you and your family enjoy the experience of 4WDing in any environment.



“Cheers”

Michael Ellem | Offroad Images





Barbecued banoffee splits

Barney Desmazery

Serves 6

Easy

Prep: 5 mins

Cook: 15 mins



Treat the family to banoffee splits next time you have a barbecue or go camping. They're super easy to make, and great fun too. Serve with vanilla ice cream

Ingredients

40g
butter
softened

50g
light brown soft sugar

½ tsp
vanilla extract

6
small ripe bananas
unpeeled

chopped pecans
ice cream, whipped cream or yogurt, to serve

Method

Step 1

Combine the butter, sugar and vanilla extract. Split the inside curve of each banana with a [knife](#), being careful not to cut all the way through. Spread a spoonful of the butter mixture into each split, then put the bananas, split-side up, onto individual sheets of foil – they should be large enough to encase the bananas completely. Crimp the edges of the foil to seal the parcels. These can be prepared the day before – just chill until you're ready to cook.

Step 2

Heat a [barbecue](#) to low or until a thin layer of coals has turned grey. Cook the parcels for 15 mins, turning once.

Step 3

Carefully unwrap the parcels, reserving any sauce that's inside. Transfer to plates, then scatter over the pecans and drizzle over any sauce reserved from the base of the parcels. Serve with a scoop of ice cream, whipped cream or yogurt.



Epic summer salad

Cassie Best

Serves 6

Easy

Prep: 10 mins

Perfect for BBQs and buffets, our epic salad is an assembly job of gorgeous ingredients – no cooking required. Serve it with lamb kebabs for an impressive summer feast

Ingredients

400g black beans
drained

2 large handfuls
baby spinach leaves
roughly chopped

500g heritage tomatoes
chopped into large chunks

½ cucumber
halved lengthways, seeds scooped out and sliced on an angle

1 mango
peeled and chopped into chunks

1
large red onion
halved and finely sliced

6–8
radishes
sliced

2
avocados
peeled and sliced

100g
feta
crumbled

handful of herbs
(reserved from the dressing)



For the dressing

large bunch
mint

small bunch coriander

small bunch
basil

1
fat green chilli
deseeded and chopped

1
small garlic clove

100ml
extra virgin olive oil
or rapeseed oil

2
limes
zested and juiced

2 tbsp white wine vinegar

2 tsp
honey

Method

Step 1

Make the dressing by blending all of the ingredients in a [food processor](#) (or very finely chop them), saving a few herb leaves for the salad. You can make the dressing up to 24 hrs before serving.

Step 2

Scatter the beans and spinach over a large platter. Arrange the tomatoes, cucumber, mango, onion and radishes on top and gently toss together with your hands. Top the salad with the avocados, feta and herbs, and serve the dressing on the side.



Mango chutney campfire cheese toasties

Good Food team

Serves 4

Easy

Prep: 10 mins

Cook: 10 mins



Gather round a campfire and make these moreish mango chutney and cheese toasties for a simple family supper. Serve with more chutney for dunking

Ingredients

100g grated mozzarella

100g medium or mild
cheddar
grated

2
spring onions
thinly sliced (optional)

8 slices white bread

4 tbsp
mango chutney
plus extra to serve

small knob of
butter
for frying (optional)

Method

Step 1

Combine both cheeses and the spring onions, if using, in a bowl. Pile the cheese mix over four of the bread slices, then spread 1 tbsp chutney over each of the remaining slices. Sandwich the slices together to make four toasties.

Step 2

If you're cooking over a [barbecue](#), put the sandwiches on a griddle for 2 mins, flip and cook for 2 mins more. Transfer to sheets of foil using tongs and tightly wrap. Return to the griddle and cook for 3-4 mins more, or until the cheese is melted. Alternatively, melt a little butter in a pan. Fry the sandwiches for 2-3 mins on each side, weighing them down with a second pan or other heavy heatproof object. Cut the toasties into fingers and serve with more chutney for dunking.

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Kimberley Kamper Platinum 2006/07 Model \$20000 ono



This kamper although older and used, is in excellent condition. It has always been garaged when not in use, regularly serviced and maintained with original or better replacement parts.

Any additional information wanted please text me. Brian 0400946684

Tare 1260 Agg 1600

New Lithium Batteries 30% increase of original setup and much lighter.

Webasto HWU Recently Serviced

Fox Shock Absorbers Recently replaced

Just serviced, new brakes fitted

Optioned up with additional storage boxes

Drawer under bed

Kwik awning

Bedioun Annexe with walls and skirt

Ensuite Tent. Original zip on to side of kamper

Webasto diesel hot water unit and shower

Ability to pump water from external source not to contaminate water tank

130litre water tank

Innersprung mattress

Rhino cargo bag

160watt portable solar panels. 80watts when folded attached to kamper with CTEK solar

BCDC charger

Spare wheel bearings

Good tyres

Eutectic fridge. Very economical on battery power

Many extras if wanted



Dwellingup Weekend Trip Report

Peel 4x4 Club



Saturday 22nd March 2025
Trip Report by Gary Mayes

The Dwellingup Trip started off as a weekend trip, however due to other commitments, I was the only one staying the weekend in Dwellingup.

Getting to the Nanga Brook Camp Ground on the Friday after work, we set up camp, and got dinner sorted. It was a lovely clear night, with a great view of the stars.

The next morning, those joining us on the day trip to the Captain Fawcett Track & Fireline Trail, all met up at the camp site.

With the camp site being only a couple of kilometres from the start of the Captain Fawcett Track, we decided to air down at camp.

Followed by a quick trip briefing, we were on our way; although it wasn't long before it was realised that it was actually a Pajero Trip being led by Landcruiser!!!

It wasn't long before we reached the fun section of the track – for those who know, yes, where I drowned the Ranger. The famous mudhole was however now almost completely dry, so I decided to make my way through it. Although dry, it was still very tight, and a very steep sideways angle. I had to keep my front wheels turned just to keep the front guards off the bank.

We went down a couple of the side tracks which were found to be slightly overgrown. One of them had a zipline, but no-one volunteered to try it out.

Followed by a spot of morning tea, we made our way back up the last of the side tracks. Straddling the rut seemed to be the best approach – even for the landcruiser which made it up without the centre diff locked in

We then made it to the end of the Captain Fawcett Track, where we decided to start the Fireline Trail, and have lunch along the river. Once at the start of the Fireline Trail however, we were greeted with a dirty (but very clean & new) sign – Attention. ROAD CLOSED, due to dangerous road conditions. Although many would see this as a challenge, I played the responsible card, and we went back to the bridge to have reassess, and have some lunch.

Checking some maps, I found a section where the Captain Fawcett Track & Fireline Trail met up, and decided to check that out. The pre-determined plan with the group was that if this did not work, we would do the Captain Fawcett Track in reverse. Unfortunately, we could not find this elusive track, so continued with the plan.

It was quite strange doing the track in reverse, as everything just seemed so different.

It was also a good eye opener as to the different skill levels of many drivers. We had to pull over for a group of approximately 9 vehicles to get through a section of the track. This section was somewhere that took us 30 seconds each to navigate earlier in the day; however due to differing levels of experience, took each of the inexperienced drivers minutes to get through.

Once we got to the end / start of the track, everyone aired up their tyres, and we had we had a trip debrief.



As many of you know, I like to finish my trips at somewhere exciting – you know, a pub, brewery, etc... Unfortunately, being later in the day, everyone had to get back home, and do homely things. As we were still camping, I decided to call into the Wine Tree Cidery in Dwellingup, and have a sneaky beer. There were quite a few emus around, and you could actually be forgiven for thinking it was an emu breeding facility. There were emus everywhere – young and old.

The following morning, on the way home, we stopped off at the Marrinup Prisoner of War Camp (No. 18). There is some very interesting history here, and is somewhere I would recommend everyone to come and check out.

The bit I find most amusing though, is the prisoners that would escape, only to be found at the Dwellingup pub having a beer.

Thanks to those that joined me on this trip, and I look forward to the next one.



Start of the Captain Fawcett Track



Pajero at home in the ruts



The infamous mud hole



The cruiser getting ready for the drop in



Cool pic



This is the area that showed the differing levels of experience. We did it well.



Jacob exiting the morning tea area



The end of the Captain Fawcett Track



That sign you don't want to see



The view at Wine Tree Cidery



Emus at Wine Tree Cidery



No words needed 😊



Some of the relics at Wine Tree Cidery



Beautiful flowers at the Nanga Brook Camp Ground



Entrance to the Marrinup No.16 POW Camp



TRIPPING OUT



MUNDARING POWERLINES



TRIPPING OUT



MUNDARING POWERLINES



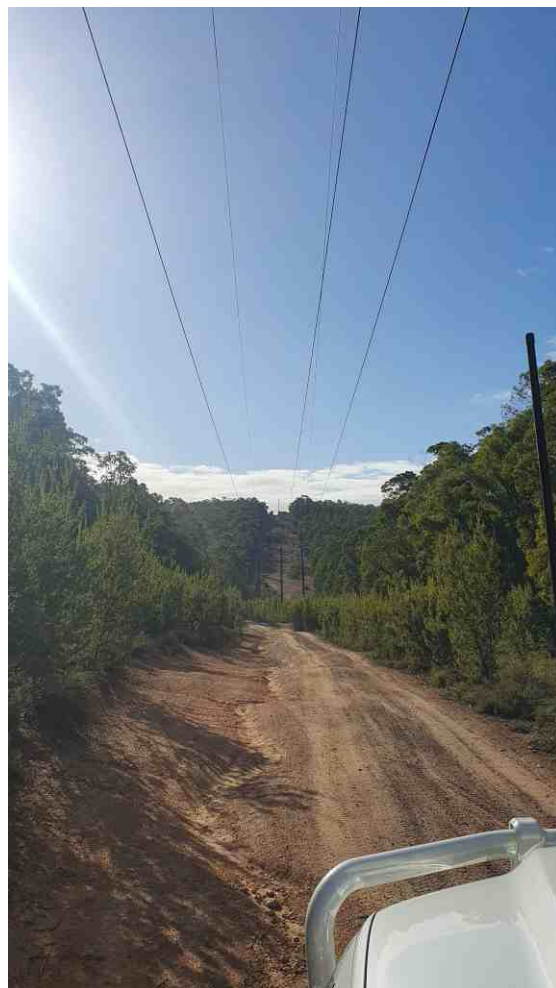
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TRIPPING OUT



NULLARBOR MUSTER



Event Schedule 2025

WA4WDA Associate Gathering, Kalgan River Caravan Park, Albany
Saturday 31st May to Monday 2nd June 2025.

Saturday, May 31			
Start	End	Event	Location
10.00am	9.00pm	Members to arrive and set up – mingle. Do activities around the park & Albany. - National Anzac Centre - Classic Car Show in town - Golfing at caravan park - Fishing at caravan park	Kalgan River Caravan Park
6.00pm	7.00pm	Dinner – Food Vans	
		Use of the marquee and firepit area. Shanty Men performing.	Marquee Marquee
Sunday, June 1			
Start	End	Event	
9am	5pm	Day trips and social events. Albany 4WD leading trips. 4WD Trips - Winery Social Event	Various
6.00pm	7.00pm	Dinner	
6.00pm	7.00pm	Own Dinner. Use of the marquee and firepit area. Mingle with members.	Marquee
Monday, June 2			
Start	End	Event	Location
6am	10am	Own breakfast. Pack Up/Leave - Please tidy your area and take your rubbish with you. See you next year.	

PARK INFORMATION

- **Kalgan River Caravan Park 9844 7937** - when booking mention WA 4WD Association and they will give non peak rates for the weekend.
- **Marquee and camp kitchen** - a communal space with tables and chairs provided for club members use.
- **Firepit** provided for club members use.



CurRy nIGht

@

tHe pOweR's

17 McCormick Street Warnbro

Saturday 5th July 2025

From 6pm

please bring your favourite
curry for all to share

BYO Drinks

Steven and Julie
0422895121





PEEL 4X4 CLUB...2025 RED CENTRE TRIP...START 18MAY – END 20JUN

The trip will commence on departure Kalgoorlie 1000hrs Sunday 18May2025

Departure point Cnr Hannan St and Outridge Tce...30.74S 121.48E

The trip will conclude on arrival home Saturday 20Jun2025.

DATE	DAY	O/NIGHT	
18	SUN	GREAT CENTRAL ROAD (GCR)	BUSH
19	MON	“ “ “	BUSH 25S 128.6E
20	TUES	AYERS ROCK RESORT	CARAVAN PARK
21	WED	KULGERA SIDING	BUSH 25.9S 133.4E
22	THURS	LAMBERT CENTRE	BUSH 25.6S 134.4E
23	FRI	OLD ANDADO	CARAVAN PARK
24	SAT	ALICE SPRINGS	CARAVAN PARK
25	SUN	“ “	CARAVAN PARK
26	MON	RUBY GAP	BUSH 23.5S 135E
27	TUES	RUBY GAP	BUSH
28	WED	HALE RIVER	CARAVAN PARK
29	THURS	“ “	CARAVAN PARK
30	FRI	GEMTREE	CARAVAN PARK
31	SAT	“	CARAVAN PARK
01	SUN	ATHELLE HIDEAWAY	CARAVAN PARK
02	MON	“ “	CARAVAN PARK
03	TUES	ALICE SPRINGS	CARAVAN PARK
04	WED	“ “	CARAVAN PARK
04	THURS	RAINBOW VALLEY	BUSH 24.33S 133.63E
05	FRI	“ “	BUSH
06	SAT	PALM VALLEY	BUSH 24.1S 132.7E
07	SUN	PALM VALLEY	BUSH 24.1S 132.7E
08	MON	KINGS CREEK	CARAVAN PARK
09	TUES	“ “	CARAVAN PARK
10	WED	KULGERA R/HOUSE	CARAVAN PARK
11	THURS	VICTORY DOWNS	BUSH
12	FRI	YULARA	CARAVAN PARK
13	SAT	WARAKURNA	CARAVAN PARK
14	SUN	GCR	BUSH
15	MON	GCR	BUSH
16	TUES	GCR	BUSH
17	WED	LEONORA	CARAVAN PARK
18	THURS	GOONGARRIE	BUSH
19	FRI	THE BREAKAWAYS	BUSH
20	SAT	HOME	



NOTES

1. Expect changes...weather, fires or whatever will dictate changes.
 2. Sat 06Jun will likely be staying at Hermannsburg and day trip into Palm Valley on the Sunday.
 3. Total KMs for the trip (Warnbro to Warnbro) is 7,300kms.
 4. You need a minimum 1000kms of fuel range. Expect diesel to be anywhere from 195cpl to 315cpl.
 5. We will be in and around the Alice Springs area (03-04Jun) in the run up to the Finke Desert Race...the place will be packed...really, really crowded. To try and get somewhere within a caravan park I will require absolute definite numbers along with...how you are camping... i.e.towing or swag or tent. If you want power you will need to work that out yourself as I will just be getting an "area" where we can setup.
 6. As well as Alice Springs being crowded for the Finke everywhere else will also be crowded as it's school holidays and there are going to be tourists everywhere...we won't be alone. You will need to be incredibly patient if you wish to coffee or dine out at the Ayers Rock Resort.
 7. Once we depart Alice Springs on 04Jun the only real place to get supplies is Ayers Rock Resort...it is usually well stocked but may not have everything you want...be prepared to be disappointed.
 8. Now for the extra good bit...like all places now one needs to prebook any camping in National Parks. To do this you need an acct with the NT Parks...
<https://parkbookings.nt.gov.au/Web/> your password needs a minimum of 14 things...good luck.
 9. Once you have an acct confirmed please book Ruby Gap for 26 27 May (for me it is \$10/night). Hopefully all is good and you have success.
 10. After that you can then register for a 2 week parks pass...\$30. I put start date 26May and it expires 08Jun which is good for us.
 11. All the other places requiring bookings that we can try and sort out once we are in the NT.
- If there is anything you think you need to know feel free to contact me (SMS is far better or maybe messenger) but just be aware I will be away at times during March and then the end of April and not back until the first week of May and then...well then it's time to hit the NT...

Mark SKEELS

0429108389

markskeels@hotmail.com



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



Northern Territory Red Centre; East of Alice Springs; and Stations around the Simpson Desert
 Sunday 18th May to Tuesday 24th June
 Mark Skeels
 Medium

WA4WDA Gathering at Kalgan River
 Saturday 30th May to Monday 2nd June
 WA4WDA. See Gary Mayes for further details
 Medium

Mystery Day Trip
 Saturday 28th June
 Steven Power
 Medium

Bring a platter / curry night.
 Saturday 5th July
 Julie Power
 Social

Myalup Fishing Trip
 Saturday 19th July
 Jacob Yardley
 Medium

Peel 4x4 Club Annual General Meeting Venue
 Total & Permanent Disable Veterans of Western Australia Clubrooms
 Saturday 26th July
 Peel 4x4 Club Committee
 Social

Kennedy Ranges & Mt Augustus
 Saturday 10th August (for approx.. 2 weeks)
 Max Milbanke / Duane Buckenara
 Medium

Karajini & Exmouth
 Following on from Kennedy Ranges & Mt Augustus trip
 Duane Buckenara
 Medium

27th to 31st August
 Dowerin
 Mark Skeels
 Medium

Wildflower Day Trip
 Sunday 14th September
 Peter & Donna Light
 Medium

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

Lake Perkolilli
 Thursday 2nd October to Monday 6th October
 Mark Skeels
 Medium

Mandurah Boat, Caravan, 4WD & Camping Show
 Thursday 9th October to Sunday 12th October
 Information Only

Koorda Drive-In & Karrara Ranges
 Friday 17th October to Saturday 25th October
 Mark Skeels
 Medium

Sandy Cape Swag Trip
 Saturday 18th October to Sunday 19th October
 Hugh Burns
 Medium

Lancellin Dunes Day Trip
 Sunday 2nd November
 TBC
 Medium

Perth 4WD Show
 Thursday 6th November to Sunday 9th November
 Information Only

Lennard Track Overnighter
 Saturday 22nd November to Sunday 23rd November
 Gary Mayes
 Medium

Peel 4x4 Club Christmas Party
 Saturday 13th December (TBC)
 Peel 4x4 Club Committee
 Social