

# REPTILES PARASITE RESEARCH

## Reptile Ticks and Mites on Free Ranging Skinks

### **Dr Sasha Herbert**

[sherbert@unimelb.edu.au](mailto:sherbert@unimelb.edu.au)

Veterinary Preclinical and Biosciences  
Building

Faculty of Veterinary Science

### **Simon Watharow**

Reptiles Victoria (Rescue, Education and  
Research)

[admin@reptilesvictoria.org](mailto:admin@reptilesvictoria.org)

Thank you for taking the time to read about our research project. Jointly University of Melbourne and Reptiles Victoria Inc. are undertaking a broad but large scale ecto-parasite collection. We are targeting both Reptile Tick (*Bothriocroton hydrsauri*) and Snake mites (*Ophionyssus natricis*) from lizards from around Victoria. We have in this flyer covered what we can to assist you to help.

Contact us

0400 809 922

[admin@reptilesvictoria.org](mailto:admin@reptilesvictoria.org)



### **What is the Aim**

To map distribution of both Reptile ticks *Bothriocroton* spp and exotic Snake Mite *Ophionyssus natricis*. We intend to examine if any other pathogens exist within both groups of ext parasites. Previously we have found *Rickettsia honei* in blue tongues and shingleback ticks in Tasmania and Western Australia.

### **Who Can Help**

We are keen to enlist the help of veterinary staff, wildlife carers and rescuers, reptile keepers and zoological parks. We have a growing list of volunteers to actively search for lizards and a range of veterinarians collecting from any lizards that are presented. Volunteers can help by registering their interest here or [admin@reptilesvictori.org](mailto:admin@reptilesvictori.org)

### **Any Risk to Staff**

While there is some evidence that tick bites can be linked to Spotted Flinders Island Fever it remains rare. Treatable with antibiotics we still urge staff to wear gloves when removing ticks and mites. Link to gov health website. Bush risk. Clothing.

3/176 Boronia Rd, Boronia  
[www.reptilesvictoria.org](http://www.reptilesvictoria.org)

## How do I do the Collection

### **Ticks -**

Use of tweezers to gently pull ticks from the lizard body. This should be done in one action firmly and decisively pull off and place in collection tube.

### **Mites -**

These need to be done within a tray or large container. Hold the lizard over the tray and gently brush down under the scales. A small paint brush works well. The mites are smaller than ticks and may be seen as small flecks of reddish brown spots on paper. Gently tap the mites into a container or large collection container. There may be a large number of mites several dozens.

### **How Many is enough?**

We usually remove up to a dozen ticks from one lizard for a good sample. The largest ticks are especially valuable as females will be engorged with blood.



## Label Container

- **Date:** 4/2/22
- **Lizard species:** Eastern Blue-Tongued lizard
- **Location:** Jells Park, Wheelers Hill next to public toilet
- **Collector:** Simon Watharow

### **Optional**

- **SVL** or adult/Young Adult 340mm
- **Weight:** 240grams

### **Where to Send Them**

While we hope to have volunteers pick up samples where possible. It can be easier to send them parcel post.

**Mail** can be sent via express or registered post (call for free samples to be sent)

Rickettsia Reference Laboratory  
Entrance 3, Bellerine St  
University Hospital Geelong  
Geelong, VIC, 3220

### **More information**

[www.reptilesvictoria.com.au/research](http://www.reptilesvictoria.com.au/research)  
blog site including ethics permission and questionnaire.

Contact us

0400 809 922

[admin@reptilesvictoria.org](mailto:admin@reptilesvictoria.org)

3/176 Boronia Rd, Boronia  
[www.reptilesvictoria.org](http://www.reptilesvictoria.org)

# ECTOPARASITE COLLECTION METHOD FROM LIZARDS AND SNAKES



## Researcher contact details:

Dr Sasha Herbert.

Email: [sherbert@unimelb.edu.au](mailto:sherbert@unimelb.edu.au)

ph: 0418 140 096

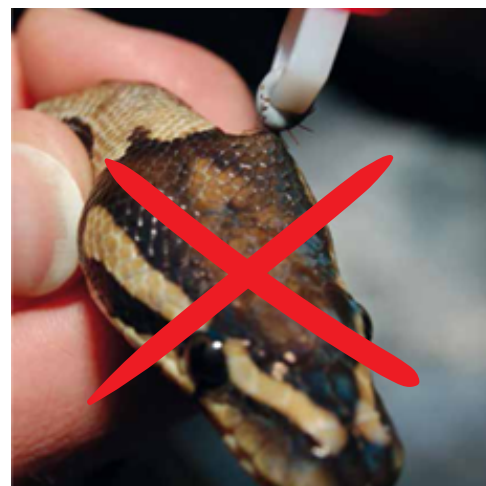
University of Melbourne, Faculty of  
Veterinary Science, Building 400 cnr  
Flemington Rd and Park St

## BIOSECURITY

Wear a fresh pair of disposable gloves for each reptile from which you collect parasites. Mites are highly contagious and can easily move from the animal to you and onto the next reptile. They can also potentially carry diseases which may affect both you and the reptile

## TICKS

Using fine forceps grasp the head of the tick as close to the skin as possible and gently pull the tick out of the skin in a straight line. Do not twist as you are pulling and do not grasp the body as both these methods can result in leaving the head behind which will create a temporary, but uncomfortable, area of inflammation for the reptile.



Contact us  
0400 809 922  
[admin@reptilesvictoria.org](mailto:admin@reptilesvictoria.org)

3/176 Boronia Rd, Boronia  
[www.reptilesvictoria.org](http://www.reptilesvictoria.org)



# ECTOPARASITE COLLECTION METHOD FROM LIZARDS AND SNAKES



## **PRESERVATION OF PARASITES** **Use 70-90% ethanol or freeze in** **water in sterile vials.**

Place ticks and mites in separate vials.

Place parasites from different animals in separate vials.

Label each vial with the ethanol concentration, reptile species, and sex and age if known, location found (GPS co-ordinates or address), unique animal ID, and date of collection.

**Please clearly label**

**Preservative:** 90% Ethanol

**Sp:** T.Rugosa

**Sex:** F

**Age:** 14yr

**Location:** Werribee Zoo

**D:** Stumpy

**Date:** 01/01/2001

## **MITES**

Holding the reptile safely over or in a clean plastic tub, use an artists' soft paint brush to brush mites out from on and under scales.

