

# A Green Guide for 4wd Outings

Best-practice environmental management for 4wd and off-road outings

## 4WD for Work and Play

Recreational 4wding and off-road driving is not all the same.

There are private outings, off-road parks, 4wd clubs, 4wd tagalong outings and full commercial 4wd outings where clients buy a seat in a company 4wd vehicle driven by a guide. Vehicles range from lightweight ATV's and RV's to 4WD utes and station wagons, 4wd Unimogs and custom 6WD coaches.

Most of these vehicles spend most of their time on sealed or sheathed roads or clearly defined dirt tracks and not much time completely off-road. Even in remote forests and outback areas most recreational 4wd travel is on existing tracks, such as old logging roads, stock routes and oil exploration lines. Some beaches are also used extensively as off-road highways. They are written for commercial off-road tour operators but may also be useful for private recreational off-roaders.

This green guide is to help you save the bush and the beaches. Of course you also need to know about safety and handling but there are other guides for that.

## Plan Your Trip

- Most commercial outings follow the same route every trip;
- For new 4wd outings, one off, expeditions, clubs and private outings, good planning cuts impacts as well as risks and costs;
- Most tourists are happy on roads and tracks, so why increase wear and tear and running costs by taking them off-track?
- Whether on or off track, get permission from the landholder or land management agency;
- Many national parks, state forests, beaches and Aboriginal reserves have restricted access for vehicles, including 4wd's;
- Where access is allowed, commercial tour operators and organised groups such as clubs may need special permits;
- Plan to stay out of trouble, getting bogged is a hassle and digging out makes a mess and delays clients, so plan your trip within the capabilities of your vehicles and drivers.
- Take enough time, panic drives and shortcuts mean trouble;
- Watch the weather, rain can turn a track into a mud hole and a slope into a slide, drought can turn a forest into a fire trap, snow can turn a mountain pass into an avalanche hazard;
- Check the tides if you're planning to drive on a beach and do it at low tide, check that you have enough time.
- If you've travelled through areas with weeds or dieback fungus, clean your vehicle before you go into a park or forest.

## **Get Your Rig Ready**

- Make sure your machine is built for what you want it to do;
- Get the right tyres for the terrain, it's a critical choice;
- Don't overload or and don't travel top heavy;
- A well setup rig with the right tyres, power and gear ratio and a well-balanced load will generally have less impact than a vehicle which is struggling with the terrain;
- Make sure you have the equipment to get out of trouble;
- Check that grass and twigs can't easily catch in your muffler, mountings, where they could catch alight and start a fire;
- Clean your vehicle so you don't carry weeds and soil Fungi;
- Check and fix any oil leaks;
- Check your muffler is working well to keep noise down;
- Adjust headlights to point along the track, not off to the side.

## **Get the Right Gear**

- A jack that works in the outback as well as well in the car park;
- A winch you can run from the outside of the vehicle if need be;
- Basic recovery gear, snatch strap, damper and shackles;
- A sand or mud anchor for the winch or tree protector and slings, depending on where you are going;
- Spade or shovel where you can get at it;
- In outback spinifex country, a wire screen over the radiator and a wire brush to clean it;
- Tyre compressor, tyre gauge and a tyre repair kit;
- Fuel stove, fire pit or fire blanket for low impact camping;
- Trowel and/or portable toilet for a bush toilet;
- Sealable garbage bags to take out trash and avoid littering;
- Ashtray, if you smoke, cigarette butts cause litter and start fires;
- Fire extinguisher, first aid, CB or HF/WHF radio.

## **Crossing Creeks**

- Getting caught in a creek damages the environment as well as your vehicle;
- Don't cross creeks if you don't need to;
- Choose an existing ford or track crossing if possible;
- Otherwise, choose somewhere with easy access and exit to avoid cutting up creek banks;
- Where possible choose somewhere where you can drive straight across, not along the riverbed;
- Don't cross within 2km upstream of a water supply intake;
- Don't cross streams which are important to rare species, fish spawning or fish breeding;
- Check the creek depth before crossing;
- On wide gravelly rivers there are often crescent shaped gravel beds which can provide a shallow crossing;
- For deep crossings keep a gentle bow wave just ahead of the vehicle.

## **Wildlife Watching**

- Watch wildlife from a distance that won't disturb them;
- Drive slowly and quietly and don't rev the engine;
- Stop the engine when stationary, keep voices low and stay in the vehicle;
- Stay downwind, move slowly and don't chase wildlife;
- Never surround an animal or group of animals and don't get between animals parents and their young;
- Put logs and rocks back where you found them;
- Don't feed animals, they can become dependent on human food and are more likely to get hit by a car.

## **Wildlife Safety**

- In areas of wildlife, drive for wildlife safety;
- This may be much slower than road conditions would otherwise allow;
- Take notice of all wildlife warning signs;
- Avoid driving at night in areas with wildlife, animals are most active at night and you can't see as well;
- Drive with particular care at dawn and dusk;
- Take extra care in forests where animals are close to tracks;
- Let animals move off the track before passing them;
- If you do hit an animal, stop and check if it is still alive;
- For marsupials, check if it is a female with a Joey in the pouch, since these can often be saved;
- In some parts of Australia, local veterinarians treat injured native animals free of charge and pass them on to trained wildlife careers to be rehabilitated and taken back to the bush;
- If the animal is seriously injured you may have to put it down humanely.

## **Muddy Tracks**

- If possible stay off muddy tracks as they are easily cut up;
- Damaged tracks are expensive to repair and often get closed;
- Drive slowly on muddy tracks, select a gear to maintain torque without spinning wheels;
- Cross old ruts at an angle to avoid getting stuck;
- Straddle ruts and gullies, or drive along the sidewalls,

## **Minimal impact camping**

- Most 4wd outings involve overnight backcountry camping;
- Stay at an existing campsite if you can;
- Choose your campsite at least 100 meters from a rivers or lakes;
- Park your vehicle 100 meters away from the water too;
- Where there is not campsite find an open space so you don't have to clear vegetation;
- Don't cut plants or pull them down;
- Keep your stay short, especially at a previously undisturbed site.

## **Fires**

- Many areas have restrictions on open fires, check before you go and take a fuel stove for cooking in areas where fires are banned, firewood is scarce or fire scars would leave and impact;
- Keep fires small and contained, use existing fire areas if available;
- Large areas of Australia are naturally fire-prone and as long as they do not get out of control, campfires do not cause significant environmental impacts;
- This does not apply in other areas of the world where vegetation is not as adapted to fire;
- Even in Australia campfires are best avoided in environments where natural bushfires are rare such as alpine grasslands, rainforests and many lakes, creek and dune areas because fires leave permanent scars on soil and vegetation;
- To build a small fire over living vegetation or soil, lay down an old tarp or blanket and cover with at least 10- 20 centimetres of loose sand to provide insulation from a fire on top;
- If you routinely run 4wd outings to otherwise fire-free areas and your everyone expects a campfire then bring a fire pit and your own firewood in the vehicle and take ashes and charcoal out;
- If you are cooking on a stove but everyone wants firelight, try candle lanterns, carry glass ones in a travelling case or improvise by standing candles in loose soil or sand inside a plastic bag;

## **Washing and Toiletry**

- If your group wants to wash clothes with soap or shampoo, give them buckets to carry water well away from the lake or river bank so that soapy water drains into the soil and not the lake or river bank;
- Use biodegradable detergents for washing up, sparingly and pour out used water at least 100 meters from creeks, lakes and rivers;
- For non-family groups or commercial outings a 4 bucket washing up system is standard, hot detergent, hot rinse, cold rinse, bleach;
- Pour out bleach and detergent well away from water;
- Make sure group members don't put rubbish or food scraps in campfires but collect all the litter and take it out;
- If you are camping with a big group or at an often used site without a permanent toilet you may need to take a portable toilet in one of your vehicles;
- For small groups in little used areas the best toilet technique is to dig individual cat-holes 15- 50cm deep well away from camp and at least 100m from any river, creek or lake;
- Bring hand towels and unscented toilet paper and remind everyone to use it sparingly;
- Setup a trickle cup and antibacterial soap for hand washing and make sure everyone knows how to use it.

## **Respect the Bush**

- Good drivers leave less impact;
- Choose your route on the day, depending conditions;
- Pick your way, don't bash the bush;
- Stay of tracks if you can;
- Follow old tyre marks if there are not 4wd tracks;
- Weave between trees, don't knock them down;
- Don't squeeze through densely grown areas, this damages plants and your vehicle;
- In the outback avoid driving over spinifex hummocks, they grow slowly and animals live in them and they trap soil nutrients;
- On beaches stick to flat sandy sections at low tide, burrowing animals live in the beaches, especially in the dry sand near the high tide mark and vehicles crush them;
- Use sand flags;
- If you have to cross sand dunes do so on a ramp of well-worn track where possible, a number of bird species nest in coastal dunes and vehicles can crush their nests and eggs and destroy stabilising vegetation;
- Even if vehicles only drive the parent birds off their nests for a few moments the gulls can kill the eggs and chicks;
- Where safety and good handling allow, keep your vehicle's revs down, this saves fuel and reduces noise and wheel sins;
- Animals live even in apparently flat and barren areas and vehicle noise can disturb them;
- In dunes or the desert, don't drive over layers of shells which may be Aboriginal middens;
- On private lands or pastoral leases avoid disturbing livestock or watering points and leave gates as they were found;
- Respect the rights of other users on tracks and campsites.

## **Getting out of Trouble**

- Best to stay out of trouble, but everyone gets stuck sometimes;
- Maintain the right tyre pressures for given terrain types;
- At low tyre pressures keep speed down and avoid sharp turns and heavy braking;
- If you have to winch from a tree, protect the tree trunk with a tree trunk protector;
- If in doubt, get out and take a look;
- Then think, assess and make a decision based on your own experiences with the vehicle recovery tools you have on hand amongst the group.