KANGAROO RESCUE TECHNIQUES AND APPLICATION

Manfred and Donna Zabinskas Greendale Wildlife Shelter

Basic Rescue Advice (for all animals)

- Personal safety is first and foremost.
- Wear a safety vest with reflective bands to increase your visibility. The wearing of a vest also allows the public and authorities to realise that you are acting in an official capacity. This is particularly important if you are carrying a rifle or must euthanase an animal in some way. It also makes it easier for other rescuers to find you.
- If an animal appears to be unreasonably agitated by your presence, try removing the vest in case it is the bright colour that is alarming the animal.
- Examination or surgical gloves are recommended for personal hygiene when handling injured animals or when checking pouches. This also reduces the risk of infection to an animal you are handling.
- After wearing examination gloves and, preferably, even before you put them on, disinfect your hands the warm and moist environment under a latex glove is a paradise for bacteria.
- Before dealing with an animal, familiarise yourself with the surroundings and assess for risks or dangers to yourself, and to the animal - eg you may be half way around a bend and not visible to oncoming vehicles.
- If the animal is on private property, you will need permission to enter.
- Attempt to assess an animal from a safe distance. Good binoculars are essential. Keeping a reasonable distance improves your own safety and minimises the possibility of an animal trying to flee and hurt itself further, or perhaps even escaping.
- Decide if you can handle the situation. You may need help, other equipment or Veterinary assistance (drugs, etc).
- ➤ Before you attempt to capture an animal, make sure you will be able to deal with the animal and that it has somewhere to go. Don't put an animal through the torment of capture if it can't be cared for.
- Be prepared when you approach an animal. Take a blanket with you even if the animal doesn't appear to be able to move. It may suddenly get up or you may need to quickly grab a joey.
- The GOLDEN RULE for most animals is to cover the head as quickly as possible. This will generally calm it down, or at least it will cover the bitey bits.
- When transporting an animal, turn off your car radio/stereo.
- > If an animal is mobile DO NOT CHASE IT follow it and devise a rescue plan.

WILDLIFE RESCUE EQUIPMENT - Basic Car Kit

Item	Purpose	Comments
"Rio" Basket	Storage of rescue equipment. Doubles up as animal transport container.	Cover basket when transporting animal to provide darkness.
Reflective Safety Vest	Rescuer safety, particularly at night. Identification when using gun to euthanase animal. Public associate vest with authority.	Note that bright colours can scare some animals - may need to remove vest.
Torch	Searching for or checking animals at night, pouches for joeys, in ceilings or under houses	More convenient to store torch in car (glove box/console) for easy access.
Surgical Gloves	Dragging dead animals off roads, checking pouches, treating wounds.	Disinfect hands after removing gloves to remove Bacterial growth!
Leather Gloves	Capture / handling of dangerous animals, such as raptors, fruit bats. Untangling / cutting barbed wire. Searching under tin or rocks.	Heavy gloves can be awkward and restrict feeling. Be careful not to injure animal.
Blanket	Capturing large animals (Roos, Koalas, etc). Covering animals / basket for transport. Climbing over barbed wire fences.	Pure wool provides good warmth and natural fibres are safer if ingested.
Towels	Capturing small animals (birds, Possums etc). Lining for basket / box containing animal. Cleaning up.	Rolled up towel can be used for some animals to grab - Koala, Raptor.
Pillow cases	Carrying small animals. Covering heads of large birds (ie Swans).	Rub spare pillow cases inside pouch of dead mum to collect natural pouch lubricant & smell - helps joey in care.
Large Sack / Bag.	Carrying and restraining large animals such as Roos & Wallabies.	Fabric needs to be extremely strong but still allow ventilation & cooling. Attach rope to tie bag.
Sewn or Knitted pouches	Carrying small animals. Keeping small animals warm (eg possums).	Beware of open knit re getting claws caught.
Garbage bags	Transporting dead animals. Laying under injured animal when transporting in car (bleeding / urinating).	Always handy.
Binoculars	Checking animals from a less threatening distance or when approach is difficult.	More detail can be seen before deciding on action (eg eye cataracts).
Pliers / Wire cutters	Cutting fence wire to free entrapped animals. Cutting fish hooks.	May be included in car tool box. If cutting fence, try to get permission - beware of wire tension.
Heat Pads	Warm animal. Keep animal warm during transport.	Reusable heat pads are available. Empty plastic bottle + hot water will do.
Cetrigen spray	Antiseptic / insecticide spray for wounds. Mark dead animals on roadside to indicate that the animal / pouch has been checked.	Cetrigen is bright purple, waterproof, and antiseptic (= dual purpose).
Small Axe	Euthanasing seriously injured animals.	Ensure solid surface under animal.
Surgical Scissors	Cutting bandages / fishing line. Cutting teats to safely remove small joeys from pouch. Cutting pouches open for access to joey. Euthanasing small birds and Pinkies.	Wombat joeys can be difficult to remove without cutting pouch open. Use round-tip scissors to prevent injury to joey.
General First Aid Items.	Cleaning and dressing wounds, rinsing eyes (smoke, dust), restrict bleeding, restrict movement (broken wing / bone)	Combine Animal & Human First Aid equipment - PTO for list of contents.
Telephone numbers	For obtaining assistance. Contacting Wildline, Vets, Police, Councils, DSE, Powercor, Telstra	Carry mobile phone if possible.
Tape, wire, cable ties	Relocating nests into trees, & miscellaneous	Remove tape & wire from trees later.
Stationery / Brochures	Pad, pens, WV rescue & volunteer info	Caller often interested to get involved
RSPCA Guide	Shows how to destroy animals humanely	Show Police, farmer with gun, etc.
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FIRST AID KIT CONTENTS - Basic Car Kit

Item	Purpose	Comments
Triangular bandage	Human - Immobilisation	
Gauze / Cotton Pads	Human / Animal - Wound dressing	
Cotton Balls	Human / Animal - Wound cleaning	
Cotton Tips	Human / Animal - Cleaning, applying antiseptic	Stems can be used as splints for small birds
Jumbo Swabs	Human / Animal - Cleaning wounds, splints	Stems can be used as splints for larger birds
Bandaids	Human - Wound dressing	
Crepe Bandages	Human / Animal - Immobilisation, Snake bite, Pressure bandage	
Resuscitation Shield	Human - Mouth-to-mouth resuscitation	
Panadol tablets	HUMAN ONLY!! - Pain relief	DO NOT USE ON ANIMALS
Dettol Antiseptic Spray	Human / Animal	
Antibacterial Hand Gel	Human - Disinfect hands	Use after wearing surgical gloves
Iodine Solution	Human / Animal - Powerful antiseptic	Good for animal wounds
Burn Gel	Human - Pain relief / antiseptic for minor burns	
SOOV Gel	Human - Itching, Stings and Insect bites	
Eye Drops	Human / Animal - eye irritation from smoke / dust	Do not use on eye injuries - seek medical assistance
NaCl Irrigation	Human / Animal - Cleaning wounds, flushing eyes, saline bandage	
Surgical Scissors	Cutting bandages / fishing line. Cutting teats to safely remove small joeys from pouch. Cutting pouches open for access to joey. Euthanasing small birds and Pinkies.	Wombat joeys can be difficult to remove without cutting pouch open. Use round-tip scissors to prevent injury to joey.
Tweezers	Handling sterile items, removing ticks / splinters / foreign objects	Pinch-type tweezers must be used to remove ticks to avoid squashing the tick and injecting toxins
Syringes - Various	Irrigating / flushing wounds	
Wooden Stirrers	Depress tongue, Splints	
Vetrap bandage	Animal - Compression bandage & Immobilisation	Excellent non-stick cohesive bandage that can be used over fur, feathers, etc. Various brands available.

IMPORTANT NOTE: The above first aid items and comments are shown as suggestions only. They should not be used as first aid or medical advice or as instructions. It is strongly recommended that all persons receive formal first aid training from accredited instructors, and to consult Veterinarians for all animal treatment.

Dead kangaroo on the side of the road

- Probably the most common kangaroo call is for a kangaroo that has been hit by a car or other type of vehicle. Sadly, even more common are hit kangaroos that are left without a report of the incident. They are simply left to die - sometimes in the middle of the road!
- The animal is often dead by the time a rescuer arrives, or when the animal has been found by chance.
- Don't get complacent if the animal appears to be dead. It may be unconscious or, in the case of a female, it may be carrying a live joey.
- Remember your own safety comes first. Dealing with a kangaroo in the middle or on the edge of a road can be extremely dangerous.
- If safe to do so, move the dead kangaroo to a safe position.
- CHECK FOR JOEYS (refer to section below).
- After you check a dead animal, mark it with a bright colour (eg Cetrigen Spray) to indicate that the animal has been checked and that it is in fact dead, and that the pouch has been checked, etc. This will avoid others having to unnecessarily do the same horrible job that you have already done.

Checking a kangaroo's pouch for Joeys

- In all cases where female kangaroos are euthanased, and for dead animals lying on the side of the road, CHECK FOR JOEYS.
- When checking pouches, the full depth of the pouch must be examined, and both nipples sighted to ensure that a tiny joey isn't present.
- Very small joeys have their mouths fused to the teat. It is therefore critical that no attempt is made to pull such joeys off the teat.
- Underdeveloped joeys are not viable to be raised and therefore need to be euthanased. If there is any doubt about a joey's viability, consult a more experienced person.
- Finy joeys can be decapitated using surgical scissors, while still in the pouch. Alternatively, cut the teat, keep warm and transport to a Vet or carer able to deal with it. The dead mum can be transported without disturbing the joey at all.
- When extracting a joey, be careful not to get legs, head or tail caught inside the pouch. Do not bend or apply force against any limb.
- Try to manipulate the joey inside the pouch so that it comes out back first and with head, legs and tail sliding out neatly behind.
- Larger joeys may be difficult to remove from pouches, especially by people with big hands. The pouch may therefore need to be cut open using surgical scissors to extract the joey. Best if scissors have rounded tip, particularly on the inside of the pouch.
- Even for bigger joeys, don't pull the joey off the teat if it won't let go easily cut the teat instead.
- Quickly place the joey into a pillowcase or similar pouch and keep warm and dark (down the front of your own shirt is great).
- ➢ If using artificial heat, be careful not to overheat (say 28 32°C for an unfurred joey). Do not warm too quickly if the joey is cold. Do not allow the heat pad to be in direct contact the joey's skin wrap the heat pad in a cloth. A plastic drink bottle filled with hot water and wrapped in a towel can serve as a good heat source.
- Rub a few spare pillowcases in the empty pouch to obtain mum's smell for subsequent care of the joey by a licensed carer.

- The dead mum can be transported with the joey left in the pouch and, in fact, this is a very good way to deliver the joey to a carer. If the joey is large (fully furred), care must be taken to ensure that the joey doesn't jump out of the pouch and escape.
- If one nipple is large and swollen, regardless of whether a tiny joey is attached to the other teat or not, an emerging joey or a joey-at-foot is on the loose and may be too small to survive. This joey must be sighted and assessed for its chances of survival. Such an assessment will need to be carried out by an experienced kangaroo carer.
- > The dead kangaroo will need to be watched until the joey returns.
- Orphaned joeys will usually return to their dead mother, and even try to enter the pouch. They will usually return for a number of days, and lie next to mum, and try to wake her by crying and tugging at her. To watch this behaviour is extremely distressing. The joey might only return during night time.
- If the dead mother must be left unattended, place a sign near her to advise that an attempted rescue is taking place and not to disturb the body. Include contact details in case someone sees the joey at its mum.
- > Example sign:

NOTICE

THIS DEAD KANGAROO IS BEING USED TO TRY AND RESCUE HER MISSING JOEY.

PLEASE DO NOT TOUCH

For further information, or to report joey sighting, phone:

Greendale Wildlife Shelter (03) 5368 1501

- When the orphaned joey gets frightened, it will hop away but will usually return again and again, usually from the same direction.
- A trap can be prepared by placing a fence of netting or shadecloth around the mother, leaving a gap for access to the mother on the side that the joey usually approaches. A net is placed on the ground across the opening and is tended by a person at each end of the net. When the joey returns to its mum, the net is raised and the joey will be trapped. The joey will probably hop into the raised net. An additional rescuer will be needed to quickly gather the joey using a blanket. The more rescuers the better, but they will need to keep well out of sight.

Live injured kangaroo on the side of the road

- Assess the kangaroo from a safe and non-threatening distance using binoculars (say 10-20 m, or closer if possible). As a method of defence against predation, the kangaroo will pretend that there is nothing wrong and that it is not worried about your presence. It may even eat grass in front of you. There will be a point, however, at which the kangaroo will not cope with your distance, and it will attempt to flee or defend itself. This can usually be detected before it is too late by observing the kangaroo's mannerisms. It may shake its head, or twitch its ears. It will look around, and you can see the fear and anxiety in its eyes. Quickly stop and retreat a couple of metres in this situation. The kangaroo will usually settle down again.
- If the kangaroo cannot get up, it is almost always serious.
- If the kangaroo has obvious injuries, which are beyond treatment (such as jagged bones sticking out, or limbs missing), try to have it humanely put down without moving it or approaching it.
- Under these circumstances, euthanasia is best achieved by using a rifle. The person with the rifle must possess an appropriate firearm licence for the type of gun used, be familiar with safe gun use and handling, and should not use the firearm in a built up area. If there is any doubt, the Police should be consulted. It is best to let the local Police know whenever a firearm is to be discharged.
- Refer to the RSPCA guide for the correct point to aim.
- PLEASE NOTE! Just because the Kangaroo must be euthanased, does not mean you have to do it. You don't even have to watch or be present. But if you are not going to do it, organise someone that will. Or organise someone else to organise someone that will - get the message?

Many kangaroos that were to be shot by the Police end up being left to suffer. While having the best intentions, Police may be redirected to a situation of higher priority. PLEASE check that any euthanasia to be carried out by others is actually done. Besides, you probably need to check the pouch anyway.

Directions for Humane Destruction of Animals

ISSUED BY THE R.S.P.C.A. (Vic)

These directions show the spot on the animal's head where an instrument should be placed or pointed and the angle at which it should be held, so as to obtain the right results.

HORSE: Draw an imaginary line from the base of each ear to the opposite eye, the intersection of the lines being the centre which, if hit, insures instant loss of consciousness. When using a revolver, place it within a few inches of the head; with a rifle a short range of a couple of feet is best.

BULL: Draw an imaginary line from each horn to the opposite eye, the intersection of the lines being the point which should be aimed at.

DOG: Shoot at the point marked X in the forehead, or if the dog is suspicious shoot at a point midway between the ears in the centre of the back of the head.

SHEEP: Shoot at a point in the centre of the forehead one finger's width above the eyes or at a point midway between the ears in the centre of the back of the head.

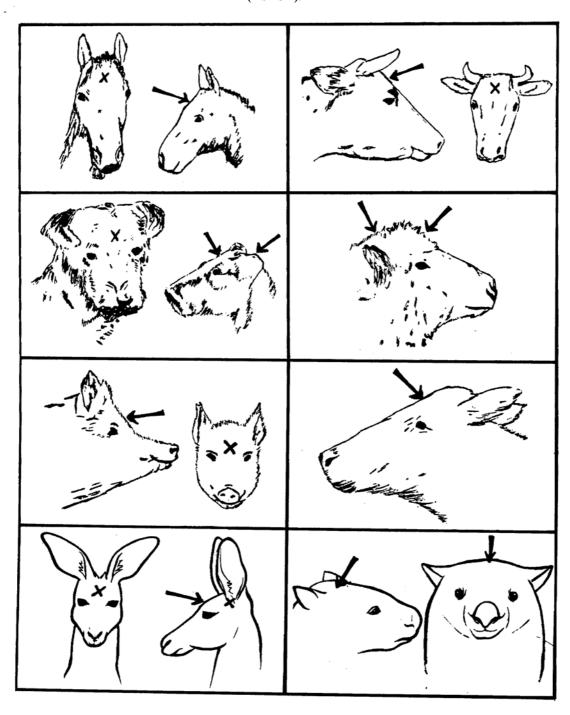
PIG: Shoot at a point one finger's width above the level of the eyes.

CALF: Shoot at a point two finger's width above the eyes or at a point midway between the ears in the centre of the back of the head.

KANGAROO: Draw an imaginary line from the base of each ear to the outside point of the opposite eye, the intersection of the lines being the point which should be aimed at. Alternatively, shoot from the side at a point at the base of the ear.

WOMBAT: The brain is very small. Shoot downwards to a point midway between the ears.

Directions for Humane Destruction of Animals (RSPCA).



- Note that if Police or a non-experienced rescuer destroys the animal, its pouch (assuming female) will probably not get checked, or at least not properly!
- A kangaroo with minor injuries will usually not be found.
- However, kangaroos with broken legs or other serious injuries can travel enormous distances, and at considerable speed. All efforts should be made to respond quickly and to search the area thoroughly until the animal is found. This may take many hours, or even days. An injured kangaroo can suffer horribly for many weeks before dying.
- If it can be found, and approached, the news is probably bad.
- ➢ If a kangaroo is on the move, observe it for injuries or awkward movement, or misalignment. A broken leg, hip, or back can usually be readily detected. The damaged leg or hip will not bear weight. A broken leg may even swing around and twist over and over. This is an extremely distressing sight.
- ➤ If there is any doubt about the condition of an animal, don't make hasty decisions it's not fair to the animal or to you. Get help or opinions from experienced carers, or consider capturing the animal for a more thorough examination or Vet assessment.
- The type of approach and technique required to capture or restrain an injured kangaroo will depend on the size of the kangaroo, the nature of its injury, the surroundings, available resources, and the ability and experience of rescuers.
- In the case of joeys or small kangaroos, it may simply be a case of quickly approaching, covering with a blanket, and placing in a sturdy sack, or "Roo Bag".
- Larger animals may also be captured by using a blanket, but the level of danger and risk of failure is greater. In many cases, sedation will be required to calm the animal for safer handling and transportation this will require Vet involvement.
- Some animals will permit a fairly close approach before panicking (say 3-4 m), so that an "Injecting Pole" or "Pole Syringe" may be used to administer a sedative. Again, this will require consultation with a Vet.
- A blowpipe may be considered for slightly larger distances (4-8 m), however, a special permit may be required and the choice of drug will be more limited to suit use in a dart (eg Zoletil) again requiring consultation with a Vet.
- Some animals will be almost impossible to capture safely without the use of a tranquilliser dart gun. Possession and use of such items require a special licence, and failure to comply with the relevant firearm laws is a serious offence, incurring large penalties.
- Sometimes the Zoo may be able to send out a Vet with a tranquilliser gun give them a try.
- The use of Injecting Poles and non-chemical restraint techniques are discussed below.

SHADECLOTH ROO BAG

Design by Manfred & Donna Zabinskas, Greendale Wildlife Shelter $_{\rm 26\,July\,2005}$

Benefits of Design: Lightweight & Durable

Holes in fabric don't lead to tearing

Fabric stretches to absorb shock from kicking

Well ventilated

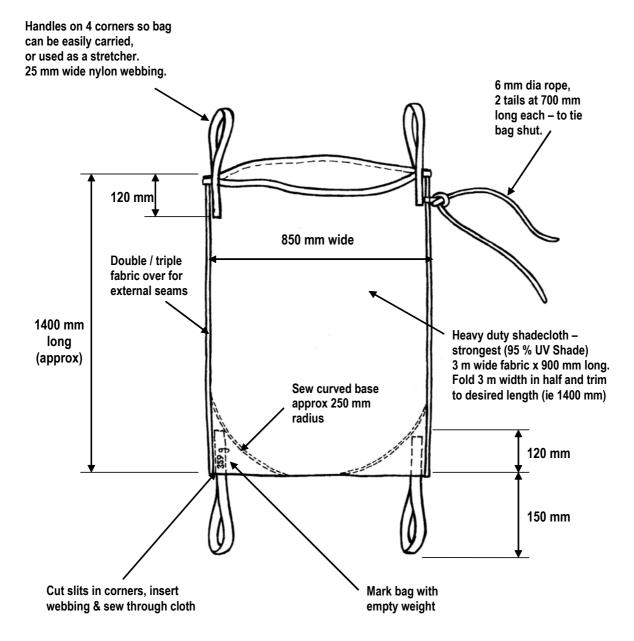
Can cool animal by pouring water through fabric

Can inject drugs through fabric

Curved base for correct support of animal

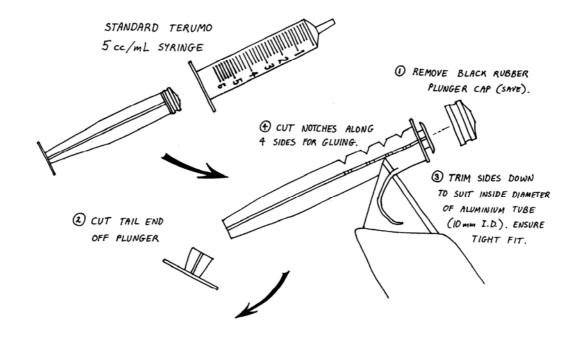
Easy for 2 or 3 people to carry large animal (carry straps)

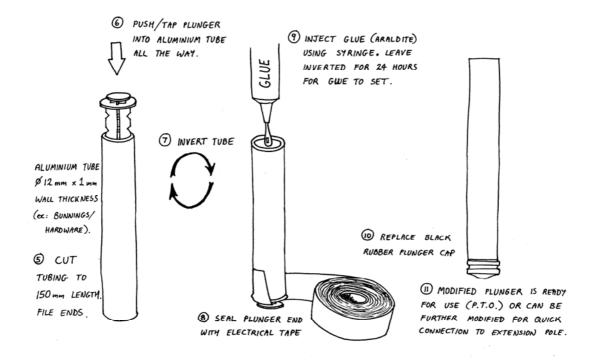
Easy to wash & disinfect

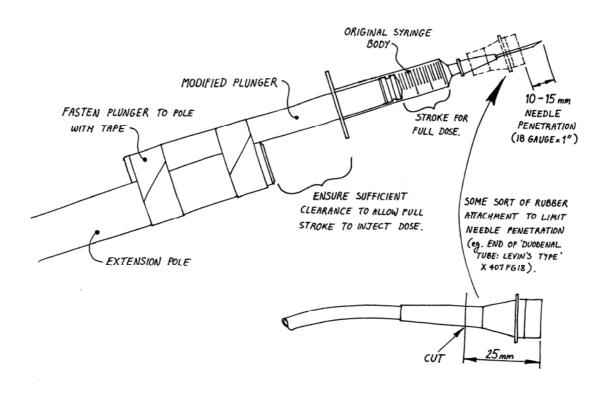


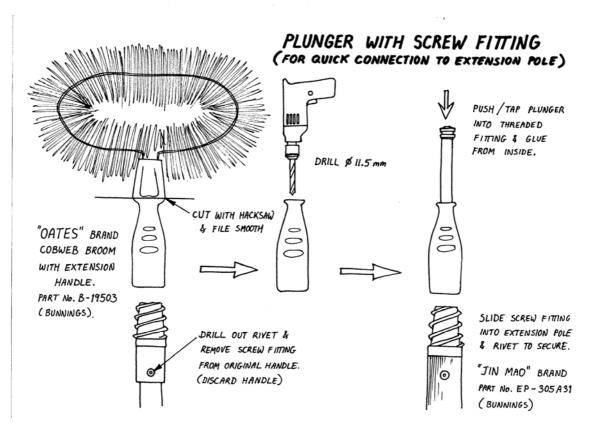
Kangaroo caught in a wire fence ("Fence Hangers")

- Fence hangers are often very badly injured, and are difficult to save.
- Recovery usually requires long periods in care (1 month to 4 months) and subjects the animal (and carer) to enormous stress.
- Large animals can be very dangerous and the size of the animal must therefore be considered when deciding whether rescue and care is feasible, or even possible. Are facilities available to handle the animal?
- Assess injuries using binoculars and euthanase in situ if necessary.
- > Try to find out how long the kangaroo was caught in the fence (ie "heard dog barking most of the night", or "it wasn't there 3 hours ago when I walked past" ask questions to get important information).
- Look for marks on the ground, or if the grass has been flattened out. Head and spinal injuries are common because of the way kangaroos thrash around to break free.
- Is the kangaroo a female? If so, does she have a joey and what is the potential for it to escape (especially if sedating or ethanasing, as the pouch muscle will relax).
- > Joeys often fall out of the pouch when mum thrashes to break free inspect the pouch after the rescue and refer to above notes for how to deal with joeys.
- ➢ If the kangaroo is fairly small, consider running up and quickly placing a blanket over its head and body and support its weight. If the fence wire has to be cut to remove the animal, be careful of wire tension (particularly if barbed wire) wear leather gloves and protect your own eyes and face. Also consider the possibility of more serious injury to the kangaroo from the sudden spring of barbed wire. It may be better to force wires apart, to cut on a particular side of a barb, or to cut barbs off first.
- ➤ If the animal is large, it may need to be sedated while still in the fence to avoid further injury from thrashing around and to render the animal safe to handle. Remember Vet supervision/authorisation is required to use sedatives.
- You can use an "Injecting Pole" to deliver a sedative from less threatening distances (approx 4 m), especially if the kangaroo doesn't know you are doing it.
- One person gets and keeps the animals attention.
- A second person, with the Injecting Pole, sneaks up from the other side and injects. Quickly retreat and allow the sedatives to take effect before attempting to remove the animal.
- It is important to get Vet assessment of fence hanger injuries.
- Most injuries are not immediately visible. The true severity of injury may not be fully revealed until up to 4 weeks later.
- Most fence hangers don't make it.
- Assess Critically!









Kangaroos in Suburbia

Rescuing kangaroos or wallabies in urban environments can be extremely difficult and dangerous for the rescuer, the public, and the animal.

Such rescues should only be carried out or supervised by experienced people.

Using a "Roo Net" to capture Kangaroos or Wallabies.

- The golden rule is DO NOT CHASE.
- Healthy Kangaroos can not be caught by chasing them. Furthermore, they won't stay healthy if chased.
- Work out where the animal has come from, or at least decide where it is going to go. Arrangements may need to be made in advance and you don't want to be sitting on the animal while you sort it out.
- A rescue plan involves setting a trap (net), covering danger areas and alternative escape routes, and influencing the animal to capture itself (ie run into the net).
- A wallaby is a good example.
- > The behaviour of a wallaby is extremely predictable.
- Simply watch its behaviour and a pattern will emerge.
- Learn the pattern and use it to design a trap.
- Decide on a capture spot the place where the net will be held. Choose a location where one or both of the net holders are hidden behind buildings or trees or around corners.
- Assess all potential escape points and make arrangements to block them or to deter the animal from going that way (ie have people hold up and wave blankets).
- Assess other risks or potential problems such as low fences (use more people with blankets), windows (draw blinds or cover with blankets), Obstacles (remove, cover or avoid) or problem spectators (give them an important job away from the scene).
- Brief all helpers, especially about personal safety.
- Discuss back-up plans, possible disasters, and other contingencies.
- Move into position.
- Allow Wallaby to keep circling.
- Prepare and lay net in position (between buildings, etc). The net should be black in colour to reduce the chance of the animal seeing it. Kangaroos and Wallabies seem to look straight through a black net, while they will avoid a light coloured one and perhaps tackle a window or brick wall instead.
- Position people to make the net location look like the biggest and best escape option. Keep rescuers out of sight beyond the path through the net.
- Have lookouts to give the signal when the animal is approaching the net, or if the animal does something unexpected, requiring a change in plan.
- Have sedatives ready for transportation (Vet supervision/authorisation needed).
- Well before the animal arrives at the capture point, raise the net and be prepared, and quiet. Without moving, let the animal run into the net. Lay the net over the animal as it makes contact. The 2 people holding and standing on the net maintain their positions.
- A nominated person with a blanket dives on the netted animal and covers its head with the blanket.
- Another person moves in and quickly grabs the tail at its base.

- All rescuers stay clear of the legs, and wait for the sedative to be injected and take affect.
- It is important that all rescuers remain as quiet as possible near the restrained animal, to minimise any additional stress.
- The same procedure applies to a "Blanket" capture, in which no net is used. However, this is more dangerous and prone to failure, so always try to use a net.
- Check for injuries and condition of the pads on the feet. This may give a clue as to the distance covered or time spent on the run. Apply an antiseptic, such as Cetrigen Spray, to minor abrasions if required.
- > Check the pouch for a joey refer to joey notes above.
- If a joey is missing search the area and notify neighbours.
- > Transport the animal in a secure bag in case it revives earlier than expected.
- Even though kangaroos are not as predictable as wallabies, a similar plan can be devised and the kangaroo can be guided in a desired direction. Always make the net look like the best escape route.
- Kangaroos and wallabies will generally run along a fence line and aim for what looks like the widest escape opening. If you have limited numbers of rescuers, one end of the net may be tied to the fence, but you will have to be quicker with the blanket as the net will be easier to escape from with one side tied.
- When releasing a healthy captured kangaroo or wallaby, be aware of the direction it may head in. Many will go uphill as this gives them an advantage against predators through their speed and stamina.

Good luck and enjoy safe and successful rescues