



11.
CONSERVATION

Let's stop paying lip service in the cause of conservation. Talk is cheap. Every one of us has a contribution to make. The most valuable contribution is to stay on existing tracks and encourage other motorists to do the same. Do not assume that a vehicle track, if it is visible but not well used, is an official track. It may be that the driver ahead of you has been thoughtless and has made his own track over virgin ground. Should you now follow the new track it won't be long before it becomes a well-used track – adding yet another to the vast maze criss-crossing our continent.

It has become apparent that in Southern Africa some of the most outspoken members of the 4x4 community, who advocate responsible driving practices, who are recognised by the country's environmental protection institutions and claim to be the leaders of the cause when it comes to protecting the environment against the damage done by 4x4s are themselves the worst offenders. For obvious reasons I am not at liberty give names, but in one case, an individual 4x4 tour guide took a 70-vehicle convoy on a Cape West coast beach drive. This same individual frequently takes ten or more vehicles onto the Botswanan salt pans and encourages the vehicles to drive ~~gloriously close~~ together. Not a single track is created across the pan, but 10! In the video footage I saw he encouraged his party to collect as much firewood as their roof-racks could carry and burn several massive bonfires.

It is no surprise that the most of the Cape West coast is about to be closed to 4x4s and the Botswana wildlife department are suggesting the closure of the Magkadikgadi Salt Pans to general traffic.



In mountainous terrain what begins as a vehicle track soon becomes runaway erosion.

ON THE BEACH

The University of the Cape Town has done some research on the effect of vehicles on beaches. They divide the beach into four regions, the glassy layer, the intertidal, the drift line and back beach and the dune field.

The glassy layer is the shallow surf where most animals are tolerant to disturbance and can handle the effects of humans and vehicles. However, effects are seen as large molluscs respond to the liquefaction of the sand by 4x4s because they 'think' that the tide is rising and come to the surface. This then makes them very susceptible to damage by vehicle convoys as they are crushed while on the surface. Plough shells also occur here and are often seen feeding on jelly fish and other drift material. Research has shown that 10% of these animals are destroyed for every 50 vehicle passes. Large convoys increase the percentage.



Sodwana Bay on a typical Saturday morning. Where 4x4s are permitted overcrowding by vehicles is often the result. This picture was taken before the crowds arrived!

The intertidal region is quite tolerant of beach traffic. The finer sand the less the damage. Course grain beaches where vehicle tracks are deeper impact more. During low tide, most animals found on fine and medium sandy beaches are plough shells, juvenile sand mussels, sand lice and worms. Less than 15% of the juvenile mussels are damaged per 50 vehicle passes.

Drift line and back beach. This is a narrow stretch of beach frequently used by vehicles as they move at high tide. This is unfortunately the home of the giant isopod (*Tylos granulatus*). Approaching the endangered species list, this animal, which grows to 55mm in length, is now absent from most South African beaches. They remain buried during the day and at night feed on the drift-line material. As the tide begins to rise again they bury themselves to hide from predators, sun and water. However they have the tendency to bury themselves in disturbed sand which, if it is a vehicle track, may be fatal if the track is used by other vehicles. The most serious hazard to this isopod is driving at night when the percentage killed by passing vehicles is alarmingly high.

Dune fields are without question the most vulnerable region of the beach. The general consensus is that there should be a total ban on driving on dunes, tidal marshes and the back-shore because of the extreme damage caused by vehicles in these areas. Not only do vehicles disturb the nesting sites of birds such as Oyster catcher and terns, sanderlings and plovers but also the salt crusts and dune-stabilising bacteria and vegetation. The results are blow-outs which destabilise the dunes and vegetation. Recovery takes a long time.



*The success of indigenous dune-stabilisers such as *Scaevola* are critical to beach survival*

In addition to the conservation aspects of driving on beaches, most beach users hate vehicles. People who love to walk for long distances to escape other people are often disturbed by vehicles, which are usually racing

across the beach. The beach is not a vehicle playground, it is a people playground. Due to irresponsible driving and today's self-centred attitude among so many people, I advocate the principle that on a beach people and vehicles don't mix. Vehicles should therefore be banned on beaches where people regularly find relaxation as well as the total ban on driving on all beaches at night.

Conservation when driving on the beach:

Driving on the beach is a hazard to the dunes. It leads to dune erosion and 'sand blows' which ultimately results in the destruction of coastal forests. Many animals, including turtles and some sea birds, nest in the dunes.

- *Vehicles pose a hazard to people walking on, and sunbathing amongst the dunes.*
- *Driving on a beach at night severely endangers beach dwellers. Even shining bright lights on nesting creatures disturbs them and can cause them to abandon their nests.*
- *Keep the area which is used for parking.*
- *Do not bury your litter on the beach.*
- *Don't drive on the beach as though it's your right of way. It is surely unreasonable to ask people strolling or children playing on the beach to look left and right as if they were on a street in a town. Give them right of way and drive slowly.*
- *Because conservation opinions differ, it is important to read conservation literature relevant to the area. This is often readily available and free to the public.*

CAMPING

Surely one of the main reasons why we enjoy four-wheel driving as a hobby is to enable us to explore the untouched wilderness? Then why do we not take better notice of good camping practices in order to preserve it?

Sound camping practices:

- *Dig a deep latrine. Faeces simply covered with a layer of soil is not sufficient. Jackals dig up shallow latrines. The deeper the hole the faster the decomposition. Bury the minimum amount of toilet paper. Burn the rest. Use unbleached toilet paper.*
- *Never bury rubbish. Wild animals dig it up and spread it around.*
- *Most cleaning chemicals contain phosphates, which contain nitrates. These run into water courses after rain and pollute the water. Water containing excess nitrates promotes the growth of algae to unnatural proportions, and eventually waterways can become choked with algae, starving the water of oxygen. Therefore wash well away from water courses.*
- *Avoid setting up camp on animal tracks. These look like human paths – they often lead to water.*

- *Never feed wild animals – you may be signing their death warrant. Animals which become accustomed to being fed usually end up making a nuisance of themselves. Often they have to be destroyed by wildlife department officials. Those that feed them are the real killers.*
- *When camping in arid areas, do not camp close to a water hole. If it is the only water hole in a large area, desert dwelling animals will travel great distances to get to the water. If you are camped too close they may be scared away and this could cost them their lives.*

LIGHTING FIRES

Be especially careful when preparing your camp fire:

- *Dig away an area and make sure that the surrounding grass cannot catch alight.*
- *Do not burn newspaper without breaking it into small pieces and rolling it up. Large pieces can catch the wind and be blown into the air.*
- *Never leave a fire unattended. Don't go to sleep inside a tent and leave a fire blazing away.*
- *Bury a fire after it has turned to ash.*
- *Use existing camp fire sites if you can. It's very unsightly when the ashes from old camp fires are scattered all over the place.*
- *Be aware that buying wood from roadside vendors could mean damage to indigenous forests.*
- *Do not make fires under a tree or on its roots. If possible, take your own firewood – you may think you're not doing much damage yourself by burning a single dead branch, but when all campers do it a single dead branch soon becomes an entire tree.*
- *Never take wood from a live tree.*



Simple carelessness by campers causes untold damage to our wilderness every year.

RESPONSIBLE BEHAVIOUR

Poor driving techniques and irresponsible driving are the biggest cause of damage to tracks and the resulting erosion. Drivers who repeatedly spin their wheels or apply accelerator in frustration when a tyre battles for traction unsettle the surface layer. The rain falls and the unstable topsoil washes away.

This concept is not new, but what is, is the attitude of some off-roaders to try and make it over an obstacle no matter the cost. If all of the off-road obstacles we encounter were easy, there would be no thrill of overcoming the tougher ones.

But, challenging obstacles to the point where vehicles are damaged and the track is destroyed is not worth it.

Two examples illustrate the point:

In the Western Cape there is a 4x4 trail beginning from the Cederberg town of Wupperthal. The trail is scenically splendid from beginning to end, but nowhere more so than about two-thirds along the route where the track runs on the edge of a deep valley before descending sharply to the valley floor. The descent is potentially dangerous in the most ideal conditions, even for experienced drivers. It is about 300 metres in length, as steep as 40 degrees in places and is surfaced with loose rocks, sand and deep holes.

Towards the end of 1998 a team tackled the trail and over 20 vehicles, driven by both experienced and novice drivers successfully completed the trail. The trail guides, all of whom were experienced, coached each driver through. Everything was professionally and safely orchestrated until someone asked if they could try and go up. The response should have been negative. But, the go-ahead was given and the specially prepared Hilux with front and back diff locks engaged made it over the top. The climb was dangerous and a few times the driver almost lost control. The damage to an already hazardous descent was severe and made even more dangerous for those coming down. Many men pay for one selfish man's prize.

The second example took place while I was driving on the Lamberts Bay trail. The trail consists of a large dune field, ideal for experimenting with vehicles, tyre pressures and driving techniques. It is operated by experienced off-roaders who should know better. I was at the head of a group of novice drivers organised by Toyota to try out the range of new Hilux 4x4s. After an hour or so most of the drivers had gained confidence and were looking for something a little more challenging. The guide suggested that they attempt a short but very steep dune climb in two-wheel drive. At this moment I made the mistake of letting it happen. A vehicle will climb anything, it will even fly, if it goes fast enough. And that is exactly what happened - a vehicle took off. At that moment everyone looked a little embarrassed that things had got out of hand. The Hilux involved sustained no damage. It is this same attitude that promotes reckless use of our environment.

Alcohol may have played a part in both of these scenarios. Alcohol and driving, including off-road driving don't mix. Unfortunately, I feel as I write this, that my words will be like an ant trying to persuade a buffalo to give way.

Other good off-roading practices:

- *After digging a vehicle out, fill in the holes.*
- *Bull bars are not for clearing bush in front of your vehicle. They are to protect against impact.*
- *When winching off a tree never tie cable around a tree. It ring-barks the tree and kills it.*

source: Mail & Guardian, 'The Thoughtful Tourist', and a selection of works compiled by Ronel Nel of the Zoology department, UCT, Rondebosch, 7701. Email PNEL@BOTZOO.UCT.AC.ZA