

Field Work Safety Guidelines

Communications

All persons working outside the homestead complex must carry a UHF radio capable of transmitting and receiving to the base station in the Office. A 1 watt transmitter is adequate within the range of hills bounding the homestead (i.e. in a 1-2 km radius provided the homestead is visible from the point of transmission). A 5 watt transmitter is necessary for activities at a greater range than the immediate environs of the homestead. A satellite mobile phone is recommended for the remote northern parts of the station. CDMA mobile reception is possible from a limited area on the tops of the high ridges in the southwest of the Station. There is no GSM mobile reception.

- The UHF channel is **16**
- Always test the transmission and reception of the UHF transceiver before departure
- Always check that you have adequate battery life for an extended conversation.
- Always inform a staff member or a colleague remaining resident on the station of your intended destination, route of travel and likely time of return.
- In emergencies only; use “repeater 8” for anyone using the channel (you will need to have the person answering call back to Fowlers Gap).

Personal Locator Beacons (PLB's)

PLB's are available from the Director and should be requested by anyone who is working in an isolated area a substantial distance away from the homestead complex. This is particularly relevant for any researchers or visitor who is moving around the station alone.

Hazards

Concealed holes, unstable slopes, rocky surfaces

A large part of the Fowlers Gap landscape is covered with stony surfaces and/or cracking clay soils. These represent hazards that may cause ankle or knee injuries or falls. Sturdy boots with strong ankle support are a necessity for walking across the Fowlers Gap landscape.

Hot Environment/UV

Fowlers Gap regularly experiences high temperatures and intense UV radiation from September through April with the maximum in January-February. You should protect exposed skin with a 15+ or better sunscreen and cover most skin with clothing having a high UV protection factor. A broad-brimmed hat should be worn in the sun as well as sunglasses with a maximum UV protection factor.

AVOIDING HEAT STRESS

- Wear light weight, light coloured, loose porous natural fibre clothes.
- Drink adequate water for conditions (up to 1 Litre per hour).
- Avoid alcoholic, caffeinated or carbonated (soft) drinks.
- Don't take salt tablets unless prescribed by a doctor.
- Avoid heavy protein foods (eg meat, dairy products) which increase the body heat and fluid loss.
- Spend as much time as possible in air conditioned buildings and avoid the hottest part of the day (12 – 4 PM summer time).
- Use shade (e.g. red gums along ephemeral creeklines) where practical.
- Wear a hat and sunscreen as sunburn limits your ability to cope with heat.

Dehydration/Hyponatremia

Under hot temperatures (> 30 °C) the average person uses about 1 litre of water per hour. The very low humidity on Fowlers Gap leads to rapid evaporation of sweat and so one may not be aware of this water loss. Clean drinking water to meet this requirement plus a reserve should be carried by persons working in the field at all times. If you are feeling dizzy or nauseous you probably need some additional electrolytes such as provided by Staminade. Water infused with a fruit cordial will often prevent nausea accompanying high consumption. Note that it is possible to drink **too much** water and to induce a condition known as *Hyponatremia* (lowering of salt levels in the blood). The initial symptoms of nausea and dizziness are similar to those of dehydration. The best advice is to drink when you feel thirsty and be aware of how much you have drunk. If the weather is humid then your consumption should be lower as you evaporate less sweat.

HEAT STRESS

Symptoms:

- Unusual discomfort and heat cramps.
- Heavy sweating, tired and thirsty, irritable, loss of appetite, prickly heat rash, moist cool skin, muscle cramps.

Treatment:

- Drink water.
- Have a cold shower or bath
- Lie in a cool place with legs supported and slightly elevated
- Massage cramping muscles, apply ice packs and drink glucose/sweet drinks - **NO SALT**

HEAT STROKE

Symptoms:

- Confusion, headache, nausea, dizziness
- Skin flushed, hot and unusually dry
- Dry swollen tongue
- Body temperature 40°C +
- Rapid pulse at first and then weaker
- Deep unconsciousness may develop rapidly

Treatment:

- Lay victim in a cool place and remove outer layer of clothing.
- If unconscious, place person in recovery position and check their breathing and circulation.
- Cool victim rapidly by applying cold water or wrap in a wet sheet and fan them (keep wet).
- When conscious give sips of water.
- Call for medical assistance from Royal Flying Doctor Service

Airborne objects

A feature of warmer temperatures is the transmission of willie willies (dust devils, twisters) across the landscape which carry dust and debris in the swirling wind. You should take evasive action if you are in the path of such an unstable air mass.

Annoying insects

Over most of the year bush flies are present on Fowlers Gap and these will settle on a person and attempt to access moisture around the eyes. Flies can transmit bacterial infections to the eyes so they are best brushed away, repelled or constrained by a physical barrier (fly net). We

recommend the latter as it avoids distraction in the field and potential irritation of the eyes from repellents or flies.

Biting insects

Mosquitoes: Around water bodies and after rain in the warmer months, large numbers of mosquitoes may be active around dawn and dusk. Ross River virus is known from Tibooburra (220 km north of Fowlers Gap) and although no known infections have occurred on Fowlers Gap it is strongly recommended that persons avoid contact with mosquitoes using protective clothing, repellents or avoiding places where they are present at times when they are active.

Ants and wasps: Treat all ants and wasps as potentially capable of inflicting a painful bite and avoid contact with any ant or wasp.

Spiders: Treat all spiders as potentially capable of inflicting a painful bite and avoid contact with them.

Venomous animals

Spiders: Red-back, white-tail and mouse spiders can inflict very painful bites that are dangerous to children. Avoid all contact with any spider that has red or white markings on the body and seek medical advice if bitten by such a spider.

Snakes: The majority of snakes on Fowlers Gap are elapids and venomous. Always retreat from a snake and do not attempt to handle or harm it. Be snake aware during the warmer months when walking around the Station or picking up objects that could conceal a snake. Always report any snake bite immediately for treatment and be aware of the use of pressure bandages. You should carry a bandage with you during warmer months when snakes may be a hazard.

Spiny plants

Many plants on Fowlers Gap have spines (copperburrs and prickly wattle) or strong woody stems (salt and bluebushes). We recommend sturdy boots with closed toes, socks and sock protectors when walking through vegetation and the use of garden gloves when handling vegetation. In tall vegetation we recommend long pants to protect the legs. If your skin is penetrated by a spine whose tip breaks off then you can allow it to migrate out of the skin as a natural healing process or if you wish to dig it out then always use a sterile needle.

Vehicles, plant and equipment

Only authorised persons with demonstrated competency and appropriate licensing may use any vehicles, plant or equipment belonging to the Station. You should not enter any area marked with hazard warnings unless you have appropriate protection. You should not enter any area marked for 'Authorised personnel' unless you have appropriate authority. You must not use any vehicle, plant or equipment without seeking authorisation.

Driving

The speed limit on all station roads is 40km/hr. Around the homestead complex the speed limit is 10km/hr. If a driver consistently drives above these speeds or drives in a dangerous

manner (determined by the station staff), they will be banned from driving on the property. Do not drive across flooded streams/creeks. It is better to wait several hours and allow the water to subside, then to risk driving across. The current of a flooded water course is more than sufficient to sweep a vehicle off the road. Please do not drive at night without the prior approval of the Director or the Station Manager; it is dangerous due to large numbers of livestock and wildlife around the station. In addition, please do not drive on the station roads immediately after rain and ask either the Station Manager or Director when it is safe to do so.

Smoking and fire hazards

The University of NSW is a smoke-free workplace. Smoking of any substance is not allowed in any of the accommodations provided for visitors, the library, the offices and the laboratory or any other place designated as smoke-free. You should familiarise yourself with the location of fire extinguishers and fire blankets. Bedrooms in residences and accommodations are fitted with smoke-detector alarms. You should vacate and move well away from any building that has ignited and inform Station staff immediately of any such event. The assembly area is in front of the office block.

Firearms:

No firearm may be discharged on the property without authorisation from the Director. All wildlife is protected and may only be trapped/harmed/taken if the Director sights a current authority from NSW National Parks and Wildlife Service and a current approval from a recognised Animal Care and Ethics committee.

Medical assistance:

All persons conducting field work on the Station must complete or provide a risk assessment and must complete a 'Field Work Medical Questionnaire'. Medical services are provided by the Royal Flying Doctor Service (RFDS). The station maintains two medical chests – one for staff and one for students and visitors. Access to the medical chests is only via a staff member. The following information is provided to assist with the treatment of medical emergencies:

24 hour Medical Line - RFDS

- **(08) 8088 1188**

Contact staff for access to medical chest and first aid response

- **Keith Leggett Ext. Admin or Solarch**
- **Garry or Vicki Dowling Ext. Supervisor or Cottage 2**

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Keith Leggett*