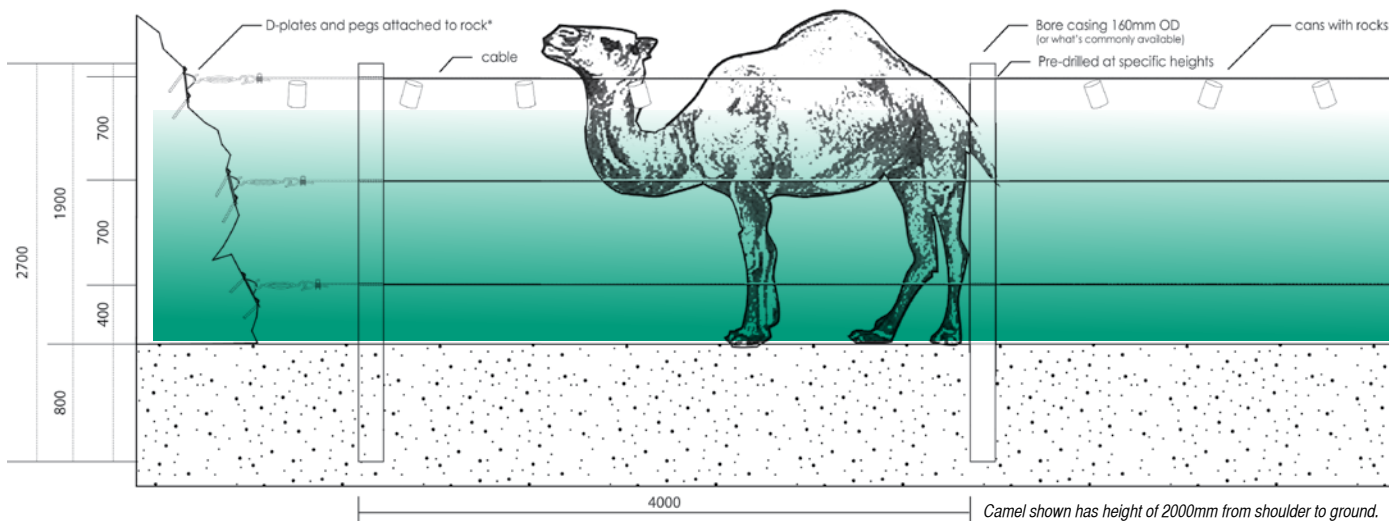
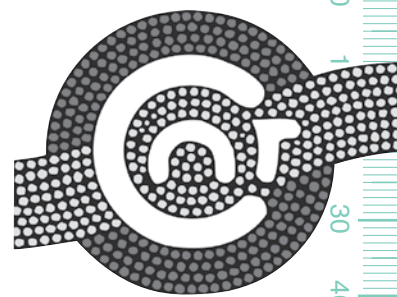


# BUSH TECH #35

## Protecting your Water Places



**Camel Fencing Project:** Designed to be installed around a selection of wetlands on a range of site types.

**Materials:** Cable, Bore casing, Old cans and tie wire, Pegs/steel rod, D-plates - constructed prior.

**Features:** Height of fence to resist main force exerted by the camels neck/chest, Simple construction and materials, Minimum maintenance required. \* If rocks on site can not be used as an anchor, stays can be put onto corner and beginning/end posts.

### Camels damage water places

Water places (water holes, rock holes, soaks, springs etc) are special places. They are often traditional sacred sites. They also provide great swimming holes, reliable drinking water for people when they are out on country and are often habitats for native plants and animals, some of them endangered. But camels damage these sites.

Thirsty adult camels can drink 100 litres of water in a couple of minutes. During dry times big mobs of camels quickly drink all of the water in small water holes, rock holes or soaks.

Camels using water places cause damage by:

- Trampling and eating out delicate plants near water holes.
- Contaminating the water with droppings or falling into waterholes and dying.
- Damaging soil and causing erosion leading to silting up of sites.

In communities camels can damage taps, toilets and water tanks, and eat the shade trees. Camels looking for water on pastoral properties sometimes damage troughs, bores and yards.

### CAT Camel Fence

Keeping camels out of a water source can be quite difficult especially in dry times. So CAT in consultation with Greening Australia and the Central Land Council have designed a solid cable fence capable of keeping camels out but still allowing native animals access.

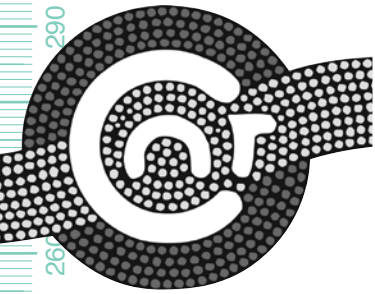
This fence uses 100mm pipe posts every 4-5 metres with 3-4 strands of 8mm cable. The top strand is 1.8 metres high, so that camels can't use their shoulders to lean on it and push it over and the bottom is 0.4 metres from the ground so that they cannot get their neck under it. The fence can be free standing or can be fixed to rock faces. The top strand should have cans or other objects attached to it to catch the light, move in the wind and make noise. This makes sure camels notice the fence.

### Planning a Camel Fence

In planning the fence you need to consult the local Land Council or other relevant organisation to ensure the local Traditional Owners have consented to the fence.

When you have this cleared you will need to go out on site with these elders to ensure they consent to the exact route of the fence line.





# BUSH TECH #35

## Protecting your Water Places

### When you are planning the route try to consider:

- The best method with the least amount of materials, sometimes this may be to use natural topography and rock cliffs to attach the fence to rather than putting a rectangular fence around the whole site.
- The degree of difficulty in building the fence. Digging holes into sand is easier and stronger than having to weld base plates and bolt posts to rock.
- The way it is going to look (aesthetic). The last thing you want to do is build something that takes away from the natural beauty of the site.
- Plan the fence taking water flows and tree growth into account. Ensure the flow of the river is not such that the fence is going to wash away in the next rain. If it is try using water gates that allow the water past without pulling it down.

### Technical Specifications

Use solid 100mm pipe with at least a 3mm thick wall. Poles need to be individually concreted in with a solid cement/sand/gravel mix. Try not to use local sand unless it has a low clay/dust content as this will weaken the mix. Ensure all holes for posts are at least 700-800mm deep. If you are in rocky country you can use a base plate that can be welded to the bottom of the post and fixed into rock using chemset glue or dyna bolts. (The dyna bolts should be at least 200mm long).

Make sure posts are level and use a string line to ensure they run in a straight line. Once in the ground use an Oxy-Acetylene torch to blow the holes in the pipe for the cable. The holes will need to line up with the holes in all the posts along the line. It is important not to leave the edges of the holes serrated or sharp. Sharp edges will damage the cable over time. Corner posts need to have stays. You may also want to add in stays to posts that are likely to be in high traffic areas as these posts will have concentrated pressure on them.



Use 8mm galvanised cable. The cable is threaded through the holes in the fence and either attached to the posts (simply with a bolt and a nut eyelet attachment) or can be fixed to rock using a threaded rod and chemset glue. Short lengths of cable can be tensioned with a large turn buckle, but larger lengths may need to be tensioned using a kangaroo jack or hand winch.

### Maintenance

These fences are designed to require less maintenance than standard cattle fencing or even electric fencing which is sometimes used to keep camels out. Even so these fences need to be checked every time they are visited.

Every time you check the fence test the strain on the cables. If they need it strain them using the turn buckle. Strain until it makes a nice "ting" when you hit it. After rain ensure any built up material in flow areas is removed and place it down stream of fence. If left to accumulate this material will cause drag on the fence and eventually pull it down. Check the posts for any movement. If they are moving a lot you may need to come out again and put in a new post.

### Further Information

Contact Greening Australia Northern Territory Inc on 08 89532882, or PO Box 9081 Alice Springs NT 0871, or email: [peter.barker@nt.greeningaustralia.org.au](mailto:peter.barker@nt.greeningaustralia.org.au).

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