



PROTOCOL FOR PARTICIPATING IN SAHG FIELD SURVEYS

1 Introduction

The primary aim of the South Australian Herpetology Group (SAHG) is to educate members on all aspects of herpetology, including interacting with animals in their native habitat and furthering scientific study. To provide this education the SAHG regularly conducts field trips and surveys for members and other interested parties.

This protocol has been developed to assist field survey participants, especially families and younger members, in gaining positive experiences and education while safely participating in SAHG field trips and undertaking field activities.

SAHG field surveys often include the installation and checking of pitfall traps/lines and opportunistic searching. While undertaking these activities there is the potential for some members of the survey to miss out on instructions or education from the team leader or senior team members or opportunities to observe or handle fauna. There is also the potential for inexperienced survey participants to mis-handle fauna, endanger themselves or inadvertently cause environmental damage. Many surveys also require participants to undertake 'bush camping', often with limited facilities and sometimes in remote locations. This document seeks to provide guidance for all survey participants to minimise negative experiences and impacts.

Please Note: For insurance liability purposes, all field survey participants should be current financial members of the SAHG or the Field Naturalists Society or the member organisation endorsing the field survey (e.g. Friends of Parks).

2 Scope

This protocol applies to all SAHG members and associates participating in a field survey, including those undertaken exclusively by SAHG or in conjunction with other organisations.

3 Background

The SAHG has an on-going role to further the knowledge of the distribution and status of reptiles and amphibians in South Australia. As a consequence the group undertakes a number of field trips each year to various locations around the state in order to search for animals and further our knowledge of their distribution.

In order to comply with relevant state legislation these surveys must be undertaken in accordance with the following documents:

- Wildlife Ethics Committee protocols and approvals
- Permit to Undertake Scientific Research
- Licence for teaching, research or experimentation involving animals
- *Guidelines for Vertebrate Surveys in South Australia using the Biological Survey of South Australia* by Helen Owens, et al. December 2000, Department for Environment and Heritage.

There is also a general requirement to undertake surveys in a safe and environmentally responsible manner to minimise the impacts on the survey environment (native vegetation

and fauna), and associated areas, including campsites, roads/ tracks & private property and to minimise the risks to survey participants.

4 Survey Hazards & Risk Management

4.1 Hazards

There are a number of hazards and risks associated with undertaking SAHG field surveys.

The major hazards and risks associated with field surveys may include:

- Remote locations
- Poor or hazardous road conditions (e.g. unsealed loose roads, wet or boggy conditions, washouts, etc)
- Vehicle accident or breakdown
- Sun Exposure (e.g. Sunburn, Heat Stress or Heat Stroke)
- Sprains and abrasions from slips, trips, falls, contact with vegetation, etc
- Eye injury from vegetation
- Bites and stings from snakes, spiders, scorpions, centipedes, ticks, bees, wasps, mosquitoes & other insects
- Burns from stoves or fires
- Extreme weather or temperature conditions (e.g. very hot weather, thunderstorms, flash-flooding).

4.2 Health and Welfare

Survey Vehicles

All survey vehicles must be road-worthy and suited to the road conditions at the survey site. Field surveys can be conducted in remote locations with limited access to fuel or mechanics.

Take care when refuelling vehicles to avoid soil contamination. Don't refuel vehicles in or adjacent to creeks or water bodies.

First Aid

Field surveys can be conducted in locations that may be remote from medical and hospital assistance. Field survey participants should take this into consideration when planning for a trip.

It is recommended that all vehicles participating in a survey carry a suitable first aid kit. Participants should carry a small personal kit in a backpack when undertaking opportunistic searching away from a vehicle. Both St John and the Red Cross have websites that provide information and advice on first aid including the purchase of first aid kits, supply first aid books and training.

Survey participants must complete a Field Survey Consent Form prior to commencing survey activities. Personal information on medical conditions (e.g. allergies, diabetes, asthma) should be provided to allow Team Leaders to assist you in the event of a medical emergency. This information will be kept confidential and forms are destroyed at the conclusion of the survey. Survey participants should ensure that they have sufficient supplies of personal medication for the duration of the survey.

General Safety and Injury Prevention

Sunburn

Hats and long sleeved/legged clothing or sunburn prevention cream should be worn to prevent sunburn and heat stress.

Animal Bites and Stings

Fauna species are often encountered during survey work that can inflict bites and stings of varying severity. The major risk in Australia is from the bite of one of our dangerously venomous snakes. The risk of bite is minimised by wearing long pants, closed footwear and using leather gloves when performing field work. In particular, gloves must be worn when checking traps, especially pitfall buckets.

Participants should have knowledge of snakebite first aid, in particular:

- an awareness of the signs and symptoms of snakebite
- being able to check if the victim is breathing and responsive
- reassuring the victim
- applying pressure immobilisation bandages to reduce venom circulation
- immobilising the victim to reduce venom circulation
- seeking immediate medical assistance.

If bushwalking away from the Team Leaders or other senior experienced persons, it is recommended that pressure immobilisation bandages are carried as a component of a first aid kit. No one should walk alone during field surveys.

5 Roles & Responsibilities

5.1 Survey Leader(s)

The survey leader is required to:

- At the commencement of the survey conduct a general briefing session about camp rules and the survey area prior to the commencement to the survey to ensure that all survey participants are aware of relevant information including:
 - Survey objectives
 - Any hazardous, restricted or 'no-go' areas, speed restrictions or poor road conditions (e.g. private property, sensitive sites, heritage sites, hazards)
 - Any environmental hygiene or disease restriction protocols (e.g. prevention of the spread of Phytophthora (plants) or Chytrid Fungus (frogs)).
 - Location of survey search areas
 - Protocols for the handling of specific animals (e.g. frogs, small mammals, venomous snakes)
 - General timetable of activities (including daytime and nocturnal surveying, 'show & tell' sessions)
 - Communication during the survey (e.g. which UHF channels are being used)
 - Any housekeeping issues for the campsite (e.g. location of toilet facilities, refuse management)
 - Emergency protocols for:
 - Evacuation plans with respect to fire

- Medical first aid including identifying first-aiders within the group and providing information on the nearest hospital or medical centre
- Collect Field Survey Consent Form from survey participants including confidential information from regarding 'next of kin' contacts and medical conditions (diabetes, anaphylaxis (+ if carrying epi-pen), allergies, asthma, etc).
- Work in consultation with other experienced survey members.
- Determine the 'make-up' of survey participants and where, required, allocate mentors (i.e. experienced members) to new or inexperienced survey participants.
- Encourage participants to ask questions and check references.
- Take into consideration the knowledge base of some of the newer participants when discussions take place in the camp or at survey sites as the knowledge of some participants may initially be limited. Where appropriate limit the use of jargon by using common names and descriptions (skink, gecko or dragon etc.) to help children. With common names and scientific names, participants can walk away with a basic knowledge which they can build on.
- Encourage inexperienced members to search for the scientific names of animals and plants in reference books or the internet to help them build up their knowledge base without feeling left out.
- Advise participants that they can request summaries of the field survey results and associated photos.

5.2 Survey Participants

Survey participants are required to:

- Complete a Field Survey Consent Form prior to commencing survey activities (refer to section 4.2 under First Aid).
- Familiarise themselves with the survey aims, issues, hazards, etc by attending the general briefing or approaching the survey leader (e.g. if a late arrival to the camp).
- Comply with all reasonable directions from the survey leader(s).
- Behave in an orderly manner at all times.
- Ensure that all children are under the supervision of an adult at all times.
- Respect the property of others at all times, such as, that of the landowners and camping places and indigenous sites. Souvenirs should not be taken.
- Avoid entering any identified hazardous (e.g. unstable cliff edges, quarry faces, mine shafts, farm dams, stock watering sites), restricted or 'no-go' areas.
- Follow any precautions to prevent the spread of environmental diseases or pathogens such as Phytophthora.
- Comply with safety requirements including avoiding leaving your group without notifying the field trip leader of your intended movements in time and place.
- Ensure that all rubbish is collected and taken home at the end of the trip.
- Minimise the environmental foot-print of activities. In particular, vehicle drivers should remain on established tracks and select turning points carefully to avoid vegetation damage.

6 Camp Site

When setting up a camp survey participants are required to:

- Advise the survey leader of your arrival and provide any relevant documentation (e.g. Field Survey Consent Form)
- Make sure they are camping within the designated camping area
- Avoid or minimise damage to vegetation when setting up or parking vehicles
- Be aware of any restrictions regarding fires, especially during the fire season (e.g. no wood fires permitted, gas stoves or BBQ only)
- Familiarise themselves with the location of facilities, where available (e.g. toilets, showers, mess areas, meeting rooms)
- Maintain a good level of housekeeping (e.g. discarding waste water through burial, secure all rubbish and food scraps to prevent spread by wind or animals)
- Be mindful of other survey participants and keep noise to a minimum in the evenings.

When leaving a campsite:

- Collect all your belongings and refuse and take them home with you
- Let the survey leader know that you are leaving and have concluded your participation in the survey.

7 Visiting a Survey site

Survey sites are usually comprised of a line or pitfall traps and/or a line of Elliot traps, but this may vary depending on the terrain and vegetation types.

7.1 Survey Leader

The survey leader is required to:

- Ensure that all participants are organised into groups and instructed to meet/gather at an allocated site together before approaching pit and trap lines.
- Encourage new members to help actively and safely check traps by:
 - Discussing and explaining what **can** be seen.
 - Explaining what sometimes **can't** be seen (i.e. buried under the soil or hiding in toilet rolls such as small snakes, spiders, scorpions and other invertebrates).
 - Scratching around in buckets with safety equipment such as gloves and small snake hooks, etc.
 - Demonstrating, when retrieving captures and collecting invertebrates, how not to injure or lose specimens.
- Lead a discussion or debrief of specimens found and recorded.
- Where required, determine which specimens to keep for SAM Vouchering
- Ensure the return and release of captured fauna at or near point of capture.

7.2 Survey Participants

At the commencement of a survey participants are required to:

- Wait for all participants or pre-arranged groups to arrive at an allocated site before approaching pit and trap lines. Be aware that there may be a need to check for additional opportunistic sightings in the location. Experienced members are requested to team-up with inexperienced participants.

- Ensure that children are in the care of parents or experienced members at all times while investigating any traps.
- Approach and check pit-lines and Elliott trap-lines as a group and follow pit-lines or Elliott numbers in sequence to ensure that no traps are missed.
- Stay on the defined tracks when entering survey areas or trap lines to minimize impacts to soil and vegetation.
- Actively and safely check traps by:
 - Looking for obvious captures
 - Carefully scratching around in buckets with safety equipment such as gloves and small snake hooks to locate any animals which may be hidden
 - Carefully retrieving captures and collecting invertebrates without injuring or losing specimens.

8 Opportunistic Searching or Spotlighting

8.1 Survey Leader

When undertaking opportunistic searching or spotlighting the survey leader is required to:

- Explain to all participants to be mindful of the minimal impacts of walking around areas or excavating burrows (i.e. avoid stepping on small plants, sensitive habitats, digging up plants, etc.)
- Advise participants of which species are expected to be found (e.g. species likely to occur in the habitat, previously recorded species).
- Advise participants of procedures to avoid getting lost, especially during night time searching.

8.2 Survey Participants

When undertaking opportunistic searching or spotlighting survey participants are required to:

- Notify field trip leaders prior to undertaking opportunistic searching or spotlighting.
- Make sure you:
 - are wearing appropriate clothing and footwear
 - are carrying drinking water
 - have a spare torch or batteries
 - have any 'tools' to assist in your search (e.g. rake, snake hook, gloves, torch)
 - are carrying a First Aid Kit containing pressure immobilisation bandages (at least one member of the group)
- Record and take note of time spent at sites or location and on return, pass the information onto the designated leader for data records.
- When searching at sites or locations be mindful of the minimising the impacts of walking around areas (i.e. avoid stepping on small plants, sensitive habitats, etc.)
- Be aware of species that may be expected to be found (likely and previously recorded).

8.3 Searching in Remote Locations

When undertaking opportunistic searching in remote locations the following measures shall be taken:

- The survey party must consist of at least two (2) vehicles (i.e. travel with at least one other vehicle)
- Do not undertake searches when the temperature is 38°C or above
- Carry an appropriate map of the region
- Carry an appropriate First Aid Kit
- Carry some portable shade or shelter (e.g. tarpaulin that can be tied to a vehicle or tree)
- Carry sufficient water (minimum of 10-20 litres per person)
- Inform the Survey Leader of your intended survey and complete a journey log before departure (e.g. make a note of time of departure, list of passengers, location of search area and estimated time of return). Make sure the log is left with an appropriate person at the campsite so that an alarm can be raised if you do not return on schedule.
- Carry a UHF radio (hire or buy one or you may be able to borrow from other survey members) and know the designated channels for general communication and emergencies.
- When searching keep other members of the group in eyesight and partner up with someone.
- Maintain an awareness of your surroundings and the direction of vehicles at all times.
- If passengers are swapping between vehicles, make sure that each driver knows the changes and is able to account for you before departing the site.

9 Document Control

Rev	Author/Edits	Issue Date	Notes
1	P. Meegan	30.04.10	Draft for committee review
2	P. Matejcic	09.05.10	Inclusion of initial committee comments
3	Z. Bowen	30.05.10	Document re-formatting & addition of info
4	SAHG Committee	01.06.10	Amendments and Accepted
5	I. Williams	12.09.11	Inclusion of first aid information & minor text changes
6	P. Matejcic Z. Bowen	15.02.13	Update & inclusion of additional remote area hazards
7	Z. Bowen A. Uren	09.09.17	Updated to include insurance requirements & minor changes to activities

Note: If you wish to edit this document please speak with the SAHG Scientific Officer who is designated as document controller.