

Anticoagulant Resistance Project - Sample collection protocol

Where to collect tails

- Sites should not be selected due to any treatment difficulty. The site should be a random representation of the rats present in the area.
- In order to reduce the chance of sampling individuals from the same family or social group, the required number of tails is a maximum of 3 per site. Do not collect more than one juvenile animal from any site.

How to collect rats

- The trapping technique used will be the one most appropriate for the conditions prevailing, type of traps available and manpower resources, and will be determined by the person undertaking the trapping. Recommended traps are listed below.
- **Cage trap** – rats may be less willing to enter and there is the additional consideration of despatch (however this will provide the freshest samples).
- **Break-back trap** in tamper resistant bait station – rats may be unwilling to enter initially but young rats will be less wary.
- **Fenn spring trap** set in tunnel or other protective cover to prevent access by non-target species.
- **Hunting dogs** (i.e. terriers)
- **Shooting**

How to process tails

- A tail tip (3-5 cm) is required to provide DNA from each rat. Each tail tip must be removed using a clean blade or sturdy scissors, stored in a separate vial and posted off within 24 hours of collection following the instructions issued with the sampling kit.
- The University will provide individually coded plastic vials for your area free of charge prior to commencing sample collection. These vials contain 80% ethanol to stop microbiological degradation of samples.
- For each sample the following information is required:
 - Location (GPS coordinate or Postcode)
 - Gender of the animal
 - And if possible: measure of body size (nose to base of tail, and base of tail to tail tip) and weight
- An exact location must be provided with a sample (GPS co-ordinates or a post code and address) or it cannot be processed.
- Once the tail sample has been collected it should either be frozen (within 12 hrs of collection) or sent by Courier to the University of Reading for DNA testing.