

285	Eurong	F	Red			25/5/2018	Wongai Campground	Red17f, born 2017 (known). 14.1kg. M'chipped. Round tag.	Juvenile	red	red	14.1kg	Low	Mid	few hairs	Yes
286	Waddy Pt	M	red	green	yellow	23/07/2018	Orchid beach northern ramp	RGY16m, born 2016 (estimated). 18.0kg. M'chipped. Round reflective tag.	Adult	Pink	Pink	18.0kg	Toes only	Toes only	few hairs	Yes
287	Waddy Pt	F	blue	red	pink	23/07/2018	Connors Corner	BRPi17f, born 2017 (estimated). 11.0kg. M'chipped. Round reflective tag.	Sub-adult	Pink	Pink	11.0kg	Low	Toes only	few hairs	Yes
288	Waddy Pt	M	orange	blue	purple	24/07/2018	South Waddy	OBPu16m, born 2016 (estimated). 19.0kg. M'chipped. Round reflective tag.	Adult	Pink	Pink	19.0kg	Low	Low	few hairs	Yes
289	Waddy Pt	M	blue	blue	blue	24/07/2018	South Waddy	BBB16m, born 2016 (estimated). 17.5kg. M'chipped. Round reflective tag.	Adult	Orange	Orange	17.5kg	Mid	Low	small	Yes
290	Eurong	M	16Blue			5/08/2018	500m Nth Eli Creek DUA beachfront	16Blue16m, born 2016 (estimated). 17.4kg. M'chipped. Rectangular tag.	Adult	Blue	Blue	17.4kg	Low	Low	Large	Yes
291	Dundubara	M	White	White	White	25/08/2018	Cathedrals Resort	WWW17m, born 2017 (known). 14.0kg. M'chipped. Round tag.	Sub-adult	Pink	Pink	14.0kg	Low	Mid	few hairs	Yes
292	Eurong	M	XWhite			15/09/2018	2.4km south of 18km access from inland road	Xwhite17m, born 2017 (known). 17.3kg. M'chipped. Rectangular tag.	Sub-adult	White	white	17.3kg	Low	high	Large	Yes
293	Dundubara	F	17Orange			17/09/2018	1km south Cathedral on beach	17Orange17f, born 2017 (known). 15.3kg. M'chipped. Square tag.	Sub-adult	Orange	Orange	15.3kg	high	Low	Large	Yes
294	Central	F	Blue			27/09/2018	Lake McKenzie	Blue17f, born 2017 (known). 11.3kg. M'chipped. Round tag.	Sub-adult	Blue	Blue	11.3kg	Mid	Mid	few hairs	Yes
295	Waddy Pt	M	orange	green	pink	14/10/2018	Connors Corner North	OGPi16m, born 2016 (estimated). 17.0kg. M'chipped. Round reflective tag	Adult	Pink	Pink	17.0kg	Low	Low	few hairs	Yes
296	Waddy Pt	F	16Pink			25/10/2018	North ramp beach	16Pink16f, born 2016 (estimated). 15.8kg. M'chipped. Rectangular tag.	Adult	Pink	Pink	15.8kg	Mid	High	few hairs	Yes
297	Waddy Pt	F	17Purple			26/10/2018	Beach between Marloo and North Ramp	17Purple17f, Born 2017 (estimated). 14.5kg. M'chipped. Rectangular tag	Sub-adult	Purple	Purple	14.5kg	Low	high	none	Yes
298	Waddy Pt	M	orange	purple	orange	26/10/2018	Waddy Point Headland	OPuO16m, born 2016 (estimated). 19.0kg. M'chipped. Round reflective tag.	Adult	Pink	Pink	19.0kg	Low	Toes only	few hairs	Yes
299	Waddy Pt	M	pink	orange	red	27/10/2018	Ocean Lake beachfront - campground	PiOR15m, born 2015 (estimated). 20.5kg. M'chipped. Round reflective tag.	Adult	Pink	Pink	20.5kg	Toes only	Toes only	few hairs	Yes

QPWS, Great Sandy Region - Fraser Island

Record of Humane Destruction of Dingoes since 2001

Ref #	Location	Reason	Date	Circumstance	Ear Tag	Year	Mode	
HR92	Eurong Beachfront	High risk / Threatening	2/07/2018	Threatening, High risk	YYYellow17m	2018	LI	Sub adult
SI14	Sandy Cape	Sick / Injured	10/10/2018	Dingo attack	UT18m_SC_2018_005	2018	LI	Pup

Published on DES Disclosure Log
RTI Act 2009

FI Dingo Necropsy Checklist

Dingo id: UT17M_2018_Poy_002

Microchip: Nil

Date and location of death: 24/7/2018 Beachfront, 200m north of Poyungan campground

Necropsy performed by: sch4p4(6) Personal information.s.73

Date of Necropsy: 28/8/2018 Time of Necropsy: 153.1782211:50 Location of Necropsy: Eurong

Position (hddd.ddddd°): Lat: -25.39448 Long: 153.17822

Skull and ear disposal: Returned to country, DNA sample kept

Probable cause of death: Dingo attack

External

Description:-Sex:-Male ☒ 2 testicles Female ☐

Age Class:- ☐Pup ☐Juv ☒Subadult ☐Adult ☐Old Adult

Approx age: 12.8 months

Colour: Ginger **Tail Tip:** No **Build:** Slight

Socks: Left front Medium Right front Medium **Scars:** Nil **Condition:** Good

Measurement: - Head Length 200mm Ear Length 125mm Neck Width 290mm Shoulder Height 470mm

Body Length 620mm Tail Length 290mm (to skin tip) Weight 9.9kg

Carcass State: - Fresh ☒ Defrosted ☒ Decomposed ☐ Skeletal ☐

Ectoparasites: Nil **External Injuries:** Neck, puncture wound right back of neck, puncture left ventral neck. Blood at site.

Mouth/Throat: Clear

Teeth: (Worn, broken or missing): Complete, good condition

Broken Bones: (Internal and external): Broken ribs, multiple rib fractures left hand side, ribs 4,5,6.

Internal

Blood under skin Yes ☒ No ☐ location: Left flank and ventral abdomen, 2 large intercostal tears, 10 &12, 3&6, multiple rib fracture - 4,5,6.

Fat under skin Yes ☒ No ☐ location and thickness: 2mm abdominal

Body cavity – Blood ☒ Air ☐ Other: significant abdominal damage, large hemorrhage-right side rib 4-6.

Heart – fat coverage and thickness: 30% and 4mm Blood inside ☐ Parasites ☐ Type?

Blood vessels: normal-unremarkable **Pericardium:**

Trachea/Bronchus: Severed neck muscle lacerations mark, large cortical lung lobe.

Lung - Colour: pink Condition: collapsed, lacerated, tooth

Stomach – Full ☐ Part Full ☒ Empty ☐ 60% Contents: Soft plastic fishing lures-3%, Dark mammal fur-80%, feathers-1%, scales-0.3%, pine needles-2%, cassuarina-1.5%, coconut shell-0.5%, bladey grass 4%, bone-6.5%.

Small intestine – contents: slurry

Parasites inside:

Large intestine – contents: fur

Parasites inside:

Feecal sample: Spirometra 4+, Hookworm 2+

Omentum fat moderate

Liver: Multiple lacerations, sharp edges

Gall Bladder: Unremarkable

Kidneys - colour: Pale purple Fat coverage & thickness: 35% - 4mm **Comment:** Unremarkable

Perirenal fat score: abundant

Pancreas - decomposed

Spleen: Contracted and normal

Other Comments: large lateral tear right side of neck region, nil scars observed.

Age definitions: Pup: 1-4 mths, Juv: 4mths-1yo, Sub adult: 1-2 yo Adult: 2-5yrs Old Adult: 5yo+

FI Dingo Necropsy Checklist

Dingo id: UT18F_Eli_2018_004

Dec_20180828_UT18F_Eli_2018_004

Date and location of death: 28/08/2018 – Beachfront, 100m south of Eli CG

Necropsy performed by: Assisted by:

Date of Necropsy: 28/08/2018 Time of Necropsy: 14:00h

Skull and ear disposal: Ear in NRM freezer, skull and carcass buried

Probable cause of death: Dingo attack

External

Description: -Sex: -Male ☒ Female ☒

Age Class: - ☒Pup ☐Juv ☐Subadult ☐Adult ☐Old Adult

Approx. age: 7 weeks

Colour: Dark brown **Tail Tip:** Large **Build:** Healthy

Socks: RFF - Mid **LFF:** Low **Tail tip:** Large **Scars:** **Condition:** Good/optimal 4

Measurement: - Head Length **134mm** Ear Length **100mm** Shoulder Height **225mm**

Tail Length **150mm (to skin tip)** Body Length **370mm** Neck Width **190mm** Weight **2.53kg**

Carcass State: - Fresh ☒ Defrosted ☐ Decomposed ☐

Ectoparasites: Paralysis tick – engorged – front left axilla **External Injuries:** None visible

Mouth/Throat: Mouth and gums white – anemic. Throat clear.

Teeth: (Worn, broken or missing): Deciduous, sharp, complete.

Broken Bones: (Internal and external): Ribs 7, 8 and 9 broken on left side.

Internal

Blood under skin Yes ☒ No ☐ location: Extensive subcutaneous bleeding to the chest walls, subcutaneous emphysema, punctures through intercostal walls.

Fat under skin Yes ☐ No ☒ location and thickness: 3mm abdom

Body cavity – Blood ☒ Air ☐ location:

Heart – fat coverage and thickness: 30%, 3mm (Thimus present) Blood inside ☐ Parasites ☐ Type?

Blood vessels: unremarkable **Pericardium:** Unremarkable

Trachea/Bronchus: **Lung** - Colour: Pale pink Condition: Right cordal lung lobe lacerated and haemorrhaged. Both lungs collapsed.

Stomach – Full ☐ Part Full ☒ Empty ☐ 50% Contents: Pine needles (10%), casuarina cone (5%), casuarina spicules (5%), gristle/fat (10%), roast meat cooking twine (70%)

Small intestine – contents: slurry

Parasites inside: Hookworms

Large intestine – contents: Faecal matter

Parasites inside:

Feecal sample: Coccidia 2+ and hookworm 2+,

Omentum fat: moderate

Liver: pale, lacerated in middle, around major blood vessels

Gall Bladder: Full

Kidneys - colour: pale Fat coverage & thickness: 40%, 3mm **Comment:** unremarkable

Pancreas - Unremarkable

Spleen: small and contracted, but normal

Other Comments:

Age definitions: Pup: 1-4 mths, Juv: 4mths-1yo, Sub adult: 1-2 yo Adult: 2-5yrs Old Adult: 5yo+

FI Dingo Necropsy Checklist

Dingo id: UT18m_SC_2018_005

Date and location of death: 10/10/2018 - 11:35. Sandy Cape (200 metres east of Caree CZ)

Necropsy performed by: sch4p4(6) Personal information with s.73

Date of Necropsy: 11/10/2018 Time of Necropsy: 18:00

Skull and ear disposal: Buried on country, Ear-DNA

Probable cause of death: Dingo attack causing injury to spine, Euthenaised for injury.

External

Description:-Sex:-Male ☒ Female ☐

Age Class:- ☒Pup ☐Juv ☐Subadult ☐Adult ☐Old Adult

Approx age: 4.3. 12-16 weeks.

Colour: Dk Brown Tail Tip: Small Build: Slight

Socks: RFF Toes only LFF Toes only Scars: nil Condition: poor condition 2/5

Measurement: - Head Length 160mm Ear Length 120mm Shoulder Height 320mm

Tail Length 198mm (to skin tip) Body Length 470mm Neck Width 205mm Weight 4.4kg

Carcass State: - Fresh ☒ Defrosted ☐ Decomposed ☐

Ectoparasites: Nil External Injuries: nil observed.

Mouth/Throat: clear

Teeth: (Worn, broken or missing): Complete, stained on rear molars, all deciduous teeth

Broken Bones: (Internal and external): Nil

Internal

Blood under skin Yes ☒ No ☐ location: subcutaneous hemorrhage at right proximal scapula and sacrum area. subcutaneous haemorrhage at retroperineum in line with L6. Puncture through to abdominal muscle in retroperitoneal space.

Fat under skin Yes ☐ No ☒ location and thickness: Nil

Body cavity – Blood ☒ Air ☐ Other: small amount of blood in abdominal cavity.

Heart – fat coverage and thickness: Nil Blood inside ☒ Parasites ☐ Type? Nil

Blood vessels: Unremarkable Pericardium: Unremarkable

Trachea/Bronchus: Clear Lung - Colour: Pink Condition: Good- not collapsed

Stomach – Full ☐ Part Full ☒ Empty ☐ 10% Contents: Pineapple skin 60%, casuarina spicules 5%, 2 Bark pieces 5%, fish scale 1%, organic matter 5%, dark mammal hairs 4%, sand 20%.

Small intestine – contents: Sand, fish scale, sick piece, bark piece. Parasites inside: Nil

Large intestine – contents: Sand, faecal matter. Parasites inside: Nil

Feecal sample: Nil parasites - biol salts, insect legs.

Omentum fat Nil Liver: Unremarkable

Gall Bladder: Part full. Not distended

Kidneys - colour: normal Fat coverage & thickness: Nil Comment: no perirenal or kidney fat. Kidneys unremarkable.

Pancreas – normal - small Spleen: Unremarkable

Other Comments: 1 testicle descended, mesenteric lymph nodes enlarged.

Age definitions: Pup: 1-4 mths, Juv: 4mths-1yo, Sub adult: 1-2 yo Adult: 2-5yrs Old Adult: 5yo+

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RTI Act 2009

FI Dingo Necropsy Checklist

Dingo id: **YYYellow17M**

Date and location of death: 02/07/2018 Eurong

Necropsy performed by:

Date of Necropsy: 28/08/2018 Time of Necropsy: 12:25

Skull and ear disposal: Returned to country, ear sample kept for DNA

Probable cause of death: euthanasia due to high-risk behaviour

External

Description:-Sex:- Male ☒ Female ☐

Age Class:- ☐Pup ☐Juv ☒Subadult ☐Adult ☐Old Adult

Approx age: 12 months

Colour: Ginger **Tail Tip:** Yes **Build:** Solid

Socks: LFF Mid RFF Low **Scars:** **Condition:** Above optimal

Measurement: - Head Length **228mm** Ear Length **140mm** Shoulder Height **503mm**

Tail Length **310mm (to skin tip)** Body Length **762mm** Neck Width **340mm** Weight **16.1kg**

Carcass State: - Fresh ☒ Defrosted ☒ Decomposed ☐

Ectoparasites: Nil seen **External Injuries:** Nil

Mouth/Throat: Clear

Teeth: (Worn, broken or missing): Missing incisor upper jaw

Broken Bones: (Internal and external): Nil

Internal

Blood under skin Yes ☐ No ☒ location:

Fat under skin Yes ☒ No ☐ location and thickness: Abdoninal 2mm

Body cavity – Blood ☐ Air ☐ Other:

Heart – fat coverage and thickness: 40% @ 4mm Blood inside ☒ Parasites ☐ Type?

Blood vessels: unremarkable **Pericardium:** normal-fatty

Trachea/Bronchus: Unremarkable

Lung - Colour: pink Condition: normal

Stomach – Full ☐ Part Full ☒ Empty ☐ 30% Contents: Plastic & parper-30%, Apple-15%, Crustacean-5%, Skin & turtle-5%, Echidna quill-1%, Mammal/bandicoot 10%, Vegetation (grasses)-5%, Sand-20%, other-9%

Small intestine – contents: slurry

Parasites inside:

Large intestine – contents: slurry

Parasites inside:

Feacal sample: Hookworm 3+

Omentum fat Abundant

Liver: sharp edges

Gall Bladder: 3/4 full, normal

Kidneys - colour: dark purple Fat coverage & thickness: 20%, 4mm **Comment:** Unremarkable-healthy

Perirenal fat score: Abundant

Pancreas - Decomposed

Spleen: Congested due to barbituate, round edges

Other Comments: Urine collected

Age definitions: Pup: 1-4 mths, Juv: 4mths-1yo, Sub adult: 1-2 yo Adult: 2-5yrs Old Adult: 5yo+



Hervey Bay Veterinary Surgery



ABN: 17 010 247 060

sch4p4(6) Personal information

Qld Parks & Wildlife Service
Eurong
Fraser Island Qld 4581

Ref: 31332HB

ABN: 17010247060

Patient History for Dingo Pup

Breed: Dingo	Species: Dog Sex: Male
DOB: 15/07/2018 Age: 0 yrs 3 mths	Colour: Tan
Current Weight:	Microchip:

15/10/2018 Ref: sch4p4(6) Personal info

Vital Signs	Name	Value	Notes	Low	High
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Invoice Details:

History Details:

History:

Pup was paralysed and not able to move
Temp taken on island at 32degrees - may not be accurate

Exam:

Small pup aprox 4kg weight
No obvious lacerations, wounds or bruising over torso
No obvious fractures

Rads:

Skeleton - nil fractures or dislocations
Abdomen - bowel filled with what appears to be sands.

HEAD:

No obvious head trauma
Eyes - right eye conjunctival injection - due to post mortum change as pup was lying on this side.

No evidence of corneal surface deficits

Nose - nil discharge

Ears - canals clear - sand filled.

Mouth - all deciduous teeth present with some discolouration of lower premolars - could be enamel damage due to traumatised when chewing bones or other foods.

- nothing in mouth or lodged in back of throat

- nil tongue lacerations

BODY:

Lymph nodes all palpably normal

Coat - no obvious lacerations or lesions on coat, no areas of alopecia

Abdominal palpation - empty bowel but colon filled with what feels like sand,

Bladder - expressed - normal urine

Nil blood.

Faeces - nil parasites seen both via smear or float

- sand +++++

Post Mortem

Ventral midline incision

Subcut fat layer - nil

Some free fluid in abdomen - blood tinged serousanguinous fluid - normal amount for pups age.

All major blood vessels intact

15/10/2018 - 13:43:01

Powered By 

Page 1



Patient History for Dingo Pup

Oesophagus - empty

- no evidence of blockages.

Stomach

- empty other than some hairs - could be grooming hairs

- some sticks

- Some pineapple

- Gastric mucousa intact and no evidence of ulceration or penetration

Small Intestine

- mostly empty

- mesenteric lymph nodes NAD

- mesenteric fat - nil

- nil parasites seen

- obvious peyers patches in ceacum and Small Intestine

Colon

- filled with sand - impaction????

Pancreas

- normal

Liver

- normal lobes sharp and tissue even and homogenous

- gallbladder half filled to empty -

Spleen

- small

Kidneys

- good size, no evidence of trauma/lacerations

- no peri - renal fat

- adrenals normal

Bladder

- intact

THORAX:

Trachea

- nil foreign bodies

- blood tinged froth

Lung fields

- no evidence of pulmonary congestion

- float test positive (floats well)

Diaphragm

- Intact

- good suck on piercing.

Heart

- evidence of intracardiac barbituate.

- good amount of clots in heart - indicates good coagulation - rules out snake

Skin - removed skin from body

Multiple areas of subcutaneous haemorrhage with concurrent tearing and punctures.

Areas include

Over pelvis, over T13-L5/6 over T5-7

Results:

Most likely cause of death is trauma from other dogs.

Operational policy

Natural resource management

Administering scheduled drugs to animals

Operational policies provide a framework for consistent application and interpretation of legislation and for the management of non-legislative matters by the Department of National Parks, Sport and Racing. Operational policies are not intended to be applied inflexibly in all circumstances. Individual circumstances may require a modified application of policy.

Policy issue

What is the Queensland Parks and Wildlife Service (QPWS) position on the use of scheduled drugs on animals, who can use them and how?

Background

Wild animals are generally more susceptible to stress and injury than domesticated animals, particularly during capture, restraint and transportation. Simple procedures such as collecting blood samples can stress animals to the degree where their health and welfare are significantly affected. Administering certain drugs to sedate or immobilise these animals can limit their stress and suffering.

Definitions

Sedation of an animal is the injection of a drug to immobilise it for transportation or to carry out a scientific procedure such as tissue/blood sampling, measuring, collaring or micro-chipping.

Scheduled Drugs – S2 to S9 – are restricted, controlled or prescription drugs listed in the schedules of the Health (Drugs and Poisons) Regulation 1996 and by associated Commonwealth legislation providing national drugs schedules. Drugs requiring a form of legal authorisation for purchase and/or use.

Health (Drugs and Poisons) Regulation 1996 is referred to as 'H(D&P)Reg 96' in this document.

Determinations

Employees must obtain approval from both QPWS and Queensland Health before they are permitted to have access to any scheduled drugs or administer them to animals. Employees are only to have access to scheduled drugs specified on their particular "drugs approval".

Where possible divisions/regions should nominate a person with the required qualifications or authority to purchase scheduled drugs to:

1. act as the purchase point for all scheduled drugs required for that region/division; and
2. provide advice on the dosages to be used (in accordance with manufacturers specifications).

Procedure

A. Authority and Storage of Scheduled Drugs

1. Applying for approval to administer scheduled drugs

The attached form: “drugs approval application” is to be used to apply for ‘drugs approval’. Applications must:

- be fully completed and signed by the applicant and approved by the relevant Manager;
- be approved by the relevant Director if non-standard drugs are to be used;
- include a signed statement by a qualified veterinary surgeon stating that the applicant has been trained in administering the scheduled drug/s and is competent in that skill; and
- include the names, forms, strengths and maximum quantities of each drug required.

An original application is preferred but a copy or facsimile can be submitted provided the original is submitted later by mail.

An approval is granted for a maximum of two years. A period of less than two years is at the discretion of the chief executive of Queensland Health.

Qualified veterinary surgeons or QPWS employees working under the direct supervision and in the presence of a qualified veterinary surgeon do not require drugs approvals. However, exempted persons must still comply with procedures related to storage and use of scheduled drugs and the use of remote injection firearms.

2. Purchase and storage of scheduled drugs

Only the drug types specified on the drugs approval may be purchased, stored and used. Scheduled drugs may only be purchased:

- from a qualified veterinary surgeon; or
- from a supplier, under the authority of the chief executive of Queensland Health.

Scheduled drugs must be transported by registered post or courier from the purchase point or supplier to authorised employees.

2.1 QPWS standard scheduled drugs

QPWS will use two standard scheduled drugs - See Table 1.

Table 1: QPWS standard drugs for wildlife		
Name	Purpose	Method of administration
Zoletil	Sedation	Standard syringe or remote injection firearm
Valbarb	Euthenasia	Only manual injection to heart or vein using a standard syringes after sedation by zoletil
Note: All uses must be recorded in the drugs register		

Standardisation has been adopted to simplify training, approval, purchase, storage and use processes and to minimise the risk of using wrong dosages or scheduled drugs.

2.2 Drugs Register

As a requirement of the regulation, scheduled drugs registers must be maintained at each drug storage location and storage facilities using the attached “scheduled drugs register form”. *These forms are subject to audit by*

Queensland Health and QPWS. The register must be kept in or close to each drugs storage unit and kept up to date with all information on scheduled drugs.

2.3 Non-standard drugs

Non-standard drugs may only be purchased and used where justification can be provided that the standard drug is not appropriate for the task. This also requires prior approval from the relevant Director.

2.4 Storage

Storage provisions for scheduled drugs are provided by the Health (D&P) Reg 96, Part 8 – Storage of controlled drugs Section 119.

An authorised person in possession of a controlled drug must keep the drug in:

- a receptacle which complies with appendix 6 of the regulation; or
- another place the chief executive is reasonably satisfied is a secure place.

The authorised person must:

- always keep the receptacle or place locked (other than when any drugs are being put into or taken out of the receptacle or place); and
- personally possess the key or combination to the receptacle or place.

Most scheduled drugs must be refrigerated to extend shelf life.

Where a lockable safe is not available or drugs have to be kept in a refrigerator, the locked cabinet or refrigerator must also be:

- located in a secure locked room away from public access areas; and
- bolted to the floor or a wall if the container is small enough to be lifted.

Drugs should be stored in a locked container inside the refrigerator and the keys must be kept in a secure place.

2.5 Disposal of expired scheduled drugs

The expiry date on all scheduled drugs must be checked each time of use. Expired drugs may be returned to the regional/divisional purchaser or disposed of as waste. Local agreement may be negotiated with a local vet or pharmacy for disposal. The disposal of expired drugs must be:

- in an appropriate manner;
- witnessed by another person; and
- recorded immediately in the drugs register.

B. Prior to field use of scheduled drugs

1. Approvals for use of scheduled drugs

All approvals for use of specific drugs must be current.

2. Field sheet

The field sheet (Appendix 2) must be completed prior to commencement of any field operation. It is an essential planning and risk management tool.

3. Training

All participants using remote injection firearms (RIFs) must:

- be 'trained' in the use of the RIFs, scheduled drugs to be used and relevant animal welfare requirements;
- be competent in marksmanship and know the target area on the animal species; and
- understand agency field operations procedures for remote injection firearms and standard scheduled drugs.

4. Dress and personal protective equipment

All participants using RIFs and scheduled drugs must:

- Wear the QPWS uniform where these activities are carried out in areas where there is, or is likely to be a public presence. If available, wear a tabard or vest with wording such as "Animal Control" or "Darting program" for areas with a high public presence. In exceptional circumstances, approval may be given for employees to use camouflage clothing or night vests.
- Wear appropriate dress and protective wear as required for the particular operational situation.

5. Equipment

All participants using RIFs and scheduled drugs must have:

- all the necessary equipment (field operations kit) to ensure the task can be done efficiently and professionally; the kit will depend on the RIF and the type and scope of the darting program (see table 2 below); and
- specialised equipment for handling dangerous animals as necessary.

Table 2. Darting program – field operations kit	
Item	Description
Essential drugs and firearms equipment	Appropriate RIF and drugs, darts, lockable esky and a sharps container, cartridges, cleaning equipment and basic tool kit for troubleshooting and maintenance
Animal Welfare Equipment	Tarpaulin, cage, restraints, stethoscope, thermometer, scales (for weighing), water.
Essential PPE	First Aid Kit, gloves, sun protection, clothing for application.
Records	Field operations record sheets.
Calculations	Small calculator

6. Assistants

Assistants do not require special training in the use of RIFs providing they do not handle the firearm. However, all RIF operators must have at least one assistant who has been briefed prior to commencement, on:

- the field operation;
- all specialised equipment being used; and
- operational and public safety issues.

C. Emergent Requirements

If sick or injured animals require the unforeseen emergency administration of scheduled drugs, employees should first consult a veterinary surgeon by phone, facsimile or email. Where possible, employees should obtain the service of a veterinary surgeon in this situation. If this is not possible, employees with a current drugs approval for the specified drug may administer that drug. Scheduled drugs should be used to sedate or euthanase animals only when other safer or more cost effective methods are not available or are impractical. A form should still be completed before/or immediately after these situations.

Only the sedative Zolatil is to be used in RIFs. Euthanising drugs must be administered manually after sedation. Use must comply with the requirements of relevant animal welfare legislation and codes of practice.

When administering any drug to an animal staff must ensure that:

- stress on the animal/s is minimised; and
- safety of the handler is maximised.

Consequently, the employees must make every practical effort to try and ensure that there is at least one assistant present in the immediate area and must always act in a professional manner and exercise caution.

Whenever firearms or scheduled drugs are out of the operator's sight – no matter for how long – they must be securely locked in a container or vehicle.

1. Variations in drug doses:

The effectiveness of drug doses is subject to variation. Sedation time may vary with age, sex, activity and health of the individual animal.

Participants of darting programs must keep accurate records of the sedation time and effect of drugs on animals as well as details on the animal's condition and behaviour using the form. These records will provide information to improve future programs and should be sent to the regional/division scheduled drugs purchasing officer.

2. Field dispensing of scheduled drugs

All usage of Zoletil and Valabarb must be carefully recorded on the form during sedation and/or after the animal is released, and in the storage drugs register at the end of each day. Also:

- drugs should be kept in a small esky with a cold pack during field operations;
- date of mixing and concentration of Zoletil must be recorded on the vials;
- a basic first aid kit must be kept with the field kit; and
- all used darts and syringes must be placed in a secure container after use.

3. Disposal of unused darts and expired scheduled drugs

If there are loaded darts left at the end of a darting program:

- the drug can be removed from the dart using the loading syringe. The solution must be put in a separate container and marked with the date mixing. Refrigerate to maximise lifespan;
- using a clean syringe, blow air into the unused dart to dry the inside;
- mark the dart 'FTU' (First to use) so that it is the first one used for the next darting program; and
- expired drugs containers must be marked 'Expired' with a permanent ink pen.

4. Used darts and syringes

- all used darts and syringes must be retrieved and stored in a Sharps container; and
- full sharps containers are to be disposed at the nearest hospital or other official disposal point.

5. Post operation records

- the “Field Sheet” should be used to reconcile the drugs register at the end of each day of a darting program; and
- all near hits and problems with firearms must be reported immediately.

At least an informal debrief is required with all participants to discuss the operation and potential improvements.

6. Research programs

Prior to application the relevant ethics committee must endorse all research programs involving the use of RIF's and scheduled drugs.

The attached form: “Autopsy” (Appendix 3) may be used to gather information on cause of death.

D. Use of remote injection firearms (RIFs)

1. Remote injection firearms

The four types of remote injection firearms that may be used for official purposes are pole syringes, blowpipes, dart pistols and dart rifles. Their characteristics are given in Table 3.

QPWS employees and non-agency personnel using RIFs must have:

- a current drugs approval from Queensland Health;
- a current Queensland firearms licence categories A and B; and
- received training in the use of the specific firearm/s and drugs.

Table 3. Characteristics of remote injection firearms				
No.	Type	Range	Advantages	Disadvantages
1	Pole syringes	0 – 3 m	Inexpensive, safe & quiet	Close range (in cages or restrained)
2	Blowpipes	5 – 15 m	Inexpensive, safe & quiet	Limited range and accuracy
3	Dart pistols	Up to 20 m	Concealable	Require practice. Not accurate
4	Dart rifles	Up to 100 m	Greatest range & accuracy	Not appropriate for very close range

2. RIF and dart choice

The choice of the remote injection system used will depend on:

- the size and type of animal;
- capture process (trapping/ darting)
- circumstances (location);
- amount of drug required;
- distance (range); and
- personal abilities of the operator.

An experienced RIF operator and Vet should be consulted when selecting a system.

3. Standard dart rifle

QPWS has adopted the Pneu-Dart Model 196 cartridge fired dart rifle as the agency standard. This firearm is powered by a .22 calibre blank cartridge and is range adjustable. It has two types of adjustment:

- blank cartridges – different loads available (brown – green – yellow: which are low - medium - high); and
- pressure control – controls the gas pressure provided by the cartridge.

In using these firearms:

- they must be engraved or stamped on the transfer block “ Use .22 blanks only”;
- have only blanks recommended by the manufacturer and supplier used;
- cartridges must never be inserted directly into the breach, always use the magazine; and
- the special requirements for maintenance carried out such as the rifle must be properly cleaned after each use. The powder from blanks is corrosive.

4. Standard darts

One millilitre barbless disposable darts will be used in remote injection firearms except for exceptional circumstances where a dose has to be greater than one millilitre because of the amount required for an animal. This will generally occur with large animals.

Fluorescent coloured darts should always be used to make retrieval easier.

5. Dart pistols

Generally, QPWS employees will not use dart pistols because of their limited range and accuracy. Dart pistols will only be considered for specialised uses where it can be proven that a dart rifle, blowpipe or pole injector cannot be used or will not perform the task required. Dart pistols are category H (concealable) firearms.

Provisions specified by the *Weapons Act 1990* and Regulation 1994 and *QPWS firearms manual* must be complied with.

6. Blowpipes

Blowpipes are regarded as firearms, including those made from PVC conduit. Care must be taken to keep the mouthpiece clean. Only one person is to use an individual blowpipe unless it is properly sterilised with disinfectant before another person uses it.

7. Pole injectors (jab sticks)

Pole injectors will generally be used where animals in traps have to be sedated before handling and/or release.

They also have potential for use on injured or diseased animals where the user can approach and inject the animal safely.

8. Marksmanship and target area

The rump is the preferred placement for all darting shots. In some circumstances where a rump shot is not possible the shot should be aimed at a well-muscled part of the body such as the chest or neck. Avoid shots to parts of the body where bones are close to the skin and to the stomach area.

9. Transport and field storage

Scheduled drugs and firearms must be handled carefully and professionally at all times. If any employees are unsure about any aspects of handling or use, they should seek advice from qualified persons. In particular:

- RIFs are to be carried in their cases at all times except when being used. The bolt must be removed from the firearm. The case must be kept inside the vehicle and out of view.
- Drugs and loaded darts must also be kept in a container (a small esky) when being transported. This esky should have a simple lock or use a lockable petty cash container.
- The vehicle must be locked whenever it is left unattended.

Volunteers are not permitted to use agency firearms.

Disclaimer:

While this document has been prepared with care it contains general information and does not profess to offer legal, professional or commercial advice. The Queensland Government accepts no liability for any external decisions or actions taken on the basis of this document. Persons external to the Department of National Parks, Sport and Racing should satisfy themselves independently and by consulting their own professional advisors before embarking on any proposed course of action.

Approved By

Alan Feely	18/10/05
Signature	Date

Executive Director
Queensland Parks and Wildlife Service

Enquiries:
Fire and Pest Systems
Ph: (07) 3199 7561

Appendix 1 - Drugs approval application

A separate application form must be completed for each individual applying for an approval

1. Applicants Name and position

Name	Phone
Position	E-mail or fax

2. Applicants qualifications

Details

3. Organisation

Details

4. Address

Details

5. Postal Address (if different to above)

Details

6. Location and description of where the scheduled drugs will be stored

Details

7. Scheduled Drugs and Poisons Required – must be completed in full – (attach list if necessary)

Drug (generic)	Trade name	Form eg. Amps, soln, etc	Strength	Max Quantity
Zoletil	Zoletil 100	Solution	Max 500mg/ml	
Pentobarbitone Sodium	Lethabarb	Solution	325 mg/ml	1 x 500ml

8. Reasons why the authority is required (attach statement if necessary)

Details

9. Declaration by Applicant

I declare that the information contained in this application is true and correct. I also make this declaration in the knowledge that a person making an application which is false, misleading or incomplete commits an offence against the Health (Drugs and Poisons) Regulation 1996.

Signature	Date
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10. This section is to be completed by a veterinary surgeon either employed or contracted by the organisation

I have personally trained (the applicant) in the use and administering of the drugs and poisons listed on this form. I believe that the applicant is competent in the use and the administering of these drugs and poisons.

Name	Signature
Registration Number	Date

APPROVAL

11. This section is to be completed by the relevant manager

..... has approval to use and administer the drugs listed on this application for official QPWS purposes

Name	Signature
Position	Date

(This section required only if **non-standard drugs** are involved)

12. This section is to be completed by the relevant Director (only for non-standard drugs)

..... has approval to use and administer the non-standard drugs listed on this application for official QPWS purposes.

Name	Signature
Position	Date

OFFICE USE ONLY:

Date received	
---------------	--

Authority Number:

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Appendix 2 - Field Sheet: Administering scheduled drugs to animals

To record details of field operations for administering drugs to animal

One form to be used for each field operation

1. Name and position of person administering drugs

Name	Phone
Position	E-mail or fax

2. Name and purpose of program

Details

3. Location and date of program

Location		Date	
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4. Target species

Details

5. Drug and dosage used

Details

6. Field operations checklist

This checklist must be completed prior to commencement of all field operations.

Checklist – darting program				
No.	Item	Description	Tick	Comments
1	RIF Program Plan	Plan of overall operation		
2	Personnel	Assistance required		
3	Transport	Vehicles, Quads etc.		
4	Firearm/s	Rifle, pole syringe, blowpipe		
5	Darts - preloaded	Keep to minimum		
6	Darts – spare	In proper container		
7	Darts – premixed	Keep cool to maximise shelf life		
8	Drug container	Lockable esky with ice		

7. Darting or administering details

(to be completed immediately following field operation)

(please attach additional sheet if required)

Animal No.	Species	Dart Time	Recovery Time	Sedation Time	Vol drug used	Sex	Age	Condition	Comments
Total volume of drug used for the day					Reconcile with drugs register				

8. Signature of person administering drug/s

Signature	Date
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Appendix 3 - Autopsy

To record details of animals which have died naturally or been euthanased.

1. Name and position of person performing autopsy

Name	Phone
Position	E-mail or fax

2. Date and location of death

Details

3. Date and location of autopsy

Details

4. Probable cause of death

Details

5. Disposal and sampling details

Details

6. External details

Species		Neonate		Sub adult		Young adult		Old adult	
Sex & Age									
General condition									
Carcass condition	Fresh		Defrosted		Decomposed		Other		
Colours, markings and scars									
Measurements	Overall length		Head length		Tail length		Ear length		
Ectoparasites	Type								
External Injuries	Type								
Mouth and throat									
Teeth									
Broken bones									

7. Internal details

Blood under skin	Location			
Fat under skin	Location & thickness			
Body cavities	Blood		Air	
Parasites	Types		Location	
Heart	Fat coverage & thickness		Blood inside	
Blood vessels				
Respiratory system	Trachea & bronchus			
Respiratory system	Lungs			
Stomach contents	Percentage %		Identified contents	
Intestine contents	small		large	
Other organs	Liver		Kidneys	
Other organs	Gall Bladder		Spleen	
Other organs	Pancreas			

8. Signature of person performing or recording autopsy

Signature	Date
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Appendix 4 - Scheduled drugs register

Storage of scheduled drugs must be as per the requirements of the Health (Drugs & Poisons) Regulation 1996

- One form per drug type. Example: - Zoletil 100
- All register forms are to be kept together in a folder, in or near the drugs storage unit. This includes all completed forms.
- The Register must be filled out for every scheduled drug purchase, field use, disposal and transfers.

Form Number		Location	
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Name and position of nominated responsible person

Name	Phone
------	-------

Position	E-mail or fax
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Authority Number (for scheduled drugs)

--

Address

Details

Postal Address (if different to above)

Details

Scheduled drugs register – must be completed in full

[illegible]

Declaration by nominated person (Sign when form is full)

I declare that the information contained in this register is true and correct. I also make this declaration in the knowledge that a person making an application which is false, misleading or incomplete commits an offence against the Health (Drugs and Poisons) Regulation 1996.

Signature: Date

Trapping and Tagging method

- Animals are observed and assessed for suitability based on location, age, size and condition.
- Suitable animals are trapped by trained staff using current QPWS trapping procedures then either drugged with Zoletil, darted as per QPWS Operational Policy 'Administering scheduled drugs to animals', or processed without drugs.
- Trapping is undertaken using Soft Catch jaw traps and cages. Rangers conducting trapping are trained in the use of these devices. Trap lines are patrolled at maximum three hour intervals to ensure that an animal spends the minimum time possible in the trap. Animals are approached carefully and then secured with pinning poles and/or head noose with pin down poles. In most instances Zoletil will be administered. A drug authorised officer will make the decision as to whether drugging of the animal is required, based on the animal's response to trapping and safety considerations for the animal and attending staff.
- Animals that are trapped are tagged with a coloured or numbered sheep tag if this has not previously occurred, or the tag replaced if the animal already has a tag. Standard colour-coded sheep tags, currently in use on K'gari for management purposes are used. NB: Where deemed appropriate a high-visibility (light-weight collars attached by Velcro) or tracking collar (maximum weight of 500 grams and a drop-off system 40 – 100 grams) may also be fitted after trapping has been undertaken).
- The animals are also micro-chipped, weighed, and tagged. A documented condition assessment and health assessment is also undertaken (15 to 30 minutes) as part of the standard trapping and tagging process.
- Drugged animal(s) are left in a recovery cage until the Zoletil wears off (up to 5 hours to ensure full recovery) before being released near the location of capture. At this stage the dingo can be observed and its condition assessed. Dingoes not drugged are released as soon as practicable.

Trapping

Selected dingoes will be trapped using current QPWS trapping procedures or darted where appropriate. If a decision is made to anaesthetise an animal, the product Zoletil will be administered. Details of dosage rates using Zoletil are as follows:

- Zoletil 100 1 amp dry added to 5mls water for injection;
- Up to 1ml depending on size and weight of dingo (average . 5 mg / kg);
- Zoletil 100 1 amp dry added to 3mls water for darting

Animals not drugged will be released immediately.