

Wildlife Reproduction and Resilience Centre

Taronga Western Plains Zoo, Obley Road, PO Box 831, Dubbo, NSW 2830 Australia

replab@zoo.nsw.gov.au

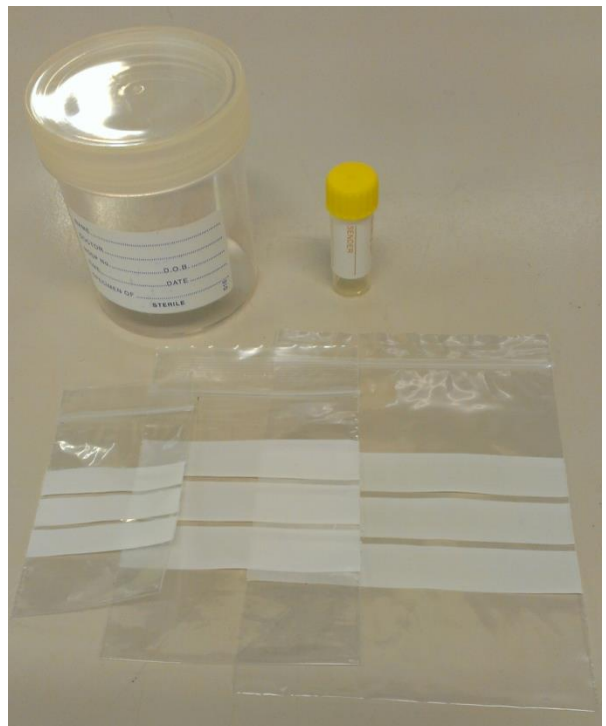
taronga.org.au/conservation-and-science/our-contribution/diagnostic-research-services

FAECAL COLLECTION PROTOCOL – ZOO-BASED ANIMALS

1. Collect faecal samples from each animal **every day (or as specified in protocol)**. Samples should be as fresh as possible and uncontaminated with urine. Hormones are not evenly distributed in faeces, so mix and sub-sample from entire bowel movement.
 - For ungulates, a faecal sample of tennis ball size is adequate. For most other species, a sample as large as your thumb.
 - For carnivores, please avoid any samples containing large amounts of hair.
 - Samples degrade under UV light and heat; do not store in a hot car or pocket.
2. Place faeces in container* and label using a sharpie or pen, with:
 - animal's name and/or number
 - collection date with month spelled out (i.e., 6 Sept 2015, **not** 06/09/15)

These are available from the WRC on request. You can use regular zip-lock bags available from the supermarket, but **DO NOT write directly on the plastic; the label will rub off and render the sample unusable.*

3. Please note any relevant behaviour, medical procedures, experimental conditions, etc. on a log sheet. Excel format is preferred (see website for download).
Behavioural observations can help determine oestrus timing or stress events on hormone profiles.
4. Place sample in the freezer for storage. The sample should be frozen within 2 hrs of collection. A regular (-20°C freezer) is adequate for short periods (<2 weeks). If storing samples **long-term, a non-frost-free freezer is preferred** to avoid repeated freezing and thawing.



Urine sample pots, tubes or ziplock bags are suitable for faecal collection and frozen storage

5. When sufficient samples have been collected for shipment, contact the WRRRC to confirm we are available to receive your package before sending it. We are not responsible for samples sent without first confirming we are available.
6. **Shipping:** Samples should be packed in accordance with UN 3373 'Biological substance, Category B' (e.g. blood, tissue, tissue fluids etc.) in a cooler or polystyrene esky of >3cm wall-thickness.
Samples need to be packed with enough ice packs to ensure the samples will remain frozen, or at least below 4°C, during transit. Place the icepacks to surround samples, including on top of samples (cold air sinks).
It is preferable to transport serum samples using dry ice; be aware this does incur a dangerous goods handling fee by the courier.

FOR PAIRED OR GROUP-LIVING ANIMALS:

FAECAL MARKER ADMINISTRATION: Faecal markers include food dye or glitter mixed in with food. The WRRRC can provide this on request.

- Contact nutritionist, veterinarian and/or institutional ethics body to obtain permission to feed out faecal marker.
- Begin administering marker several days before the study begins to ensure the marker is detectable in faeces. If marker cannot be detected, increase the quantity or request other options from the WRRRC.
- During the study, administer faecal markers DAILY and keep an up-to-date record on log sheets of which animal is getting which marker.

IF YOU ARE NOT SURE WHAT ANIMAL THE FAECAL SAMPLE CAME FROM, **DO NOT COLLECT IT.**

