UNSW SMITHS LAKE FIELD STATION

USER GUIDE

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School of BEES

UNSW Sydney

Version 6.0

Feb 2023

Minyang nyura wubaliyn?

Nyura yiigu marala barraygu.

Yii Gathangguba barray.

Gathay nyiirun.

Gathang Acknowledgement of Country (from muurrbay.org.au)

We acknowledge that we stand on the traditional lands of the Worimi people, the original custodians of the land, and pay our respects to Elders past, present and future

1 Contents

2 Essential Information

2.1 Emergency Contacts

Emergency Services

Fire / Ambulance / Police Emergency

‘Triple-Zero’ 000

UNSW Security:

Emergency number: 9385 6666

General number: 9385 6000

Forster Police
Lake St (cnr of West St), Forster
6555 1299

Bulahdelah Police Station
12 Meade St, Bulahdelah NSW 2423
4997 4204

NSW Rural Fire Service
Bush Fire Information Line
1800 679 737

Forster Fire Station
22 Lake St, Forster NSW 2428
6554 6096

Manning Base Hospital
Corner of High Street and, Commerce St, Taree NSW 2430
6592 9111

Forster Private Hospital
15 South St, Forster NSW 2428

6555 1333

Station Maintenance

Caretaker
Jim Stack
Dogwood Rd, Bungwahl
0488 122 996

Station manager
Mira van der Ley
UNSW Sydney
0400 719 861

Plumber
Geoff McCarthy
0419 484 273

Electrician

2.2 Access

See booking confirmation email for information of key access.

2.3 Instructions for arrival and departure

See check list in Appendix 3, Arrival/Departure Checklist**, page 30**

These are also printed out in the lab.

Please note the following:

- In the event of a power failure, the main circuit breakers are at the eastern end of the dining area.
- Report any problems to Mira van der Ley, School of Biological, Earth and Environmental Sciences, UNSW. Tel. (02) 9385 8030 or 0400 719 861; local assistance may be sought form the caretaker, Mr Jim Stack on 0488 122 996

2.4 Location and directions

The UNSW Smiths Lake Field Station is located on the southwestern shore of Smiths Lake near the village of Bungwahl. It is about 35 km south of Forster, NSW. From Bulahdelah, take the Lakes Way, which leaves the Pacific Highway a few kilometres north of the town. At Bungwahl, turn right into Seal Rocks Rd, proceed towards Seal Rocks for 2.3 km. Turn left at Horse Point Rd, a dirt road opposite the Fish Co-op. Proceed straight ahead for 1.6 km until you reach the field station: do not turn left into Dogwood Rd.

2.5 Map of local emergency and medical services

https://www.google.com/maps/d/drive?state=%7B%22ids%22%3A%5B%221kYpNb_lpy7no0tT0hoTwINMEJuw65S4e%22%5D%2C%22action%22%3A%22open%22%2C%22userId%22%3A%22106499830836689981613%22%7D&usp=sharing

UNSW Smiths Lake Field Station

The station

UNSW Smiths Lake Field Station,

Medical Centres

Pacific Palms Medical Centre

Forster Tuncurry Medical Centre

Forster Community Health

Tuncurry Medical Centre

Twin Town Medical Centre

Wallis Street Medical Centre

Police, Fire, Rescue

Bulahdelah Police Station

Forster Police

Fire and Rescue NSW Forster Fire Station

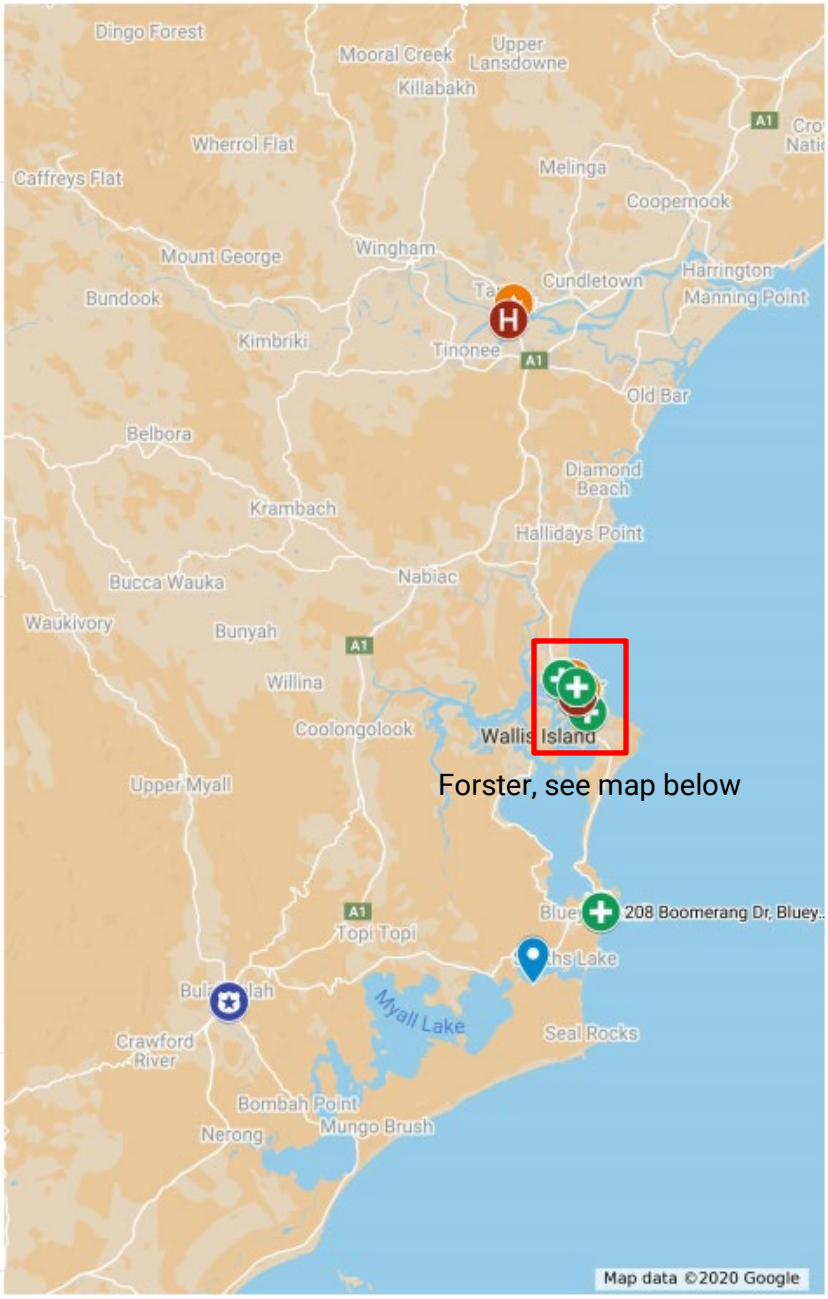
Marine Rescue Forster Tuncurry

Volunteer Rescue Association - Taree

Hospital

Forster Private Hospital

Manning Base Hospital: Emergency Department




North St
North Ln
Head St
Head St
Forster
Head Ln
Wallis Street Medical C...
Wallis Ln
Miles Island
Fire and Rescue NSW For...
Middle St
Strand St
Lake St
Hadley St
Middle Ln
Townsend St
Bruce St
MacIntosh St
Marcella St
Strand St
James St
Forster Private Hospita...
Belle Ct
Curlew Ct
Leon Island
Forster Tuncurry Medica...
Likely St
Well St
South St
Wallis Lake
Forster Ave
Garden St
Sunset Ave
Surfview Ave
Mark St
Godwin St
Regatta Ave
Kularoo Dr
Water St
Toby St
The Lakes Way
Likely St
Kularoo Dr
Kularoo Dr
Bright St
Boona St
Boundary St
Pirates Parade
Forster Community H

2.6 Other useful contacts

See page 6 for essential and emergency contacts.

Medical Centres	
Forster Tuncurry Medical Centre 14 South St, Forster 6554 5331	**Wallis Lake Medical Centre** 20 Wallis St, Forster 6554 7000
Tuncurry Medical Centre 12 Beach St, Tuncurry 6554 5331	**Bulahdelah Community Hospital** Richmond St, Bulahdelah 4997 4477
Other	
NSW National Parks (DPIE) Myall Lakes National Park The Ruins Campground The Lakes Way, Pacific Palms 6591 0300	**Marine Rescue Forster Tuncurry** Breakwall, Dolphin Dr, Forster NSW 2428 6554 5458
Additional maintenance services (first refer to primary contacts on page 6)	
Essential Energy 13 20 80	**Forster Gas (gas supply)** (02) 6555 3352 Before calling, first check if you need to change the gas source, see page 23.
	Electrician - Steve Brack 0416 285 178
Electrician - Cliff Manners 6554 2215 0419 408 628	**Locksmith - F&T Security Locksmiths** 48 Mackintosh St, Forster 6555 6111
Supplies	
Bungwahl Store 2600 The Lakes Way, Bungwahl 4997 6132	**Smiths Lake News and Supa Mart** Macwood Rd, Smiths Lake 6554 0117
Frothy Coffee Boat Shed 1 Amaroo Drive, Smiths Lake 6554 420	**Foodworks Pacific Palms** 203 Charlotte Bay St, Charlotte By, (just off The Lakes Way) 02 6552 9318

3 Safety

3.1 Fires and evacuations

In the event of bush fires in the area, guests should leave the station early - if safe to do so. If it is not safe to leave the station, the lawn and the lake itself can act as a refuge.

National Parks and the Rural Fire Service may use the station as a base during emergency procedures.

Emergency assembly location

In the event of an emergency, guests should assemble near the lake in front of the boat shed. See Figure 1. For emergency contacts, see Section 2.1, page 6.

Total fire bans

Visit https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans to check if there is a total fire ban.

DO NOT use the fire pit during a total fire ban.

"During a Total Fire Ban you cannot light, maintain or use a fire in the open, or to carry out any activity in the open that causes, or is likely to cause, a fire."

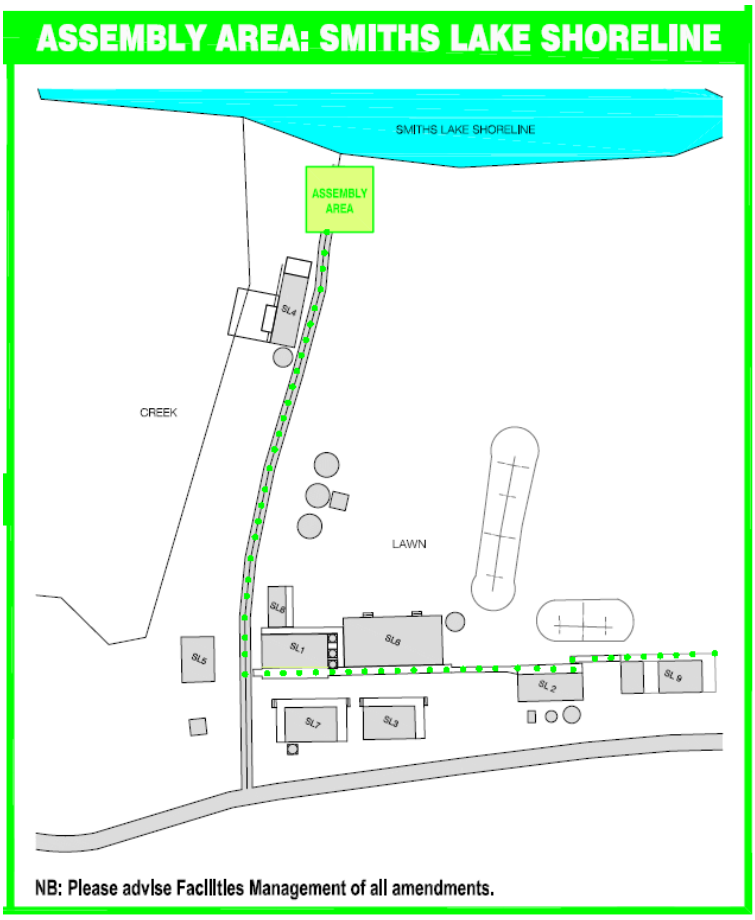
Be aware of fires in the area- Use the Hazards Near Me app

The Hazards Near Me app (https://www.nsw.gov.au/emergency/hazards-near-me-app) is strongly recommended for any guests, particularly during the fire season. While at the station, guests should mark the Station as a Watch Zone so they will get a notification of fires in the areas.

The Pacific Palms Rural Fire Brigade Facebook page includes frequent updates on hazards in the local area. Also Bush Fire Information Line ph. 1800 679 737

Using the fire pit

If using the fire pit, guests should take the hose reel stored in the ladies bathroom and attach to the tap next to the fire pit. This can be used to prevent fire spread (if safe to do so) and to quickly treat burns.



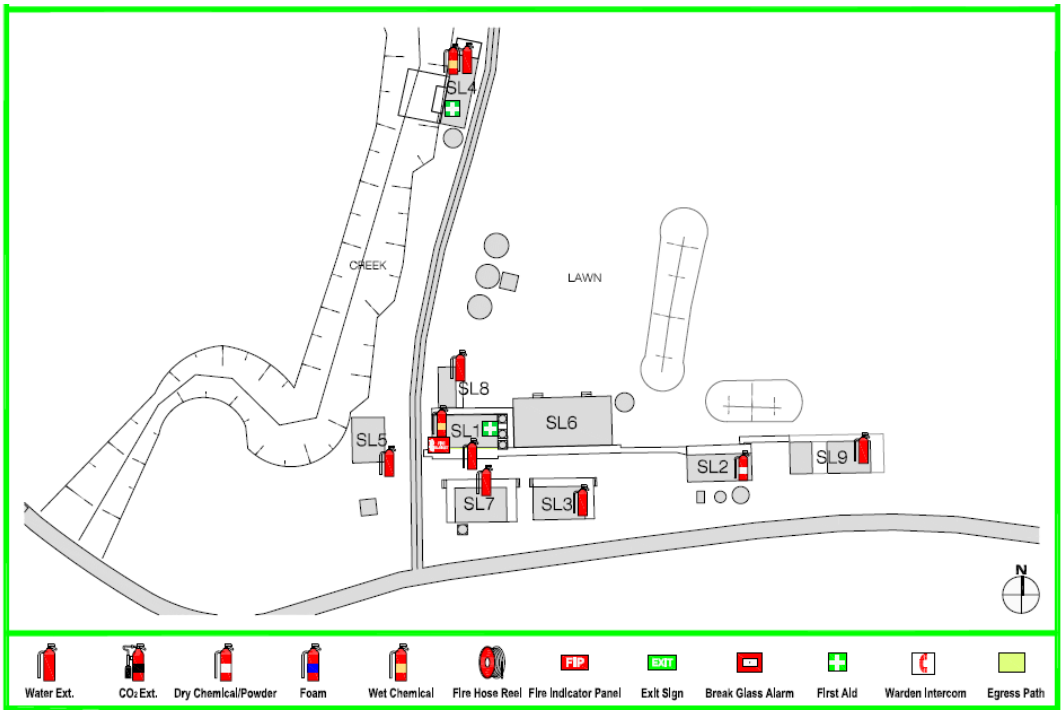


Figure 1. Site evacuation plan and location of fire extinguishers.

3.2 Food preparation safety

General food safety

Keep it cold

- keep the fridge below 5°C
- put any food that needs to be kept cold in the fridge straight away
- don't eat food that's meant to be in the fridge if it's been left out for 2 hours or more
- defrost and marinate foods in the fridge, especially meats
- shop with a cooler bag, picnic with an esky.

Keep it clean

- wash and dry hands thoroughly before starting to prepare or eat any food, even a snack
- keep benches, kitchen equipment and tableware clean and dry
- don't let raw meat juices drip onto other foods
- separate raw and cooked food and use different cutting boards and knives for both
- avoid making food for others if sick with something like diarrhoea.

Keep it hot

- cook foods to at least 60°C, hotter for specific foods
- reheat foods to at least 60°C, until they're steaming hot
- make sure there's no pink left in cooked meats such as mince or sausages
- look for clear juices before serving chicken
- heat to boiling all marinades containing raw meat juices before serving.

Large groups

For large groups, where a small number of people do the food preparation for many people (e.g. course fieldtrips), the following safety requirements apply:

- The person who oversees cooking for large groups should have food hygiene training
    - Two free online courses are recommended: (1) DoFoodSafely, Provided by the Victorian Government; or (2) Environmental Health Australia / Federation Council Food safety course
    - This should mean a group knows of the key principles of food safety (e.g. 2 h/ 4 h rule, no cross contamination, washing hands regularly, food storage)
- You should incorporate a sanitising step when prepping and cleaning
    - Use a food grade sanitiser (one that doesn't required rinsing afterwards, but is safe to use for cooking once it's dried)
- You should bring and use a food temperature probe.

3.3 Arboviruses

Hazard and Risk:

- Mosquito-borne viruses, such as those causing Ross River Disease and Barmah Forest Disease, are prevalent in the area.
- While many people who are infected show no symptoms, a minority can be affected to various degrees by these diseases and a few people have become very ill.

What you can do:

Avoid being bitten by mosquitoes.

- Keep screen doors closed.
- Wear suitable clothing (long pants, long sleves, loose). Avoid tight-fighting thin fabrics.
- Use insect repellent. Spray skin and clothes. Spray in open area away from food. A supply of repellents and insecticides is usually kept in the Rat Proof Room for those people who have not brought their own.

3.4 Snakes, spiders

Hazard and risk

- Snakes are occasionally seen in the vicinity of the field station and sometimes within the grounds. The most dangerous are the Eastern Brown Snake and the Death Adder.
- A range of spiders may be found around the area and are more likely to be encountered than snakes. Some will be venomous and some not, so it is best to treat all with caution.

What you can do:

- Wear appropriate clothing, including long pants and stout shoes, especially at night.
- Carry a torch at night.
- Check your shoes or boots for spiders if these are left outside rooms.
- Be particularly careful when handling wood in the wood shed – take a torch to help to find any spiders which may be present and use gloves when removing wood and use the gloves supplied in the sealed container near the door.

3.5 Ticks

Hazard and risk:

- Ticks are parasites that feed on human and animal blood.
- Depending on weather conditions and the stage of their life cycle, ticks can be very common in the bush around the field station; sometimes they can even be found in large numbers within the grounds.

- Tick bites are usually harmless, but sometimes they can cause an allergic reaction or serious illness.

What you can do:

- Wear light clothing to assist seeing ticks.
- Wear long sleeves and trousers.
- Tuck shirt into pants and pant legs into socks.
- Wear a broad brimmed hat.
- Use insect repellent containing DEET or Picaridin. Always check product instructions and if it is suitable for children.
- Wear permethrin treated clothing.
- Check your clothing and body for ticks

Treatment:

Tweezers are no longer recommended for tick removal!

Larval and nymph ticks (ones that are hard to see) can be killed using permethrin cream such as Lyclear scabies cream.

- Dab cream on rather than rubbing it in.
- Leave on for 60-90 minutes then scrap off with a sharp-edged scraper such as a bank card.

Adult ticks (ones you can see) can be killed by freezing with an ether containing spray such as Tick Off.

- Spray 5 times and wait a few minutes to see if it is dead (legs stop moving).
- If it is not dead spray another 5 times. It should drop off when dead.
- If the tick does not drop off, see a health professional. Even a dead tick can inject allergen saliva into you if squeezed.

Video on how to remove a tick

Management of tick bites in Australia – Department of Health and Aged Care, Nov 2022

Prevention of tick bites in Australia - Department of Health and Aged Care, Nov 2022.

3.6 Camping Under Trees

- Do not camp under trees: signs in the grounds advise of areas where camping is not permitted.
- Avoid walking in the bush or under trees during high winds.

3.7 Water safety

Be cautious around water, including the lake and creek.

Children should always be accompanied by an adult at the field station.

3.8 Smoking

Smoking of any substances in not allowed at the station.

Both UNSW and National Parks ban smoking on their properties. Consequently, smoking is also banned at the field station.

This includes e-cigarettes, as UNSW does not allow vaping on any of its campuses.

https://www.nationalparks.nsw.gov.au/safety/no-smoking-in-national-parks

https://www.wellbeing.unsw.edu.au/smoke-free-university

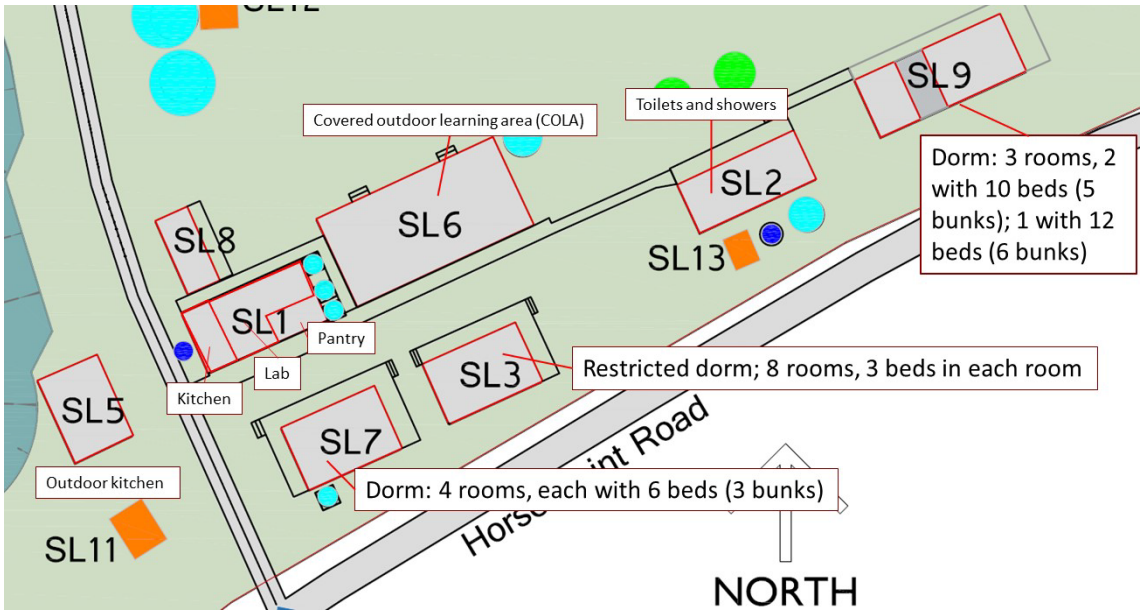
4 Buildings & Capacity

The capacity of the station is reduced when COVID physical distancing is in force. See section 7.4, page 84.

The field station can cater for a maximum of 56 people with the general admission dorms, and an extra 24 beds in the restricted OEH dorm. Although camping is permitted (except in certain areas at risk of falling tree branches) the carrying capacity of the station is capped to 80 and groups in excess of this size will not be booked.

The buildings of the station comprise the following:

- Two general admission dormitory blocks (SL7 & SL9) with 56 beds in double bunks. SL7 has 4 rooms of 6 beds (SL9) has one room of 12 beds and 2 rooms of 10 beds.
- One restricted dormitory (SL3) of 8 rooms of 3 beds, king single size (OEH, UNSW and other universities with prior approval and no undergraduate student use allowed);
- One ablutions block (SL2) – 3 showers (hot/cold water), 3 toilets and 3 basins in each of the male and female sections;
- One lab/kitchen building (SL1) with three rooms. Kitchen has 3 fridges, 1 food only freezer, 1 microwave oven and gas stove/oven. Lab has one non-food freezer, general use dissecting microscopes and cupboards, bench space and storage space. There is also a pantry room ('The Rat Proof Room');
- One outdoor cookhouse (SL5) with open sides, with 2 wood barbeques, 5 gas rings and 2 double sinks with hot/cold water;
- One covered outdoor learning area (SL6) with open sides which also functions as a mess hall, and a storage room at one end with chairs, tables, and 1 refrigerator;
- One two-room storage building (SL8 - restricted access);
- One boatshed (SL4 - restricted access).
- A woodshed near SL5 (general access) and 3 pump sheds (restricted access).


SL9
Toilets and showers
Covered outdoor learning area (COLA)
Dorm: 3 rooms, 2 with 10 beds (5 bunks); 1 with 12 beds (6 bunks)
SL2
SL6
SL8
SL13
SL1
Pantry
Lab
Kitchen
SL3
Restricted dorm; 8 rooms, 3 beds in each room
SL5
SL7
Outdoor kitchen
Dorm: 4 rooms, each with 6 beds (3 bunks)
SL11
NORTH

5 What we do and do not supply

5.1 Items not supplied

In the true tradition of field stations, many things are left behind, despite all requests to take belongings, food etc. upon departure. This can be seen as a blessing when you arrive and forget to bring something such as cooking oil, detergent, bin bags, etc. In the past, people have come to rely upon the kindness of strangers and have requested that these be replaced when supplies have run out. Please be aware that such items MAY be there on arrival or MAY NOT. We do not supply these and are not responsible when such supplies run out, but if you find them you are welcome to use them.

We DO NOT supply the following items (though there may be some onsite left-over):

- axe or other equipment for chopping wood (see below) – your axe is your responsibility as is the maintenance of such;
- Garbage bags (although we supply garbage bins we do not supply bags);
- Soap for bathrooms/showers;
- Foil and cling wrap;
- Cooking oil, salt, pepper or other condiments;
- Dishwashing detergent and other cleaning products;
- Tea towels, sponges etc for cleaning dishes;
- Gloves

5.2 Cooking and food storage

There are two wood barbeques and five gas rings in the cookhouse (SL5). In the lab/kitchen building (SL1) there are three fridges, one freezer, a gas stove/oven and a microwave oven. The kitchen is for food only - do not store bait or samples in the freezer or refrigerator in the kitchen - there is a freezer for this purpose in the lab. There is an extra refrigerator in the covered area of the COLA (SL6) which can be used for food only in addition to the kitchen refrigerators if required.

All cutlery, plates, mugs, and so on, are stored in the kitchen along with a large selection of cooking/food preparation utensils. There is also a food storage room, which is known as the “Rat Proof Room”. It is advisable to store all food which does not require refrigeration. Vermin are attracted to the kitchen. At night please keep the doors closed once you have finished with the kitchen. Please do not leave food behind in the Rat Proof Room or kitchen.

Please also refer to the safety documents in the appendix:

SCI-BEES-SWP-5392 General use of Smiths Lake Field Station

SCI -BEES-SWP-5344 Chopping wood, collecting kindling and lighting fires

5.3 Beds

Beds are double bunks with wooden slats and foam mattresses. Visitors must supply pillows, sheets and blankets or sleeping bags. Please do not move the mattresses around or leave them outside.

The beds in the staff-only dorm (SL3) are king single size so regular single sized sheets don't fit.

5.4 Toilet paper and paper towel

These are supplied by the field station and are kept in the Rat Proof Room (SL1). If the supply is low, please inform the field station manager.

5.5 Fire-fighting equipment

Fire extinguishers are provided at various points around the field station, and there is a fire blanket in the kitchen. There are also several external taps, one near the cookhouse (SL5), at the ablutions block (SL2), at the boatshed tank (SL4) and at the pump shed on the lawn and hoses may be found in the ablutions block. In the event of a fire, please follow the emergency evacuation procedures and head to the evacuation area at the shore of the lake.

5.6 Tables and chairs

There are about 18 tables of various sizes at the field station. Some are collapsible and some are not. They are stored in the storage area in the communal building with the exception of two which stay at the cookhouse (SL5) and those which stay in the lab (SL1). Plastic chairs are also stored in this storage area. There are signs indicating where particular furniture items should be stored. Please adhere to this storage pattern and stack items in areas indicated for them - failure to do so may result in being charged an extra cleaning fee.

Please do not leave behind furniture items for storage for your own personal use at a later time, unless you have the express permission of the field station manager. Unauthorised items will be removed and disposed of. Please also refer to SCI-BEES-SWP-5392 General use of Smiths Lake Field Station in the appendix.

5.7 First aid kits and defibrillator

A first aid kit is kept in the lab in SL1; users are advised to bring their own supply of first aid items to supplement those at the station. There is also a defibrillator located in the lab which should only be administered by a qualified first aider.

5.8 Laboratory equipment

A selection of books on natural history and on biology generally is kept in the lab/kitchen building. Please put any books that you use back on the shelves when you leave. A selection of microscopes, together with lamps, is available in cupboards in the lab (SL1) and a freezer available for chemicals or samples (not food).

5.9 Sporting equipment (including canoes and paddleboards)

There may or may not be various recreational equipment left at the station. Please read and follow the safety precautions recommended in the SCI-BEES-RMF-11930 Use of unpowered watercraft.

5.10 Boat shed and equipment in restricted storage areas (SL4 & SL8)

Four dinghies and five outboard motors are stored in the boatshed (SL4) with boating equipment, some fuel, sampling gear, and other general equipment. The boats and outboard engines are only available for use by members of the School of BEES. Similarly, a selection of equipment is available to BEES users in the restricted storerooms (SL8). Please contact the station manager if you have further enquiries

6 Services

6.1 Water

It is important to conserve water. All our drinking water, kitchen water and (except in very rare circumstances) our ablutions, comes from our rainwater tanks. While we have a large storage capacity, it is still a limited supply and wasteful use of water soon drains it, so please be conscious of our water and use wisely. . Please check the water level on the gauge on the window sill in the lab on departure and inform the field station manager and fill in the sheet with the details.

6.1.1 Drinking and cooking water

All of our rainwater tanks are connected in a reticulated system and all taps supplying this, with the exception of those in the ablutions block (see below) are suitable for drinking and cooking. The tanks at the eastern end of the lab & rat proof room have taps fitted which allow gravity fed water. This is an important resource in the event of a power failure where the reticulated water is not available.

6.1.2 Non-drinkable water (Ablutions Block SL2)

This water is supplied from three separate sources. The main source is the connected tank system as noted above, from either the large tank behind the block or, in most circumstances, from the other tanks. These tanks contain rainwater only. There is a small back-up tank for emergencies which contains creek water. **Do not drink water from the taps in the ablutions block** as there is a very low chance that this water could be contaminated with creek water although this supply is only connected in very rare circumstances.

Taps in the hand basins are push button and timer activated; push again as required. Taps in the shower block are on a timer setting. To use, press the button and the water will come on for three minutes; for hot water turn to the left, for cold water turn to the right. Shower will turn off automatically after three minutes, and will remain off for some time.

If you have no hot water in the shower, please make sure that you have turned the tap to the left (for hot water).

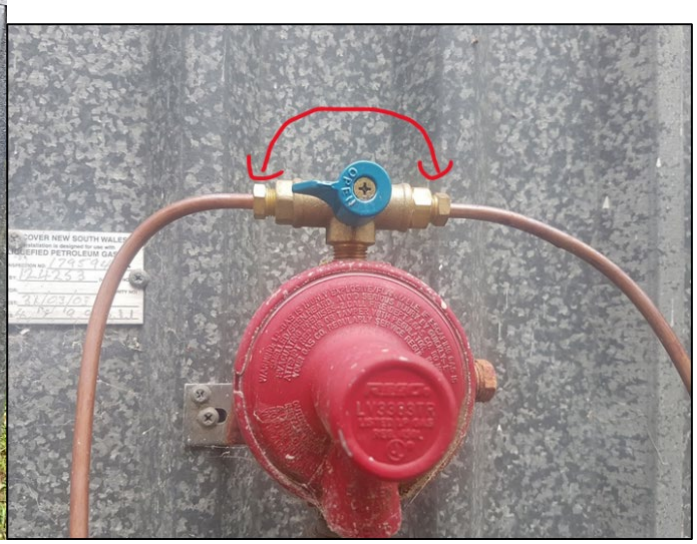
6.1.3 Water supply issues:

If there is no reticulated water (either cold or hot) coming through the taps, there may be a problem with the power supply – see under electricity below. Hot water to the kitchen and cookhouse is supplied by a gas hot water system located in the outdoor cookhouse (SL5) and there is a similar supply in each of the two rooms in the ablutions block (SL2). If there is no hot water (but there is cold water), check to see that the appropriate system is switched on and connected to gas and electrical supply. Refer also to gas below. If you experience difficulties with the water supply in the ablutions block or in any other areas, but the power is working, it may be necessary to swap the supply for the whole system from one pump shed to another, or for the ablutions block to be supplied by the tanks behind the ablutions block. To switch between the various water supplies, first contact the plumber, Geoff McCarthy, or the caretaker and follow his advice. Please also notify the field station manager.

6.2 Gas

Hot water and cooking all on gas.

The gas is supplied by tanks next to the kitchen (SL1) and behind the ablutions block (SL2). Each gas setup has four gas bottles, with only two in use at any one time. If the gas runs out, you need to turn the blue knob (shown in picture below) 180° so it extracts from the other two full bottles. You will also need to close the green tap knops at the top of the old bottles, and open on top of the new ones. If you change the gas source, you must text Mira on 0400 719 861 so the empty bottles can be refilled.



6.3 Firewood.

Firewood is supplied by a local contractor. It is kept in a shed near the entrance to the field station. If the firewood supply is low, please inform the caretaker. The firewood provided in the woodshed is for use in the cooking fires (provided that there are no fire bans) and for the slow combustion heater in the COLA (SL6). Please note that you need to supply your own axe. Safety glasses and gloves are provided for chopping wood in a sealed container just inside the door of the woodshed. Please also refer to SCI -BEES-SWP-5344 Chopping wood, collecting kindling and lighting fires in the appendix.

6.4 Electricity

The field station has only single-phase power to supply a large amount of electrically powered equipment and appliances. The main circuit breaker, along with several others, is located in the main distribution board (fuse box) at the eastern end of the COLA (SL6). All power supply switches are Residual Current Devices (RCD aka Safety Switches) in accordance with the WHS Regulation 2011 Clause 164.

If there is a power failure, either total or partial, the above distribution board is the first place to look in order to restore power. Other distribution boards are found at the eastern end of the lab/kitchen building (SL1), in the north-eastern room in the old dormitory block (SL7), at the western end of the far dormitory (SL9), the female section of the ablutions block (SL2) and in the OEH dormitory (SL3). The switches for the outdoor cookhouse (SL5) are on the board in SL7 and the boatshed is supplied by the main board (SL6).

If the power blackout is not caused by an overloaded circuit, then the problem probably lies somewhere outside the field station and you will then have to wait for the local distributor to restore power. This might only take a few hours but it can be a lot longer after a major storm. At such times it might be necessary to use buckets of water from the creek to flush toilets and to obtain drinking and cooking water from the gravity fed taps on the tanks adjacent to SL1. To provide light there is usually a supply of candles in the Rat Proof Room. If power is not back on after 24 hours, check with the local distributor. They might advise that a local electrician needs to be called.

Please note that there is a single 15-amp power point in the COLA (SL6) which is to be used for 15 amp appliances only. Currently the only 15 amp appliance at the station is one of the conveyer toasters which lives in the rat proof room (SL1) and this should only be used at that outlet. Do not under any circumstances modify a 15-amp appliance so that it plugs into a 10-amp power point.

6.5 Waste Water

Waste water from the toilets and showers is piped to an Ecomax treatment system. It comprises three cells of specially treated soil that are housed in the mounds outside the ablutions block. Normally only two cells are in operation at any one time. Switching on and off of cells is the

responsibility of the field station management. If the red light on the instrument on top of the septic tank starts to flash, please immediately contact the plumber, Geoff McCarthy. If this number does not answer, inform the caretaker or field station manager.

Waste from the sinks in the cookhouse enters a grease trap and is then pumped to the Ecomax system. The power point for the pump is located on a post near the grease trap. Do not switch off the power at this point. If the grease trap is overflowing, please immediately contact the plumber, Geoff McCarthy and await further instructions.

6.6 Rubbish Removal

The field station currently has one small rubbish bin and one larger recycling bin, which are kept along Horse Point Rd near the intersection with Dogwood Rd, and a skip opposite the entrance to the field station. Please fill the bins before filling the rubbish skip. Please use the correct bins when putting rubbish or recyclables in them. The bins are currently emptied by Great Lakes Council on Wednesdays.

The skip is removed once a month, on the third Monday. In periods of heavy use (especially from December through to April) it is emptied more often, at the discretion of the manager. While we are aware of when these heavy periods are and plan accordingly, the skip may still be full on arrival, possibly due to illegal rubbish dumping. If this is the case, please report it to the field station manager.

Please DO NOT dump excess rubbish next to the skip in the vain hope that someone will clear it away – they won't, and it will just attract animals that will spread the waste further around the station.

Small bins are also provided for use around the field station. In order to prevent animals getting into the bins, please keep the lids on them at all time. Please also ensure that no rubbish is left behind in these after your stay.

Please note that there is no system for composting kitchen waste.

6.7 Cleaning/Maintenance

Cleaning of the field station and maintenance of the grounds is done by local casual staff of UNSW. Users of the field station are, however, expected to leave it in a clean and tidy condition when they depart, including removing rubbish and cleaning the ablutions block. Please leave things where you found them. **If you feel the need to move crockery, cutlery, utensils, appliances etc, please move them back to their original locations before you leave.**

7 Appendices

Appendix 1. UNSW Smiths Lake Field Station

We are responsible for the health, safety and welfare of visitors to Smiths Lake. In addition to the following numbered points regarding what would be expected as the usual safety issues, the safety documents must be read before travelling to Smiths Lake. This is a mandatory condition of staying at the field station. Users may do this in either two ways:

UNSW Staff and students should access these documents through Safesys, the University's safety management system. You can either open the hyperlinks or, if these don't work, log onto safesys and navigate to the documents by document number or title. You can then read the documents on safesys and then declare as read by clicking the button at the bottom of the page.

OR

Visitors external to UNSW must read the documents attached in the appendix and at least one member of each group (the group leader) must complete (fill in name and date) and sign the sign-off sheet which pertains to these documents and email to smithslake@unsw.edu.au . Others in the group in the group may sign but are not required to do so but their names should be either listed on the sign-off sheet or attached as a separate document. By signing this sheet, the group leader also indicates that they will be responsible for the training of others in their group in these procedures – this may be incorporated into a safety briefing.

The fieldwork leader will discuss medical and security emergency procedures with participants upon arrival at the field station including introducing the First Aid trained personnel. The participants must provide the fieldwork leader with home contact/next of kin information (for UNSW, completion of the HS009 form). In the event of a medical or security emergency the fieldwork leader will make contact with both (UNSW Security and Field Station Manager) and with the home contact/next of kin.

Whilst undertaking field activities in the district around the field station the fieldwork leader will ensure all participants return safely to the field station. If anyone is missing all appropriate information will be gathered by the fieldwork leader and if required passed on to emergency service agencies listed above. No contact will be made with any media agency. If the media request information regarding an emergency situation at the field station the request must be directed to the UNSW Media Office (02) 9385 2864 for comment.

A1.1. Safety sign-off sheet for all visitors

I have read and understood the following safety documents

- SCI-BEES-RMF-6542 General use of Smiths Lake Field Station
- SCI-BEES-SWP-5392 General use of Smiths Lake Field Station
- SCI-BEES-SWP-5344 Using fire BBQs, fire pits and fireplaces at Smiths Lake Field Station
- SCI-BEES-RMF-15514 Wood fires for cooking, warmth and/or recreation
- SCI-BEES-SWP-14766 Chopping firewood
- SCI-BEES-SWP-7285 Use of unpowered watercraft
- SCI-BEES-SWP-12062 Food preparation for large groups (e.g. course fieldtrips)

☐ I have read and understood details in the UNSW Smiths Lake Field Station User Guide.

☐ I am responsible for the safety of my group and will provide a briefing to ensure they understand and comply with the requirements outlined in the UNSW Smiths Lake Field Station User Guide and the above safety documents.

☐ I will ensure our group follows all NSW Government requirements regarding COVID safety.

☐ I will report any hazards or issues to the station manager.

☐ I will ensure our group keeps the station clean and tidy

☐ I will ensure our groups follows the departure checklist before leaving

Signed

_____	_____	_____
Group leader name	Signature	Date
_____	_____	
Position / Company	Contact number	

Appendix 2. Recreational Visits Sign-off

The UNSW Smiths Lake Research Station (the facility) is available for recreational visits by current UNSW staff members (group leader/s) and their immediate family under the following terms:

- An "immediate family" is defined in this case to mean a spouse, de facto partner, child, parent, grandparent, grandchild or sibling of the group leader/s;
- Immediate family members must be accompanied by the group leader/s at all times during the visit;
- A recreational group size is limited to 8 persons
- Recreational use of the facility extends only to accommodation dormitories, the kitchen and outdoor cooking areas, the ablutions block, and the covered group area. It does not extend to the boatshed nor any on-site water-craft;
- The cost of visiting the facility is set-out on https://www.bees.unsw.edu.au/about-us/facilities/smiths-lake-field-station
- Recreational groups take lowest priority if bookings clash with research or teaching groups – your booking may be moved or cancelled at short notice;
- The Smiths Lake Users Guide is to be read by the group leader/s
- It is compulsory the group leader to (1) complete and sign the table below; and (2) complete and sign the UNSW Smiths Lake Field Station
- The booking will not go ahead should these completed documents fail to be emailed back to the Smiths Lake Admin Team at smithslake@unsw.edu.au at least two weeks before the visit.

I understand and agree to the terms outlined above. I declare the list of recreational visitors listed below comply with the requirements of an "immediate family"

Signed: _____ _____ _____ _____

Group leader name | Signature | Date | Mobile number

	Name	**Age (price varies)**	**Relationship to group leader**	**UNSW staff or Guest**
1				UNSW staff member and group leader
2				
3				
4				
5				
6				
7				

	Name	Age (price varies)	Relationship to group leader	UNSW staff or Guest
8				

Appendix 3. Arrival/Departure Checklist

Before departure, add this form (both sides checked off) to the guest book folder.

Group leader: _____

Dates _____ to _____

SMITHS LAKE ARRIVAL CHECKLIST (report any issues to Station Manager)		
1	Power and lighting working? Make sure all switches on the distribution board in the ablutions block are turned on.	☐
2	Check water availability and pressure. Check hot water. If there is no water or the water pressure is low, inform the field station manager, and follow their instructions. Do not attempt to remedy the situation yourself.	☐
3	Turn on the fridges you need and make sure the freezers are still turned on.	☐
4	Inspect dorm rooms, ablutions block, kitchen for any issues (power, lights, water not working etc) & report	☐
5	Make sure that the submersible pump in the grease trap is turned on. The switch is located on the pole beside the grease trap (near the cookhouse). It should never be turned off.	☐
6	If you plan to use the fire pit (check if any fire bans are in place), take the hose from the ladies' toilets at attach to the tap next to the fire pit. Ensure the hose does not represent a trip hazard.	☐
If there are any other problems relating to water supply, hot or cold, or to gas or electricity, please refer further to those items in the User Guide in Section 6, page 22. If unable to resolve, call the Station Manager.		
Comments on arrival (e.g. cleanliness, anything not working)		

SMITHS LAKE DEPARTURE CHECKLIST (report any issues to Station Manager)		
1	Do not turn off any switches on any distribution boards	☐
2	Clean all fridges used and also the freezer if it was used. Do not leave food in them or in the Rat Proof Room or kitchen. Make sure all items were where you found them	☐
3	Turn off the fridges and leave the doors open (only the fridge in the outdoor area should be closed)	☐
4	Leave the chest freezers on.	☐
5	Make sure the pilot light and gas are off to the stove in the kitchen	
6	Return all cooking utensils, cutlery, plates, cups and glasses to the racks and benches in the kitchen.	☐
7	Put all chairs and tables into the storage area of the communal building in their appropriate areas and lock the roller door. Please follow the allocated areas for the different types of tables	☐
8	Empty all bins and return all small outdoor bins to the roller door storage area	☐
9	Clean up any facilities you used, including but not limited to: clean the kitchen (wipe benches, mop floor); sweep out the rooms, clean the ablutions block (hose out, clean toilets, ensure all toilet seat lids are closed).	☐
10	Inspect and clean BBQ as required. Make sure gas is turned off at the BBQ and outdoor burner outlets (but leave the large main gas bottle open)	☐
11	Turn off all the lights.	☐
12	Make sure all water outlet taps are turned off - do not turn off any taps on supply lines.	☐
13	Make sure all fires are extinguished.	☐
14	Return hose from the fire pit to the ablutions	☐
15	If you have used the restricted dormitory (SL3), take the mattress protectors off and leave in a pile in the corridor.	☐
16	Lock all the buildings, close all the windows, and return the key.	☐
17	Take all garbage and recyclables to the council red/yellow bins near Dogwood Rd or put them in the skip if the council bins are full.	☐
Comments on departure		

Thanks for staying at Smiths Lake Field Station!

Appendix 4. Safety Documents

We are responsible for the health, safety and welfare of visitors to Smiths Lake. In addition to the following numbered points regarding what would be expected as the usual safety issues, there are three safety documents which must be read before travelling to Smiths Lake (attached here and are also displayed throughout the station in appropriate locations). **This is a mandatory condition of staying at the field station**. Users may do this in either two ways:

UNSW Staff and students should access these documents by accessing SafeSys, the University's safety management system. You can either open the hyperlinks or, if these don't work, log onto SafeSys and navigate to the documents by document number or title. You can then read the documents on SafeSys and then declare as read by clicking the button at the bottom of the page. For class groups, one person from a group visiting the field station (the group leader) must do this and is responsible for the training of others in their group in these procedures – this may be incorporated into a safety briefing.

OR

Visitors external to UNSW - One person from a group visiting the field station (the group leader) must complete (fill in name and date) and sign the sign-off sheet which pertains to these documents and email to smithslake@unsw.edu.au . Others in the group in the group may sign but are not required to do so but their names should be either listed on the sign-off sheet or attached as a separate document. By signing this sheet, the group leader also indicates that they will be responsible for the training of others in their group in these procedures – this may be incorporated into a safety briefing.

The sign-off sheet must be received no later than three working days before your arrival at the field station and completion of the form is mandatory for non-UNSW visitors. Likewise UNSW visitors must read and declare as read these documents on Safesys no later than three days before arrival at the station and this is mandatory for UNSW visitors. Failure to comply will result in being blocked from further use of the station.

A4.1. Safety Documents List:

Document number	Document name
SCI-BEES-RMF-6542	Smiths Lake Field Station – General Use
SCI-BEES-SWP-5392	Smiths Lake Field Station – General User Guide
SCI-BEES-SWP-5344	Using fire BBQs, fire pits and fireplaces at Smiths Lake Field Station
SCI-BEES-RMF-15514	Wood fires for cooking, warmth and/or recreation
SCI-BEES-SWP-14766	Chopping firewood
SCI-BEES-SWP-7285	Use of unpowered watercraft
SCI-BEES-SWP-12062	Food preparation for large groups (e.g. course fieldtrips)

A4.2. Risk Management Form – SCI-BEES-RMF-6542 Smiths Lake Field Station – General Use

Risk Management Form

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Risk Management Procedure (HS329) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-RMF-6542	Current Author	Mira van der Ley	Original Author	Frank Hemmings
Approval Status	Approved	Approval Date	14/03/2023		

Title * Smiths Lake Field Station - General Use

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Mira van der Ley

Period of time before next review ○ 6 months ○ 1 year ○ 2 years ◉ 3 years ○ N/A

OR

Next Review Date 14/03/2026

Review Date Reminder ☑ 1 day ☐ 5 days ☐ 10 days ☐ 15 days ☑ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Risk Management Details

Risk Management Form Description

General use of Smiths Lake Field Station by guests, including UNSW staff and students, external visitors.

Current Smiths Lake Field Station Manager: Mira van der Ley, 9385 8030, 0400 719 861.

Locations FSSL-All Areas

Persons at Risk *

- ☑ Workers
- ☑ Students
- ☑ Visitors
- ☑ Contractors
- ☐ Members of the public

Consultation Process * Persons must read this form. Raise any concerns or questions with any/all of the following: this document's author; this document's approver; your supervisor; the Smiths Lake Field Station Manager; BEES Health and Safety Advisor

Contact page: https://www.unsw.edu.au/science/our-schools/bees/about-us/our-people/professional-technical-staff.

Related Legislation, Standards, Codes of Practice etc. *

WHS Act 2011; WHS Regulations 2017;
HS917 Fieldwork Procedure;
HS406 Fieldwork Guidelines;
HS432 Manual Handling Guide,
HS706 Guide to Safe Manual Handling;
HS414 Visitors to UNSW Facilities Guideline

AS/NZS 5263.1.5:2019 Gas appliances - Domestic gas refrigerators;
AS/NZS 60335.1:2020 Household and similar electrical appliances - Safety - General requirements;
Australia New Zealand Food Standards Code Standard, Part 3.2 Food Safety Requirements;

SWA - Managing electrical risks in the workplace Code of Practice OCTOBER 2018
NSW Gov - Mosquitos are a health hazard guideline Fact Sheet

Related Safety Documents

SCI-BEES-RMF-6641-Chopping wood, kindling collection and lighting fires.
SCI-BEES-RMF-889-GIS field course at Smiths Lake
UNSW-UNSW-SWP-3484-Working with a ladder
SCI-BEES-RMF-18119-Fieldwork at Smith's Lake during elevated fire risk
SCI-BEES-SWP-5392-General use of Smiths Lake Field Station
SCI-BEES-RMF-2646-GEOS3731 Coastal Geomorphology Smiths Lake Field Trip
SCI-BEES-SWP-10344-Field sampling for DNA
SCI-BEES-RMF-248-MSCI2001 field trip
SCI-BEES-SWP-7285 - Use of unpowered watercraft
SCI-BEES-SWP-10155 - Use of unpowered watercraft (kayaks, canoes, rowboats and paddleboards)

Related Equipment

-

Related Activities

-

Hazards and Risks

Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add new hazard' at the end of this box

Hazard Task/Scenario *

Moving heavy items

Hazard Category *

Manual handling - Poor technique

Associated Harm *

Musculoskeletal disorders.

Existing Controls *

Eliminate the risk:
- Not possible. The covered outdoor learning area is open, and the field station is remote, left of items left out is highly likely. Consequently, tables and chairs must be moved in and out of the locked storage location.

Reduce the risk through substitution, isolation or engineering controls:
- Where possible, use the lighter/smaller items. E.g. plastic fold-out tables.

Reduce the risk using administrative controls:
- Follow SCI-BEES-SWP-10109 - Manual Handling
- Heavy tables always need two people to lift.
- Always use correct lifting techniques, bending at knees when lifting low objects and standing close to objects to avoid straining
- Sharing load with more than one person where necessary
- Use of trolleys and other equipment to minimize lifting
- When filling large pots of water from the tank, do not overfill
- When filling an urn, place the urn in the desired location and use pots or other receptacles to fill rather than fill the urn directly itself as it is large and can be heavy
- Do not overfill pots/receptacles
- If moving the conveyor toaster, use two people as it is particularly heavy
- Be careful when lifting to place hands in safe position so as to avoid crushing when object is lowered
- Wear covered footwear to minimise risk of dropping objects onto feet
- Use gloves where necessary (such as for rough or sharp edges or where pinching is a risk)
- Inspect furniture for damage and repair as required or remove rough or sharp edges.
- Do not sit on stacked chairs
- Do not sit on tables
- Do not carry stacks of chairs alone

Reduce the risk using personal protective equipment (PPE):
- In the context of manual handling and musculoskeletal disorders, PPE should not be required. However, heavy-duty gloves are stored in the laboratory cupboard.

Additional Controls

Risk Consequence	2. Minor	Risk Likelihood	C. Possible	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario *	General use of electrical items (excluding work by contractors)
Hazard Category *	Electrical
Associated Harm *	Electrical shock.
Existing Controls *	Eliminate the risk: - Not possible. Reduce the risk through substitution, isolation or engineering controls: - All circuits fitted with RCD. Reduce the risk using administrative controls: - Inspect power cords and outlets before use for signs of deterioration or exposed wires - All plugged equipment is tested and tagged annually. See SCI-BEES-RMF-17610 - Electrical equipment inspection, testing and tagging requirements. - Follow the item's manual and/or safe work procedure Reduce the risk using personal protective equipment (PPE): - As required according to the task; however, PPE should not be required to reduce the risk of electric shock. Higher-level controls reduce risk to suitable levels.
Additional Controls	

Risk Consequence	2. Minor	Risk Likelihood	E. Rare	Risk Rating	Low

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario *	Cooking and fires - heat
Hazard Category *	Temperature
Associated Harm *	Burns, fire
Existing Controls *	See SCI-BEES-RMF-15514 - Wood fires for cooking, warmth and/or recreation Eliminate the risk: - Not possible Reduce the risk through substitution, isolation or engineering controls: - Fireplace in the outdoor covered area is fully enclosed - unable to install complete barries; however, a fire screen is provided for guests to use - Hazardous area marked with hashed ground markings. - Fire pit has a large concrete boundary area to prevent fire escaping. - There is a tap installed near the fire pit for quick treatment of burns or to prevent fire spread.

Reduce the risk using administrative controls:
- Follow guidelines in SCI-BEES-SWP-5344 Using fire BBQs, fire pits and fireplaces at Smiths Lake Field Station
- Follow guidelines in SCI-BEES-SWP-12062 Food preparation for large groups (e.g. course fieldtrips)

Reduce the risk using personal protective equipment (PPE):
- Use pokers etc to keep your distance from fire.
- Wear/use oven mits, tea towels etc when handling hot objects in the kitchen.

Additional Controls

Risk Consequence	3. Moderate	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Food preparation and other - knives, potentially broken glass and tin edges

Hazard Category * Sharps/Needlesticks

Associated Harm * Cuts

Existing Controls *

Eliminate the risk:
- Not possible

Reduce the risk through substitution, isolation or engineering controls:
- Tomato knives (with serrated edge) are provided for people inexperienced in cooking. Serrated knives are less likely to slip. These are the little ones with coloured handles.
- Knife sharpener provided.

Reduce the risk using administrative controls:
- Follow guidelines in SCI-BEES-SWP-12062 Food preparation for large groups (e.g. course fieldtrips)
- Be observant when carrying knives and other sharp utensils
- Be aware of opened tins having sharp surfaces; fold sharp edges inside the tin
- Clean up broken glass with dust pan and broom and dispose straight to the skip (not glass recycling)
- Always wear covered footwear in kitchen & cookhouse
- First aid kit on site
- Follow SWP

Reduce the risk using personal protective equipment (PPE):
- n/a PPE should not be required.

Always cut away from you, not towards

Additional Controls

Risk Consequence	2. Minor	Risk Likelihood	D. Unlikely	Risk Rating	Low

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Food preparation - bacterial infections, food allergies

Hazard Category * ZOther

Associated Harm *	Illness from contaminated food, illness or anaphylaxis from allergen.
Existing Controls *	Eliminate the risk: Not possible Reduce the risk through substitution, isolation or engineering controls: - Both indoor and outdoor kitchens have stainless steel surfaces which allow for effective sanitisation. - The indoor kitchen is fully screened to prevent insect ingress - The walls are sealed to prevent rodent ingress. - Three fridges are provided: one has a temperature display. Reduce the risk using administrative controls: - Follow procedures outlined in SCI-BEES-SWP-12062 Food preparation for large groups (e.g. course fieldtrips) and in sections 11.4 - 11.6 of the HS406 – Fieldwork Guideline. - People leading the food preparation should have completed some level of food safety training. See SCI-BEES-SWP-12062 for examples. - Ensure food is stored, prepared and dishes are cleaned in a hygienic manner, including regular washing of hands . - For student tips, ensure students preparing food have adequate supervision while preparing food. - Participants should notify of any dietary requirements and allergies. Reduce the risk using personal protective equipment (PPE): - wear gloves if there are open wounds on hands
Additional Controls	

Risk Consequence	2. Minor	Risk Likelihood	E. Rare	Risk Rating	Low

Cost of Controls	Free online courses are suitable.
Is this reasonably practicable?	(•) Yes ( ) No

Hazard Task/Scenario *	Mosquito borne diseases
Hazard Category *	Animal & insect - Disease
Associated Harm *	Various viral illnesses includign Ross River Fever and Barmah Forest Virus The salt marsh mosquito Ades vigilax likes to breed in coastal flooded saltmarsh and can disperse up to 50km from breeding areas. This mosquito is also a carrier of Ross River virus and Barmah River virus, so appropriate precautions need to be taken. In NSW, most mosquitoes become active at dawn and dusk, and into the evening
Existing Controls *	Eliminate the risk: - Not possible. In a National Park surrounded by a swamp and creek. Spraying is not an option. Reduce the risk through substitution, isolation or engineering controls: - All rooms are screened - Drains and roof guttering clear to avoid standing water - Rainwater tanks screened Reduce the risk using administrative controls: - Wear insect repellent (containing picaridin or DEET) on all exposed skin - Clothing pre-treated with insecticides can provide additional protection - Use mosquito coils in outdoor areas - Keep doors shut to rooms and use fly screen doors where provided Reduce the risk using personal protective equipment (PPE): - Wear loose long clothing which protects arms and legs (mozzies can bite through tight clothing)

Additional Controls

Risk Consequence	2. Minor	Risk Likelihood	E. Rare	Risk Rating	Low

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Coronavirus

Hazard Category * Biological

Associated Harm * COVID-19

Existing Controls * All visitors must follow all requirements of the NSW Government regarding COVID controls. Cleaning procedures and requirements under different lockdown scenarios are outlined in the Smiths Lake User Guide.

The risk rating below is based on times of low vaccination levels and high transmission levels.

Additional Controls

Risk Consequence	3. Moderate	Risk Likelihood	D. Unlikely	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Remote area: ~1hr to Taree base hospital

Hazard Category * ZOther

Associated Harm * Varies - delayed help in case of emergency

Existing Controls * Eliminate the risk:
- Not possible

Reduce the risk through substitution, isolation or engineering controls:
- Mobile reception on site to help with communciation
- WiFi available on site to help with communication
- There is space available on the western side of the creek for a helicopter to land

Reduce the risk using administrative controls:
- In a life-threatening emergency, call triple-zero 000 for helicopter evacuation.
- The User Guide has a list of closer medical centers and private hospitals; however, these are not open 24/7.
- Visiting groups must have a trained first aider; group members should be shown where the first aid facilities are.
- Defibrillator (AED) available in the lab
- First aid kit in lab contains epi-pen, and tourniquet. Only training first aiders should use these.
- First aid kit contains snake bandages and splint.

Reduce the risk using personal protective equipment (PPE):
n/a

Additional Controls

Risk Consequence	4. Major	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Remote area - communication

Hazard Category * ZOther

Associated Harm * delayed help if communication is not available

Existing Controls *

Eliminate the risk:
not possible

Reduce the risk through substitution, isolation or engineering controls:
- Mobile reception through Optus and Telstra towers is generally available, but signal strength varies in different areas
- WiFi available on-site

Reduce the risk using administrative controls:
- You must be in the coverage area of one of the mobile providers in Australia to make emergency calls;
- a call to 000 will be carried on any available mobile network, even if your paid provider does not have coverage.
- You can call 000 without having to unlock the keypad or enter a security-protection Personal Identification Number (PIN). You should check your handset manual for information about emergency call dialing.

Reduce the risk using personal protective equipment (PPE):
- N/A

Additional Controls

Risk Consequence	4. Major	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Walking around

Hazard Category * Slip, trip, fall - Fall on same level

Associated Harm * Musculoskeletal damage

Existing Controls *

Eliminate the risk:
- Individuals should remove trip hazards, if able and safe to - e.g. branch on a path.
- Graded path from the bathroom to the covered outdoor area has removed a change in level along the path
- unable to remove change in level from the path up to the covered outdoor area as this is needed to stop water ingress (similarly for steps up to kitchen and lab).
- the field station is in a National Park and with unsealed roads. There are many natural trip hazards that cannot be avoided.

Reduce the risk through substitution, isolation or engineering controls:

- Floor sealant/paint is non slip
- Non-slip hazard tape on steps
- Solar lights highlight paths
- Gutters and drainage to reduce water ingress onto covered paths.

Reduce the risk using administrative controls:
- Keep the station areas clean and free of clutter
- Clean up spills immediately
- When cleaning floors, display wet floor signage (stored in ladies bathroom)
- Report any trip hazards that can't be fixed on the spot.

Reduce the risk using personal protective equipment (PPE):
- Wear slip-resistant footwear

Additional Controls

Risk Consequence	2. Minor	Risk Likelihood	C. Possible	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario *	Wildlife - venomous animals (Death Adders and Eastern Browns have been seen near the station, along with others)
Hazard Category *	Animal & insect
Associated Harm *	Common Death Adder - "Death adders have relatively large fangs and toxic venom and, before the introduction of antivenom, about 60% of bites to humans were fatal." - Aus Museum 19/11/20 Eastern Brown Snake - "As the initial bite is generally painless and often difficult to detect, anyone suspected of receiving a bite from an Eastern Brown Snake should call for medical attention without delay. This species has the unfortunate distinction of causing more deaths from snake bite than any other species of snake in Australia. Many bites have been a direct result of people trying to kill these snakes and could obviously have been avoided." - Aus Museum 28/04/22 Tiger snake - "The venom of the tiger snake is strongly neurotoxic and coagulant, and anyone suspected of being bitten should seek medical attention immediately." - Aus Museum 19/11/20 Red-belly black snake - " The venom has predominantly anticoagulant and myotoxic effects, and symptoms of envenomation include bleeding and/or swelling at the bite site, nausea, vomiting, headache, abdominal pain, diarrhoea, sweating, local or general muscle pain and weakness, and red-brown urine (due to myoglobin being released from damaged muscle tissue)." - Aus Museum 28/04/22 Mulga Snake / King Brown - " The venom is highly toxic and can be expressed in enormous quantities. Its effects are mainly haemolytic (breaks down blood cells), cytotoxic (disrupts cells), myotoxic (affects muscle), and also mildly neurotoxic (affects nerve cells)" - Aus Museum 19/11/20
Existing Controls *	Eliminate the risk: - Not possible. Reduce the risk through substitution, isolation or engineering controls: - Cannot remove or control snakes - field station is in a National Park. Reduce the risk using administrative controls: - Don't approach or pick up snakes - Torches or lanterns should be used when moving about field station at night - Stomping doesn't scare snakes away - At least one individual per field team must have appropriate first aid training - The team should review the pressure immobilisation technique - The first aid kit in the lab has snake bandages - Call tripe-zero 000 if you suspect a snake bite. Reduce the risk using personal protective equipment (PPE): - Wear heavy/thick boots and pants in high-risk areas - Wear snake gaiters in high-risk areas - Wear robust gloves if digging or picking up items from areas that could disturb potentially hazardous animals.
Additional Controls	

Risk Consequence	4. Major	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Tree branches and high wind

Hazard Category * Outdoor work - Environmental exposure

Associated Harm * Musculoskeletal damage

Existing Controls *

Eliminate the risk:
- not possible

Reduce the risk through substitution, isolation or engineering controls:
- trees overhanging buildings and common walkways are assessed annually by arborists and risky branches removed

Reduce the risk using administrative controls:
- Guests should avoid walking under trees during periods of high wind, or soon after.
- No camping under trees. Signs are up to indicate this.
- Report any dead or hanging branches to the Field Station Manager, as soon as possible.
- Report any large fallen branches or fallen trees to the Field Station Manager, as soon as possible.

Reduce the risk using personal protective equipment (PPE):
- groups should risk assess if they need a safety helmet if walking through the bush

Additional Controls

Risk Consequence	4. Major	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Other Risk Management Details

Date All Controls Implemented 14/03/2023

Emergency Procedures *

Fire

- fire extinguishers and fire blankets are located throughout the station,
- emergency exits are marked for each building
- and evacuation procedures and the assembly point (lake shore) is indicated on the noticeboard.

First Aid

- The Field Station Manager has current first-aid training
- Gut groups are to also provide adequate numbers of first-aid trained staff.
- Two first aid kits are located at the field station, in addition to other kits taken along if necessary (for work further from the station).
- Emergency services can be contacted and will land a helicopter on adjacent property (across the creek) if necessary.

Competency and Training Required	• Mobile phones are carried around the station and if working remotely from the station (although reception is not guaranteed in some places).
Competency Levels *	1. Read Document

Only add descriptions below for competency levels chosen above

Training Description	
Knowledge Test Description	
License/Cert Description	
Other Competency Description	
Additional Documents	

Declare As Read

Close

A4.3. Safe Work Procedure – SCI-BEES-SWP-5392 - Smiths Lake Field Station – General User Guide

Safe Work Procedure

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Safe Work Procedures Guideline (HS027) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-SWP-5392	Current Author	Mira van der Ley	Original Author	Frank Hemmings
Approval Status	Approved	Approval Date	14/03/2023		

Title * Smiths Lake Field Station - General User Guide

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Mira van der Ley

Period of Time Before Next Review ○ 6 months ○ 1 year ○ 2 years ◉ 3 years ○ N/A

OR

Next Review Date 14/03/2026

Next Review Date Reminder ☐ 1 day ☐ 5 days ☐ 10 days ☐ 15 days ☐ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Safe Work Procedure Details

Safe Work Procedure Description

General use of Smiths Lake Field Station by visitors, including cooking and use of the kitchen.

Details can be in this document and in the Smiths Lake Field Station User Guide available here:

https://www.unsw.edu.au/science/our-schools/bees/about-us/facilities/smiths-lake-field-station

Locations FSSL-All Areas

Related Legislation, Standards, Codes of Practice etc. * WHS Act 2011; WHS Regulations 2017;

Related Safety Documents
SCI-BEES-RMF-6641-Chopping wood, kindling collection and lighting fires.
UNSW-UNSW-SWP-3484-Working with a ladder
SCI-BEES-RMF-114-Marine based fieldtrips to Smiths Lake (BIOS3081 Ocean to Estuarine Ecosystems and MSCI9001 Masters of Conservation Biology)
SCI-BEES-RMF-889-GIS field course at Smiths Lake
SCI-BEES-SWP-7285 - Use of unpowered watercraft
SCI-BEES-RMF-6542 - General use of Smiths Lake Field Station
SCI-BEES-RMF-2646-GEOS3731 Coastal Geomorphology Smiths Lake Field Trip
SCI-BEES-SWP-10344-Field sampling for DNA
SCI-BEES-RMF-248-MSCI2001 field trip

Related Equipment -

Related Activities -

Hazards and Risks
Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add new hazard' at the end of this box

Hazard Category *	ZOther
Controls *	For risk assessment, refer to SCI-BEES-RMF-6542 Smiths Lake Field Station - General Use

Safe Work Procedure Instructions

Resources Required	This SWP must be read along with the Smiths Lake User Guide.

Instructions *	**Requirements during COVID**
	
	All visitors MUST follow all special requirements outlined in the Smiths Lake User Guide v5.1 (or higher). This is available from the Smiths Lake Field Station facilities webpage: https://www.bees.unsw.edu.au/about-us/facilities/smiths-lake-field-station
	
	1) Moving furniture:
	
	• Check items prior to moving for obvious signs of damage and for rough, sharp or pinch point hazards.
	• Mark damaged items to prevent use and notify Frank Hemmings ASAP on 9385 3274.
	• Keep lifting to as light as possible by using more frequent carrying of single items rather than fewer trips of stacked items.
	• Seek help to team lift awkward, bulky or heavy items.
	• Test the weight prior to lifting an item.
	• To unfold tables
	  ◦ Place the table face down on a flat surface
	  ◦ Unfold the legs from the base
	  ◦ Slide the joint locks over the joints
	  ◦ Turn table upright and only use on a stable surface
	• To store tables – use the reverse of the above procedure
	
	2) Use of gas cooker, BBQ and outdoor gas burners
	
	Ensure that you have read the safety information before proceeding
	
	For outdoor gas burner:
	
	• Ensure gas cut-off valve is open
	• Turn on desired burner at individual tap and light with match
	• Place desired cooking vessel/item on burner
	• When cooking is done, turn off at cut off valve
	• Turn off at individual burner after allowing flame to die out.
	
	For outdoor gas BBQ:

- Follow instructions on BBQ
- Turn on main gas cut-off valve (parallel with gas pipe)
- Turn the knob of the first burner (closest to you) to high and push and hold down. then press in the ingition button until you hear a woosh.
- To light the back row, just turn on know and hold down and it will catch the flame from the first burner to light.
- Turn the burner dials to your desired setting.
- When cooking is done, turn off at cut off valve
- Turn off individual burner switches after allowing flame to die out.
- Scrape solid debris off bbq plate and wipe down with apper towel if necessary.
- Do not scour surface
- Surface should remain non-stick. Do not oil surface pof hot plate but lightly oil food to be barbecued instead.

For kitchen cooker:

A. Open gas cut off valve if necessary

B. Lighting oven

- Set the oven thermostat control knob to "OFF" (0 degrees). The Thermostat is located at the top left corner above the oven doors.
- Open the oven door, depress, and hold the Pilot button.
- Light the pilot burner located inside the bottom of the oven, at the front left of the burner.
- When lit, continue holding the Pilot down for 15 seconds before releasing it.
- Pilot should remain lit. If not, wait 5 minutes and repeat from step 3. If the Pilot will not stay lit after several attempts, release the Pilot button and contact your service technician or the Manufacturer.
- Set the oven thermostat to the desired temperature, 0 to 340 degrees, by turning the knob clockwise or anti-clockwise respectively.
- To turn the oven OFF, turn the thermostat clockwise to "0 degrees".
- Press the Pilot OFF button to shut the pilot off.

C. Lighting the open top burners (hotplates)

- Locate the FRONT or REAR control knob corresponding to the Open burner required.
- Turn the knob anti-clockwise completely and manually light the burner.
- Set the burner at the desired flame by turning the knob clockwise or anti-clockwise to HIGH or LOW flame.
- To turn the burner off, depress and turn the knob clockwise fully.

D. Lighting the griddle

- Locate the GRIDDLE control knob corresponding to the griddle.
- Depress the knob slightly and turn to PILOT position.
- Push the knob in and hold. Immediately light the Pilot burner, located through the open cut hole beside the corresponding knob. Continue holding down the knob for 10 seconds after the pilot is lit before releasing the knob.
- Pilot burner should remain lit. If it goes out, repeat from step 3.
- Set the burner at the desired flame by turning the knob clockwise or anti-clockwise to HIGH or LOW flame.
- To turn the burner off, depress and turn the knob clockwise fully.

3) Use of refrigerators, freezers and electrical kitchen appliances

- Inspect power outlet and cords for any obvious signs of damage, and if applicable ensure door seals properly;
- If using urn, place in desired location before filling, fill receptacle with water and carry to urn to fill urn up; use multiple refills if necessary rather than overfilling receptacle;
- If moving toaster to/from regular place in kitchen to other desired location, use 2 people as item is particularly heavy
- Turn on applicance at power outlet if necessary and turn on at appliance;
- Place items in refrigerator, freezer, or microwave taking care to follow manual handling guidlines to avoid strain injuries
- For microwave oven select power and time settings and then press start;
- Remove objects from refrigerator, freezer, or microwavetaking care to follow manual handling guidlines to avoid strain injuries - take care with microwave as items may be hot.
- Wipe down inside of microwave with a damp cloth/sponge after use when cool;
- Turn items off after use except chest freezers - **Do not turn chest freezers off.**
- Only move toaster when it is turned off and cool.
- Wipe down inside of refrigerators and leave doors ajar to allow air to circulate and refrigerators to dry.
- For urn, drain off any excess water through tap and do not put urn arway until it has cooled.

Emergency Procedures *

In the event of fire, fire extinguishers and fire blankets are located throughout the station, emergency exits are marked for each building and evacuation procedures and the assembly point (lake shore) is indicated on the noticeboard. The Field Station Manager has current first aid

	training, but groups are to also provide adequate numbers of first aid trained staff. First aid kit is located at field station, in addition to other kits taken along if necessary (for work further from the station). Emergency services can be contacted and will land helicopter on adjacent property (across creek) if necessary. Mobile phones carried around station and if working remote from station (although reception not guaranteed in some places). Emergency contact details held with Field Station Manager and BEES administration.
Cleanup and Waste Disposal Instructions	
Competency and Training Required	
Competency Levels *	1. Read Document
	Only add descriptions below for competency levels chosen above
Training Description	
Knowledge Test Description	
License/Cert Description	
Other Competency Description	
Additional Documents	

Declare As Read

Close

A4.4. Safe Work Procedure - SCI-BEES-SWP-5344 - Using fire BBQs, fire pits and fireplaces at Smiths Lake Field Station

Safe Work Procedure

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Safe Work Procedures Guideline (HS027) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-SWP-5344	Current Author	Mira van der Ley	Original Author	Frank Hemmings
Approval Status	Approved	Approval Date	12/03/2023		

Title * Using fire BBQs, fire pits and fireplaces at Smiths Lake Field Station

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Mira van der Ley

Period of Time Before Next Review ○ 6 months ○ 1 year ○ 2 years ◉ 3 years ○ N/A

OR

Next Review Date 12/03/2026

Next Review Date Reminder ☑ 1 day ☐ 5 days ☐ 10 days ☑ 15 days ☐ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Safe Work Procedure Details

Safe Work Procedure Description: Lighting fires for recreation, cooking, or warmth at the Smiths Lake Field Station.

Wood fires may be lit in: (1) the wood-fired BBQ in the outdoor kitchen; (2) the enclosed fireplace in the covered outdoor learning area; and/or (3) the large fire pit on the lawn.

Locations: FSSL-SL5-G-G01; FSSL-SL6-G-G02

Related Legislation, Standards, Codes of Practice etc. *: WHS Act 2011; WHS Regulations 2017; HS432 Manual Handling Guide, HS706 Guide to Safe Manual Handling.

Related Safety Documents: SCI-BEES-RMF-889-GIS field course at Smiths Lake
SCI-BEES-RMF-15514 - Wood fires for recreation or cooking

Related Equipment: -

Related Activities: -

Hazards and Risks

Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add

new hazard' at the end of this box

Hazard Category *	ZOther
Controls *	See general fire hazards in SCI-BEES-RMF-15514 'Wood fires for cooking, warmth and/or recreation'

Safe Work Procedure Instructions

Resources Required

Instructions *

When is it OK to have a fire

Open fires should not be lit during fire bans or during park bans.

Check for total fire bans - https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans

Check for park fire bans - Click on the Local Alerts button on this webpage:
https://www.nationalparks.nsw.gov.au/visit-a-park/parks/myall-lakes-national-park

Collecting firewood from the wood shed

- Firewood is supplied at Smiths Lake Field Station for cooking, heating, and the firepit.
- It is supplied as large blocks and needs to be split or cut
- wear shoes and gloves. Gloves are provided in a container in the woodshed.
- use adequate lighting to inspect wood pile from a safe distance for signs of snakes and spiders;
- Select log and take to chopping block - always follow manual handling guidelines, lifting from the legs not the back.

Collecting kindling

- wear shoes and gloves;
- always be vigilant for snakes and spiders;
- only collect kindling from the grounds of the field station - do not go into the adjacent National Park to collect kindling;
- carry kindling back to the fire or chopping area for processing - always follow manual handling guidelines, lifting from the legs, not the back.

Chopping wood and processing kindling
Follow instructions in SCI-BEES-SWP-14766

- wear covered shoes, preferably safety boots, when chopping wood – never wear thongs
- wear PPE - use heavy duty gloves and wear safety goggles;
- keep blade sharp – if blade dull, harder to chop wood, more effort required, more likely to lose control of axe/hatchet;
- onlookers to stand well clear of chopper;
- wood chopper to always use two hands on axe/hatchet handle - one about mid way, the other towards the end. This will provide for more control of the motion of the axe;
- wood chopper should only swing from shoulder height or below, not above head height which will cause loss of control of axe and muscle strain injuries and back injuries;
- use minimum force when splitting wood;
- use hatchet to divide the larger pieces of kindling which are too big to be broken by hand; only smaller pieces can be broken with hands or by propping on an angle on the ground and using foot.

Lighting fires in BBQ pits and slow combustion stove

- fires should not be lit during fire bans; cook on gas instead if this is the case;
- tie back long hair and loose overhanging clothing;
- long clothing can protect form heat but highly flammable clothing should not be worn when cooking near open flame;
- be careful when lighting fire – have fire blanket and fire extinguisher close by and keep area around fire clear of combustible material (c. 2 metres);
- keep out of smoke; move away from direction in which smoke travels;
- avoid smoke inhalation - move away from fire if required.;
- wash eyes/face with water if affected by smoke;
- ensure fire is fully out before leaving it unattended or retiring for the night

Emergency Procedures *

In the event of fire, fire extinguishers and fire blankets are located throughout the station, emergency exits are marked for each building and evacuation procedures and the assembly point (lake shore) is indicated on the noticeboard. Field Station Manager has up to date first aid training and first aid kit is located at field station, in addition to other kits taken along if necessary (for work further from the station). Emergency services can be contacted and will land helicopter on adjacent property (across creek) if necessary. Mobile phones carried around station and if working remote from station (although reception not guaranteed in some places). Emergency contact details held with Field Station Manager and BEES administration.

Cleanup and Waste Disposal Instructions

Competency and Training Required

Competency Levels *

1. Read Document

Only add descriptions below for competency levels chosen above

Training Description

Knowledge Test Description

License/Cert Description

Other Competency Description

Additional Documents

Declare As Read

Close

A4.5. Risk Management Form - SCI-BEES-RMF-15514 - Wood fires for cooking, warmth and/or recreation

Risk Management Form

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Risk Management Procedure (HS329) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-RMF-15514	Current Author	Mira van der Ley	Original Author	Mira van der Ley
Approval Status	Approved	Approval Date	13/03/2023		

Title * Wood fires for cooking, warmth and/or recreation

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Frank Hemmings

Period of time before next review ○ 6 months ○ 1 year ○ 2 years ◉ 3 years ○ N/A

OR

Next Review Date 13/03/2026

Review Date Reminder ☑ 1 day ☐ 5 days ☐ 10 days ☑ 15 days ☐ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Risk Management Details

Risk Management Form Description

This RMF relates to making/using open fires and the general associated risks/hazards/controls.

Open fires are used in the School of BEES on both teaching and research fieldtrips for (1) cooking, (2) heating, and (3) recreation.

Locations BEES Off campus Australia

Persons at Risk *

- ☑ Workers
- ☑ Students
- ☑ Visitors
- ☐ Contractors
- ☐ Members of the public

Consultation Process * Persons must read this form and acknowledge that they understand and will observe the Risk Controls outlined in the document. They will raise any issues relating to the hazards and controls with the field leader who will communicate with this document's author and/or approver. If not resolved, raise concern with HSE Consultation representative. If not resolved, raise concern with Head of School or Manager of Work Unit; If not resolved, raise concern with Associate Dean or Senior Manager of Division

Related Legislation, Standards, Codes of Practice etc. * WHS Act 2011; WHS Regulations 2017; HS432 Manual Handling Guide, HS706 Guide to Safe Manual Handling.

Related Safety Documents SCI-BEES-SWP-5344 - Chopping wood, collecting kindling and lighting fires
SCI-BEES-RMF-25337-Myall Lakes Dingo Surveying Fieldtrip for BIOS6671

Related Equipment -

Related Activities -

Hazards and Risks

Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add new hazard' at the end of this box

Hazard Task/Scenario * Collecting, chopping and moving large pieces of wood

Hazard Category * Manual handling - Poor technique

Associated Harm * Musculoskeletal damage

Existing Controls * Eliminate the risk:
- not possible to completely eliminate, a fireplace needs largeish blocks for coals to develop

Reduce the risk through substitution, isolation or engineering controls:
- use a wheelbarrow, trolley, container, etc for transport
- carry minimum size wood possible

Reduce the risk using administrative controls:
- Following manual handling safe work procedure: SCI-BEES-SWP-10109 'Manual Handling'
- Follow SCI-BEES-SWP-14766 Chopping firewood
- Review first aid procedures for musculoskeletal damage

Reduce the risk using personal protective equipment (PPE):
n/a for manual handling risk (PPE required to reduce other risks, see below)

Additional Controls

Risk Consequence 2. Minor Risk Likelihood D. Unlikely Risk Rating Low

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario * Wood chopping,kindling processing with hatchet - cuts and crush injuries.

Hazard Category * Sharps/Needlesticks

Associated Harm * Cuts and crush injuries from blades to wood chopper and/or onlookers; piercing injuries especially to hands, eye/face.

Existing Controls *	Eliminate the risk: - not possible; wood used for fires are inherently sharp and heavy. Reduce the risk through substitution, isolation or engineering controls: -n/a Reduce the risk using administrative controls: - Follow SCI-BEES-SWP-14766 Chopping firewood - Review first aid procedures for puncture wounds. Reduce the risk using personal protective equipment (PPE): - Wear fully closed shoes – never wear thongs - Use heavy-duty gloves - Wear safety glasses
Additional Controls	

Risk Consequence	3. Moderate	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls	
Is this reasonably practicable?	(•) Yes ( ) No

Hazard Task/Scenario *	Collecting wood, kindling and walking around grounds - bites and stings.
Hazard Category *	Animal & insect - Bite/scratch/kick
Associated Harm *	Bites and stings including envenomation form both invertebrates (spiders) and vertebrates (snakes).
Existing Controls *	Eliminate the risk: - not possible, wildlife everywhere. Reduce the risk through substitution, isolation or engineering controls: - n/a Reduce the risk using administrative controls: - make sure no spiders are present on pieces of wood when these are collected. - Keep an eye out for snakes at all times - Check for ticks afterward - If a snake is seen, step away carefully, and notify the group. Do not approach. - Review first aid procedures for snake and invertebrate bites. Reduce the risk using personal protective equipment (PPE): - Wear protective clothing (long pants/sleeves, robust shoes) when walking. - Snake gaiters recommended - Wear insect repellant - Wear heavy-duty gloves. (Please remember that visitors are prohibited from gathering firewood or removing plants in most national parks.)
Additional Controls	

Risk Consequence	3. Moderate	Risk Likelihood	E. Rare	Risk Rating	Medium

Cost of Controls	
Is this reasonably practicable?	(•) Yes ( ) No

Hazard Task/Scenario *	Lighting fires - heat.
Hazard Category *	Temperature
Associated Harm *	Burns/blisters.
Existing Controls *	Eliminate the risk: - N/A Reduce the risk through substitution, isolation or engineering controls: - use fully enclosed fireplaces where possible. - Use physical barriers where possible; e.g. defined edges of the firepit - Use visual barriers where possible; e.g. marked areas showing heat hazard areas. Reduce the risk using administrative controls: - Use long matches and/or tongs to maintain safe distance from fire when lighting. - Tie back long hair and loose overhanging clothing. - Long clothing can protect from heat but highly flammable clothing should not be worn when near an open flame. - have a fire blanket and fire extinguisher close by. - Always keep a source of water nearby; e.g. bucket of water or access to a hose. Reduce the risk using personal protective equipment (PPE): - N/A; the higher level controls should reduce risk to an acceptable level, if not, a wood fire should not be used for cooking, recreation, and/or warmth.
Additional Controls	

Risk Consequence	2. Minor	Risk Likelihood	D. Unlikely	Risk Rating	Low

Cost of Controls	
Is this reasonably practicable?	(•) Yes ( ) No

Hazard Task/Scenario *	Lighting fires - smoke inhalation
Hazard Category *	Air quality - Fumes/smells/dust
Associated Harm *	Smoke inhalation causing irritation to eyes, lungs.
Existing Controls *	Eliminate the risk: n/a Reduce the risk through substitution, isolation or engineering controls: - Use cooking and heating that do not produce smoke where possible. e.g. electrical heating and cooking. - Use a fireplace with a flue where possible - use fully enclosed fireplaces where possible. Reduce the risk using administrative controls: - Keep out of smoke; move away from the direction in which smoke travels - Wash eyes/face with water if affected by smoke. Reduce the risk using personal protective equipment (PPE): - N/A the higher level controls should reduce risk to an acceptable level, if not, a wood fire should not be used for cooking and/or recreation.
Additional Controls	

Risk Consequence	2. Minor	Risk Likelihood	D. Unlikely	Risk Rating	Low

Cost of Controls

Is this reasonably practicable? (•) Yes ( ) No

Hazard Task/Scenario *	Lighting fires - bushfire.
Hazard Category *	Fire/Explosion
Associated Harm *	Smoke can spark and start fire nearby
Existing Controls *	Eliminate the risk: - N/A Reduce the risk through substitution, isolation or engineering controls: - Use other methods of cooking and heating where possible. e.g. electrical heating and cooking. - Use a fireplace with a flue where possible - Use fully enclosed fireplaces where possible. - Build a flammable-free 2 m zone around dedicated fire areas. Reduce the risk using administrative controls: - See below. Reduce the risk using personal protective equipment (PPE): - N/A Before lighting the fire: - Only light fire when safe to do so - do not light a fire when a fire ban is present but cook inside on gas instead. - Check for total fire bans https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans - Always check the weather conditions in your area - Do not light or maintain a campfire on dry, windy days - Do not light or maintain a campfire when the Fire Danger Rating (FDR) is very high, severe, extreme or catastrophic - Always keep a source of water nearby; e.g. bucket of water or access to a hose. If a total fire ban: - A total fire ban means no fires out in the open. A total fire ban helps limit the potential of fires developing. - During a Total Fire Ban you cannot light, maintain or use a fire in the open, or to carry out any activity in the open that causes, or is likely to cause, a fire. Constructing the fireplace: - Choose a location clear of flammable vegetation such as long grass and spinifex - Use a built fireplace where provided or dig a 30 cm deep trench to house the fire and prevent embers from flying out - Create a border around the fire using large rocks - Remove branches, leaves and twigs from the ground and above the flames to create a clearing of three metres around the fire - Ensure the fire is three metres away from tents and other camping equipment is stored well away, especially flammable items such as gas cylinders and fuel cans Lighting the fire: - Light the campfire in a cleared area. - Never use flammable liquid or fuel such as petrol or diesel on fire even when you are trying to get it started During: - Never leave a campfire or stove unattended Finishing up: - Extinguish all campfires and flames before leaving the fire unattended - Pour plenty of water on the fire to drown all embers, not just the red ones, until the hissing sound stops

Additional Controls	- Stir ashes and embers with a stick or shovel, then scrape the sticks and logs to remove any embers - If you do not have water, mix dirt or sand with the embers, stirring until all material is cool - Do not bury the fire as it will continue to smoulder and could catch roots on fire that could start a bushfire. People could also walk over it inadvertently and get burned. - Do not touch a campfire that appears to be out as a poorly extinguished campfire retains heat for many hours					
Risk Consequence	2. Minor	Risk Likelihood	D. Unlikely	Risk Rating	Low	
Cost of Controls						
Is this reasonably practicable?	(•) Yes	( ) No				

Other Risk Management Details

Date All Controls Implemented: 13/03/2023

Emergency Procedures *

In the event of an emergency, call Triple-Zero (000).

The location of fire blankets, fire extinguishers, water sources are known by participants.

Ensure there is a first-aider in the group.

Ensure there is water readily available.

If the fire escapes the firepit/stove:

- Do not attempt to fight a fire if it seems unsafe or fire is out of control - call Triple-Zero (000), evacuate all participants, and notify other local persons
- If safe to do so, smother stray flames with water and/or soil.

First Aid - Burns:

(St John Action Plan March 2023)

Burns and scalds are damage to the skin caused by heat. A burn is caused by dry heat and a scald is caused by something wet and hot. Burns can also affect the respiratory system and the eyes.

What to do

1. Follow DRSABCD.
2. If clothing is on fire: STOP-DROP-ROLL
    - Stop the casualty from moving around.
    - Drop the casualty to the ground and wrap in a blanket or similar.
    - Roll the casualty along the ground until flames are smothered.
3. Assess the adequacy of the casualty's airway and breathing.
4. Cool the burnt area with copious amounts of cool water for up to twenty (20) minutes.
5. Remove any clothing and jewellery from affected area unless stuck to the burn.
6. Cover burnt area with a light non-stick dressing or clean, dry non-fluffy material.
7. Rest and reassure the casualty and check for shock.

Call Triple Zero (000) if:

- Burns involving airway, hands, feet, face or genitals.
- Deep burn.
- Superficial burn larger than twenty (20) cent piece on an adult or ten (10) cent piece on a child.
- If in any doubt of what to do.

Do not

- Peel off clothing that is stuck to the skin.
- Use ice or iced water to cool a burn.
- Apply lotions, ointments or creams.

- Break blisters.

Signs and symptoms

- Superficial burn
  - Skin is red and painful, may blister and swell.
- Deep burn
  - Skin is white, dark red or charred
  - No pain where nerve endings have been destroyed
  - Usually surrounded by superficial burns

Competency and Training Required	
Competency Levels *	1. Read Document

Only add descriptions below for competency levels chosen above

Training Description	
Knowledge Test Description	
License/Cert Description	
Other Competency Description	
Additional Documents	Bush-Fire-Safety-for-Campers-and-Bushwalkers.pdf Emergency-Bush-Fire-Information-and-alert-levels.pdf Fact sheets_burn or scald.pdf Fire-Danger-Ratings.pdf NSW-RFS-Total-Fire-Bans-A5-Factsheet.pdf Standards-Lighting-a-Fire-2020-online.pdf

Declare As Read

Close

A4.6. Safe Work Procedure SCI-BEES-SWP-14766 - Chopping firewood

Safe Work Procedure

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Safe Work Procedures Guideline (HS027) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-SWP-14766	Current Author	Mira van der Ley	Original Author	Mira van der Ley
Approval Status	Approved	Approval Date	06/03/2023		

Title * Chopping firewood

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Mira van der Ley

Period of Time Before Next Review: ○ 6 months ○ 1 year ○ 2 years ◉ 3 years ○ N/A

OR

Next Review Date 5/03/2026

Next Review Date Reminder: ☑ 1 day ☐ 5 days ☐ 10 days ☑ 15 days ☐ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Safe Work Procedure Details

Safe Work Procedure Description

Chopping firewood for woodfires using manual tools (splitting axe/maul and hatchet).

The term axe is used throughout in reference to both splitting axes and splitting mauls.

This safe work procedure covers only the hazards and risk associated with chopping wood and collecting kindling. The key risks are:

- Laceration (normally from holding the log when chopping)
- Strain
- Injury from projectile

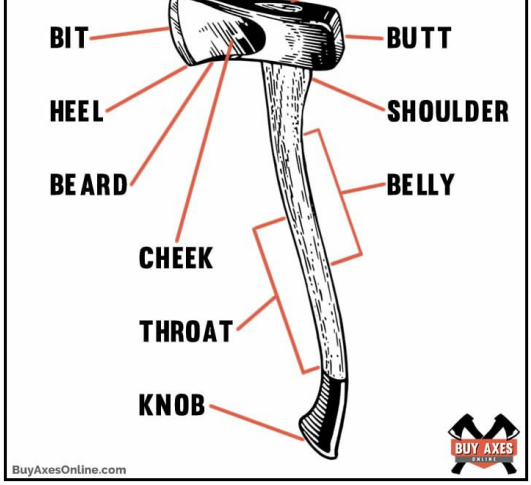
The risk assessment SCI-BEES-RMF-15514 covers hazards and risks associated with wood fires in general -- **Always check it is safe before lighting a fire.**

Terminology

Kindling - small sticks or twigs used for lighting fires.
Splitting Axe - for splitting wood with a downward motion, along the grain. They have a tapered head and are light than the splitting maul.
Splitting Maul - as called 'block splitters', used for splitting wood with a downward motion, along the grain. They have a wedge-like head, blunt edge, and heavier than the splitting axe.
Hatchet - smallest size axe, used with one hand for light work such as splitting kindling

A splitting maul typically has a heavier head than a splitting axe, which allows it to deliver a more powerful blow. The head of a splitting maul is also often wedge-shaped, which helps to force the wood apart as it is split. This makes a splitting maul ideal for splitting larger logs and tough, knotty wood.

A splitting axe is lighter and more maneuverable than a splitting maul. It often has a sharper blade and a more slender handle, which allows for more precise cuts. This makes a splitting axe ideal for splitting smaller logs and for chopping kindling or other smaller pieces of wood.



Locations	BEES All Locations; BEES Off campus Australia
Related Legislation, Standards, Codes of Practice etc. *	WHS Act 2011; WHS Regulations 2017
Related Safety Documents	SCI-BEES-RMF-15514 - Wood fires for recreation or cooking
Related Equipment	-
Related Activities	-

Hazards and Risks

Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add new hazard' at the end of this box

Hazard Category *	ZOther
Controls *	See SCI-BEES-RMF-15514 Lighting fires - General

Safe Work Procedure Instructions

Resources Required

Chopping wood: Safety glasses, heavy-duty gloves, and sturdy boots.

Collecting kindling: As required for conditions/environment. Recommended: Sturdy boots, heavy-duty gloves, protective clothing (long pants/sleeves)

Instructions *

Chopping large logs using a splitting axe/maul

Prepare

1. Choose a suitable chopping location
    - Find a flat, stable surface that is clear of any obstacles or debris. Make sure that there is enough space around you to move freely and swing the axe without hitting anything.
    - Use a chopping block to support the wood and prevent the axe from hitting the ground or other hard surfaces.
2. Inspect the axe
    - Check the axe blade for any cracks, chips, or other damage before using it. If you notice any damage, do not use the axe and replace it or have it professionally repaired.
3. Focus on the task
    - Avoid distractions while chopping wood and focus on the task at hand. Never attempt to chop wood while under the influence of drugs or alcohol.
4. Keep a first aid kit nearby
    - In case of an accident, keep a first aid kit nearby and know how to treat minor cuts and injuries.

Chopping

1. Wear PPE as listed above
2. Check for people and obstacles in the immediate vicinity
    - Always check around you before swinging.
    - Pieces of wood may fly away from the chopping area
    - Check for overhanging branches
3. Place the log on a flat, even surface (e.g. a chopping block)
    - It should be on its end so that you split the wood along the grain.
    - Never use a splitting axe/maul to chop *against* the grain.
    - DO NOT hold the log yourself in place when chopping
    - DO NOT ask someone else to hold log in place when chopping
4. Holding the axe
    - Your non-dominant hand should sit near the end of the handle.
    - Your dominant hand starts closer to the axe head/blade/bit
    - Your dominant hand will slide away from the blade towards your non-dominant hand when you swing
5. Grip firm, but wrists and body relaxed
6. Start with the axe resting on the top of the log exactly where you want to split it.
    - Start in line with the grain, or at a visible crack. This will lessen the effort required to split the log.
7. Start with a few slow-motion practice swings
8. Stand with your feet shoulder-width apart, hold the axe firmly with both hands, and swing the axe using your whole body, not just your arms.
    - Aim for the center of the wood and swing the axe with a smooth, controlled motion.
    - You want to swing through the target instead of at it.
    - Avoid over-swinging or swinging with excessive force.
    - Only swing from shoulder height or below. Not above head height, this will cause loss of control of the axe, muscle strain injuries, and back injuries. NEVER swing the axe back over your shoulders.
    - Your swing should be in line with your body. Do not swing over the shoulder or twist.
9. Keep your eyes on the log

Finishing Up

1. Inspect the axe
    - Check the axe blade for any cracks, chips, or other damage before using it. If you notice any damage, do not use the axe and replace it or have it professionally repaired.
2. Store the axe safely
    - When finished chopping wood, store the axe in a safe location, such as a secure tool shed or garage. Keep the blade covered with a sheath or blade guard to protect it from damage.
3. Collect wood
    - Safely transport
    - Safely stack

Collecting kindling

- When moving wood and kindling always follow manual handling guidelines – lift from the legs, not the back.
- Use a hatchet to divide the larger pieces of kindling; only smaller pieces can be broken with your hands or by propping on an angle on the ground and using your foot.
- Never collect from National Parks, Nature Reserves, etc.

Emergency Procedures *

In an emergency call Triple-Zero 000.

First aid - Open Wounds

Sritharen et al. 2018 found lacerations were the most common injury from axe use.

Grazes

- Wash hands to rid of any bacteria
- Wash graze with warm water and gentle soap using a gauze
- Put on a dressing to cover it once it's cleaned; this can be either a band-aid or bandage, depending on the severity of the graze

Cuts

- Wash hands to rid of any bacteria
- Apply pressure to the cut
- Wash cut with warm water and gentle soap using a gauze
- Apply bandage to the cut
- If the cut continues to bleed, seek medical advice.

EMBEDDED OBJECT

- Apply pressure to the surrounding area of the protruding object to control bleeding
- Position padding around the object to prevent the object from twisting or moving, bandage over and around the padding to secure the foreign object
- If the object is quite long, ensure the bandaging around the object has positioned it securely
- Seek medical assistance, if severe injury or if you're unable to safely move the casualty; call triple zero (000)

DO NOTs when providing First Aid for Embedded Objects

- DO NOT remove the embedded object as it may be preventing significant blood loss. The removal of the object could also cause major structural and nerve damage. It must always be completed by a professional
- DO NOT put any pressure on the object
- DO NOT cut the end of the object unless it's completely unmanageable and causes you or medical professionals difficulty in moving the casualty

PUNCTURE WOUNDS

- Remove any clothing covering the wound
- Keep the wound as clean as possible - if possible, do not use dirty clothing or materials
- If the wound is not bleeding, clean around it
- If the wound is bleeding, apply gauze around the wound and apply pressure to control bleeding
- DO NOT try to remove any foreign materials found in the wound
- Check if there is an exit wound on the opposite side of the opening
- Apply a sterile dressing
- Ensure casualty is seated in a comfortable position
- Seek medical assistance; call triple zero (000) if blood loss is severe
- It's important to be mindful that open wounds can become infected from the bacterial colonies present on the skin, so when treating a wound, it's vital to practice proper sanitation to prevent any further infection.

Cleanup and Waste Disposal Instructions

Competency and Training Required

Competency Levels * 1. Read Document

Only add descriptions below for competency levels chosen above

Training Description

Knowledge Test Description

License/Cert Description

Other Competency Description

References

Sritharen, Y., Hernandez, M. C., Zielinski, M. D., & Aho, J. M. (2018). Weekend woodsmen: Overview and comparison of injury patterns associated with power saw and axe utilization in the United States. The American journal of emergency medicine, 36(5), 846-850.

https://www.gearpatrol.com/outdoors/a36598444/how-to-swing-axe/

Bromm, T. (2015). *Sunder axe: Encouraging habit and safe use*. Rochester Institute of Technology.

Additional Documents

Declare As Read

Close

A4.7. Safe Work Procedure - Use of unpowered watercraft

Safe Work Procedure

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Safe Work Procedures Guideline (HS027) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-SWP-7285	Current Author	Rochelle Johnston	Original Author	Rochelle Johnston
Approval Status	Approved	Approval Date	14/03/2021		

Title * Use of unpowered watercraft

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Frank Hemmings

Period of Time Before Next Review ○ 6 months ○ 1 year ○ 2 years ○ 3 years ○ N/A

OR

Next Review Date 13/03/2024

Next Review Date Reminder ☐ 1 day ☐ 5 days ☐ 10 days ☑ 15 days ☐ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Safe Work Procedure Details

Safe Work Procedure Description

Recreational use of unpowered watercraft (canoes and paddle boards) at Smiths Lake Research Station.

Please note there is another SWP for non-recreatioal use including research and education: SCI-BEES-SWP-10155 "Use of unpowered watercraft (kayaks, canoes, rowboats and paddleboards)."

Locations FSSL-All Areas

Related Legislation, Standards, Codes of Practice etc. * WHS Act 2011; WHS Regulations 2017, Marine Safety Regulation 2016

Related Safety Documents
SCI-BEES-SWP-5392-General use of Smiths Lake Field Station
SCI-BEES-SWP-10155 - Use of unpowered watercraft (kayaks, canoes, rowboats and paddleboards)
SCI-BEES-RMF-6542-Smiths Lake Field Station - General Use

Related Equipment -

Related Activities -

Hazards and Risks

Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add new hazard' at the end of this box

Hazard Category *	Manual handling
Controls *	Lifting watercraft to launch and retrieve: • Use correct manual handling techniques and sufficient people to lift and control the watercraft. • Wear sturdy footwear to protect feet from cuts or crushing and maintain awareness trip hazards such as the uneven ground of the lake foreshore
Hazard Category *	Animal & insect - Bite/scratch/kick
Controls *	• Look out for spiders and snakes before handling the water craft. If in doubt do not use the watercraft and consult the station manager. • Wear sturdy footwear to protect feet
Hazard Category *	Water - Open/closed body of water
Controls *	Use of the watercraft on the lake - Falling in, Sinking canoe, losing paddles, unable to return due to fatigue or weather conditions: • Life Jackets must be warned by all (refer to Procedures) • Check the weather conditions prior to departure. • Practice getting in and out in shallow water. • Do not use water craft in in low visibility including at night. • Notify a shore support person of your activity, destination and expected time of return. • Carry first aid and a means of communication in a water proof bag if travelling further than the Research Station Bay (eg travelling further than line of site of the station and/or further than easy swimming distance from shore).

Safe Work Procedure Instructions

Resources Required

Instructions *

Life jackets:

1. Life Jackets (PFD level 50S or higher) must be worn by all users. PFD level 100S support the head and are preferred.
2. Check that the jacket is in good condition and that all buckles and zips function correctly.
3. Check correct size for the wearer and adjust straps to fit.
4. Rinse in fresh water and hang to dry after use.

Procedures:

1. Check the weather conditions prior to departure. Do not use water craft if poor weather

including storms, lightening or heavy rain is forecast.
2. Do not use water craft in in low visibility including at night.
3. Practice getting in and out in shallow water.
4. Notify a shore support person of your activity, destination and expected time of return.
5. Carry first aid and a means of communication in a water proof bag if travelling further than the Research Station Bay (eg travelling further than line of site of the station and/or further than easy swimming distance from shore).
6. All children under 12 years of age must be supervised by a person aged 16 years or over.

Note: All children under 12 years of age that are swimming or undertaking any activities in the lake, must be supervised by a person aged 16 years or over.

Emergency Procedures *	First aid kit is located at field station, in addition to other kits taken along if necessary (for work further from the station. Emergency services can be contacted and will land helicopter on adjacent property (across creek) if necessary. Mobile phones carried around station and if working remote from station (although reception not guaranteed in some places). Emergency contact details held with Field Station Manager and BEES administration.
Cleanup and Waste Disposal Instructions	
Competency and Training Required	Read this document
Competency Levels *	1. Read Document

Only add descriptions below for competency levels chosen above

Training Description	
Knowledge Test Description	
License/Cert Description	
Other Competency Description	
Additional Documents	NSW Marine Safety Regulation 2016.rtf

Declare As Read

Close

A4.8. SCI-BEES-SWP-12062 Food preparation for large groups (e.g. course fieldtrips)

Safe Work Procedure

Print Instructions | Clone As New

Document Details

Enter the details of the document. The Safe Work Procedures Guideline (HS027) should be consulted to assist in the completion of this form.

Document Number	SCI-BEES-SWP-12062	Current Author	Mira van der Ley	Original Author	Mira van der Ley
Approval Status	Approved	Approval Date	13/03/2023		

Title * Food preparation for large groups (e.g. course fieldtrips)

Faculty * Science

School * School of Biological, Earth and Environment

Approver * Mira van der Ley

Period of Time Before Next Review ○ 6 months ○ 1 year ○ 2 years ○ 3 years ○ N/A

OR

Next Review Date 13/03/2023

Next Review Date Reminder ☑ 1 day ☐ 5 days ☐ 10 days ☑ 15 days ☐ 30 days ☐ 45 days ☐ 60 days ☐ 90 days

Safe Work Procedure Details

Safe Work Procedure Description

In situations where a small group of people are preparing food for a large group of people (e.g. course fieldtrips), strict food safety procedures must be followed.

This SWP does not cover all aspects of food safety but instead outlines how the School of BEES manages food safety.

Locations BEES All Locations

Related Legislation, Standards, Codes of Practice etc. * WHS Act 2011; WHS Regulations 2017; Australia New Zealand Food Standards Code (FSANZ); Food Act 2003 (NSW); Food Regulation 2015

Related Safety Documents SCI-BEES-RMF-20046 - COVID-19 Food Preparation and Handling on BEES Undergraduate Fieldtrips
SCI-BEES-SWP-10570 - Use of the microwave oven for food

Related Equipment -

Related Activities -

Hazards and Risks

Use this section to list each task/scenario and its associated hazard and risk. You can choose multiple tasks by clicking on 'Add new hazard' at the end of this box

Hazard Category *	Temperature
Controls *	Burns Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - use guards/screens/lids where available where there is a chance the water or oil could spit. - organise the kitchen such that food prep is out of the way of hot cooking/items. Reduce the risk using administrative controls: - see the instructions below Reduce the risk using personal protective equipment (PPE): - see the instructions below

Hazard Category *	Sharps/Needlesticks
Controls *	Cuts Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - maintain sharp cutting utensils - storage or sharps should such to avoid cuts. Reduce the risk using administrative controls: - see the instructions below Reduce the risk using personal protective equipment (PPE): - gloves which protect against cuts should not be needed during food preparation

Hazard Category *	Biological
Controls *	Foodborne illness Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - Ensure food preparation facilities are able to be cleaned and sanitized. Reduce the risk using administrative controls: - see the instructions below Reduce the risk using personal protective equipment (PPE): - n/a

Hazard Category *	Fire/Explosion
Controls *	Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - dependent on area using for food prep Reduce the risk using administrative controls: - follow the instructions below. Reduce the risk using personal protective equipment (PPE): - N/A

Hazard Category *	Electrical
Controls *	Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - Buildings should have RCD protection Reduce the risk using administrative controls: - Keep electrical appliances away from water sources - Check appliances have a current electrical test tag, and inspect for damage before using - Keep appliances clean and dry - Ensure that the electrical appliances you use in the kitchen are appropriate - Avoid plugging too many appliances into a single outlet or extension cord Reduce the risk using personal protective equipment (PPE): - n/a
Hazard Category *	Chemical
Controls *	Chemicals used for cleaning Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - always review chemical SDS and substituted with less hazardous option Reduce the risk using administrative controls: - ensure SDS sheets, product instructions, and local procedures are readily available. Reduce the risk using personal protective equipment (PPE): - Ensure the PPE required by either the SDS, the product instructions, or the local procedure are available and worn. - Normally nitrile gloves and safety glasses required
Hazard Category *	Ergonomic
Controls *	Eliminate the risk: - not possible to fully eliminate Reduce the risk through substitution, isolation or engineering controls: - Use cooking surfaces that are a suitable height. Reduce the risk using administrative controls: - This safety document applies to people who cook food intermittently and does not apply to people who work full-time in hospitality; consequently, it is considered that ergonomic risks should be of low risk due to the short duration of the activity. Reduce the risk using personal protective equipment (PPE): - N/A

Safe Work Procedure Instructions

Resources Required

Instructions *

Heat / fire hazards

- Use oven mitts or potholders to handle hot pots, pans, and dishes.
- Turn handles inward so they are not sticking out where someone could bump into them.
- Never leave your stove unattended while cooking.

- Keep a clean and organized kitchen to help prevent accidents, including burns.
- Keep your cooking area free of flammable materials.
- Be aware of hot surfaces: Do not touch or place anything on these surfaces unless they have had time to cool down.
- Keep children away from hot surfaces
- Use caution with boiling liquids: Use a lid or a splatter screen to keep the liquid from boiling over.
- Avoid loose clothing: it could catch fire or get caught on handles
- Tie up hair
- Use long matches and/or tongs to maintain safe distance from fire when lighting
- Check a first aid kit with burn gel and/or running water is nearby
- Check there is a fire extinguisher and fire blanket nearby
- Water for hot appliances to cool down before moving; e.g. toasters, urns, sandwich press, etc.
- Wear closed shoes when cooking

Chopping/sharps

- Use sharp knives: Dull knives require more force and are more likely to slip, increasing the risk of cuts.
- Use sharp knives and keep them sharpened regularly. A knife sharpener is available in the kitchen.
- Use the right cutting surface - a board made of a material that won't dull your knives, such as wood or plastic.
- Hold the knife with a firm grip and keep your fingers away from the blade.
- Pay attention while cutting: Avoid distractions and pay attention while cutting to prevent accidental slips and cuts.
- Store knives safely

Food Handling and Hygiene

Summary

For large groups (where a small number of people do the food preparation for many people, e.g. course fieldtrips), the following food safety procedures apply:

- The person in charge, overseeing the food preparation and cleaning of food preparation facilities, has training in food hygiene/safety
- The person in charge ensures any helpers follow hygiene requirements
- The person in charge ensures any helpers follow food safety principles
- When cleaning utensils/surfaces etc, a sanitisation step must be included, this can either be temperature or chemical sanitisation.
- Wiping Cloths: Wet wiping cloths that are in use for wiping food spills from food
- contact and nonfood-contact surfaces of equipment shall be stored in a sanitizing solution.
- Tea towels are not to be used for drying, unless they are single use.
- A thermometer is used to check the internal temperatures of potentially hazardous hot and cold food items.

Training

The person in charge who oversees the food preparation and cleaning of food preparation facilities has training in food hygiene/safety. Two free online courses are recommended:

1. (1) DoFoodSafely, Provided by the Victorian Government; or
2. (2) Environmental Health Australia / Federation Council Food safety course

Training for food prep during the coronavirus pandemic

The person in charge should do the COVID-19 awareness for food service training, provided by the NSW Food Authority.

Chemical sanitisation

Use a food-grade sanitiser - One that doesn't require rinsing afterwards, but is safe to use for cooking once it's dried. QAC sanitisers need to have a QAC concentration of 200 ppm, do not use more, or else residue can remain, also can be toxic to the environment at high concentrations.

Always follow the instructions on the bottle and the SDS.
Generally:

- concentrated solutions of sanitisers must not directly contanct any part of the body, wear gloves and safety glasses when diluting.
- A twin-chamber measuring bottle can be used which greatly reduces risk of contact
- Make a large volume (e.g. 5L) of dilute solution (~0.1% benzalkonium chloride) to reduce the handling of concentrated solution. Use this to top up spray bottles.
- the concentration of the dilute solution (~0.1% benzalkonium chloride), following product instructions, is similar to that of hand sanitizers and is considered safe to contact. *However, benzalkonium chloride is a common allergen and people should be made aware.*

Instructions for large groups at Smiths Lake Field Station

For large groups (where a small number of people do the food preparation for many people, e.g. course fieldtrips), the following safety requirements apply:

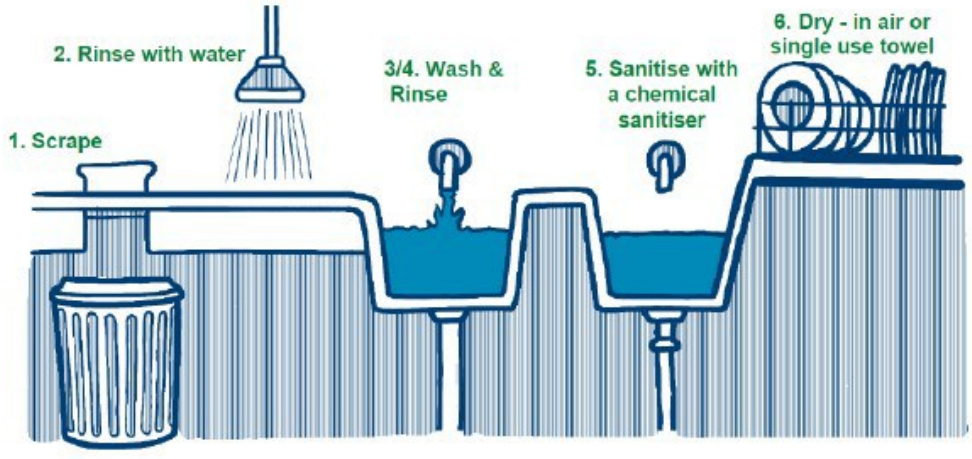
- The person overseeing the food preparation and cleaning of food preparation facilities should have training in food hygiene/safety.
- A sanitising step should be included:
- You should incorporate a sanitising step when prepping food preparation and eating areas, and cleaning afterwards
- Use a food-grade sanitiser
- Groups need to bring their own food-grade sanitiser (and other cleaning chemicals)
- Large groups should also bring a food temperature probe to ensure the correct temperatures required for food safety.

Washing up areas for students should be setup up as follows:

- Station 1 - a bin to scrape scraps
- Station 2 - A tub for removing the remaining solid bits
- Station 3 - then one sink with warm water and detergent for cleaning which brush
- Station 4 - a sink with just cold water to rinse off detergent
- Station 5 - Tub with a food-grade sanitiser (choose a sanitiser such that is safe to use the utensils for food once it's dried).

Example setup (from NSW Gov Food Authority):

Figure 1: Cleaning and sanitising using a double bowl sink



Is notification to the Taree council required?

- Council will not require notification – the kitchen will be registered with Council at that address as being suitable for catering purposes for groups attending.

Can outdoor sinks be used?

- Yes as long as they are properly set up with separate cleaning and sanitising sinks.

Food safety guidelines from HS406 – Fieldwork Guideline

11.4. Catering and Food Hygiene

Food provisions should be suitable for the conditions and duration of the fieldtrip and should include adequate supplies in case of emergency or extended duration. The following is an excerpt from

Food Safety Standards Australia and New Zealand and should be observed:

- All food items must be prepared hygienically, using clean hands and utensils.
- Food should be selected and prepared carefully. In many parts of the world raw food (salads etc.), shellfish and ice-cream should be avoided and fruit should be washed and peeled before eating. In cases of doubt, food should be thoroughly cooked to kill any contaminating microorganisms.
- A constant supply of potable water must be available. If necessary, the water should be sterilised by boiling, filtration or use of tablets. Always assume stream and river waters are unsafe, even in wilderness areas.
- Food must be kept clean and covered to prevent contamination by dust, insects etc. It should be kept cool (below 5°C) or hot (above 60°C).
- Pre-prepared foods should be wrapped tightly or protected in sealed containers before packing them in a cooler. Raw meats should be placed at the bottom of the cooler and ready-to-eat items above.
- The practice of cooking food for consumption one day ahead should be avoided.
- Utensils must be kept clean.
- when cooling cooked potentially hazardous food, cool the food –within two hours – from 60°C to 21°C; and within a further four hours – from 21°C to 5°C;
- when reheating previously cooked and cooled potentially hazardous food to hold it hot, use a heat process that rapidly heats the food to a temperature of 60°C or above.

11.5. Hygiene of food handlers

- A food handler must, when engaging in any food handling operation –
  - take all practicable measures to ensure his or her body, anything from his or her body, and anything he or she is wearing does not contaminate food or surfaces likely to come into contact with food;
  - take all practicable measures to prevent unnecessary contact with ready-to-eat food;
  - ensure outer clothing is of a level of cleanliness that is appropriate for the handling of food that is being conducted;
  - only use on exposed parts of his or her body bandages and dressings that are completely covered with a waterproofed covering;
  - not eat over unprotected food or surfaces likely to come into contact with food;
  - not sneeze, blow or cough over unprotected food or surfaces likely to come into contact with food;
  - not spit, smoke or use tobacco or similar preparations in areas in which food is handled; and
- A food handler must wash his or her hands –
  - whenever his or her hands are likely to be a source of contamination of food;
  - immediately before working with ready-to-eat food and after handling raw food;
  - immediately after using the toilet;
  - before commencing or re-commencing handling food;
  - immediately after smoking, coughing, sneezing, using a handkerchief or disposable tissue, eating, drinking or using tobacco or similar substances; and
  - after touching his or her hair, scalp or a body opening.
- A food handler must, whenever washing his or her hands –
  - use the hand washing facilities provided;
  - thoroughly clean his or her hands using soap or other effective means, and warm (if possible) running water; and
  - thoroughly dry his or her hands on a single use towel or in another way that is not likely to transfer pathogenic microorganisms to the hands.

11.6. Food Allergies

Food allergy occurs in around 2 in 100 adults. The most common triggers are egg, cow's milk, peanut, tree nuts, seafood, sesame, soy, fish and wheat. Some food allergies can be severe, causing lifethreatening reactions known as anaphylaxis.

Persons with known serious allergies should have an action plan completed by their doctor and made known to the Fieldwork Leader. They may also carry an adrenalin auto-injector.

In general, adrenaline auto-injectors should not be in first aid kits, as it is the individual's responsibility to carry their own medication for personal use. However, if a risk assessment determines that these are required then the HS905 First Aid Procedure outlines how they are to be managed.

As there is currently no cure for food allergy, strict avoidance is essential in the management of food allergy.

It is important for individuals with food allergy to:

- Provide this information on the HS009 Fieldwork Participant Form;
- Carry their adrenaline auto injector (if prescribed) and Action Plan with them at all times;
- Know the signs and symptoms of mild to moderate and severe allergic reactions (anaphylaxis) and what to do when a reaction occurs;
- Read and understand food labels for food allergy;

- Tell wait staff that they have a food allergy when eating out;
- Be aware of cross contamination of food allergens when preparing food.

More information is available at: www.allergy.org.au

Emergency Procedures *

On campus emergencies - call 9385 6666

Off-campus emergencies - call 000

Food poisoning first aid (1/06/2022)

(from https://www.sja.org.uk/get-advice/first-aid-advice/poisoning/food-poisoning/)

What is food poisoning?
Food poisoning can be caused by eating contaminated food. In most cases the food hasn't been cooked properly and is contaminated by bacteria, such as salmonella or E. coli.

Signs and symptoms
Look for:

- vomiting
- stomach cramps
- diarrhoea
- signs of a fever, with a high temperature.

What to do
If you think someone has food poisoning, advise them to lie down and rest.

If they're vomiting, give them small sips of water to drink as this will help prevent dehydration.

If they have accompanying diarrhoea or diarrhoea only, it is even more important to try to replace lost fluids and salts.

You can advise them to take an oral rehydration solution (ORS) as directed on the packet from your local pharmacy. This is particularly important in more vulnerable people such as the elderly, those with other health conditions, and children.

When they feel hungry again, advise them to eat light, bland, easily digested foods, such as bread, rice, crackers, or a banana.

Do not drink alcohol, caffeine, or fizzy drinks.

If they get worse and the vomiting and diarrhoea is persistent, particularly in the elderly, babies, or young children, seek medical advice.

Do not take anti-diarrhoea medicines unless specifically advised by a healthcare professional.

To prevent the spread of the infection, always use and encourage good hand hygiene.

Stay off work or school until at least 48 hours after the last episode of diarrhoea or vomiting.

Burns first aid

https://www.healthdirect.gov.au/burns-and-scalds (14/03/2023)

As soon as possible, put the burnt area under cool running water for at least 20 minutes:

- Don’t use ice (only apply water to the burnt area).
- Remove any clothing or jewellery near the burn, unless they are stuck to the burn.
- Don’t remove anything that is stuck to the burn.

Cover the burn:

- Use a light, loose, non-stick dressing. Use non-fluffy material. Plastic cling film is a good choice.
- If the burn is to an arm or leg, raise it whenever possible to reduce swelling.

Some things to avoid:

- Don’t touch the burn or apply ice.
- Don’t put a child with burns into a bath full of cold water.
- If blisters develop don’t pop them, and visit your doctor in case they need to be removed.
- Don’t use any ointments, creams, lotions or fat on a burn. They seal heat in and cause more damage.

When should I call an ambulance?

Call an ambulance or go straight to your nearest emergency department if:

- the burn is deep, even if the person doesn’t feel any pain
- the burn is larger than a 20 cent piece
- the burn involves the airway, face, hands or genitals
- the skin looks leathery
- there are patches of brown, black or white
- the burn was caused by chemicals or electricity
- the patient is having trouble breathing

Cleanup and Waste Disposal Instructions

Competency and Training Required

Competency Levels *

1. Read Document

Only add descriptions below for competency levels chosen above

Training Description

The person overseeing the food preparation and cleaning of food preparation facilities should have training in food hygiene/safety.

- Two free online courses are recommended: (1) DoFoodSafely, Provided by the Victorian Government; or (2) Environmental Health Australia / Federation Council Food safety course
- The person in charge must ensure all people assisting in food preparation and cleaning are following food safety principles.

Food prep during the coronavirus pandemic

- The person in charge should do the COVID-19 awareness for food service training, provided by the NSW Food Authority.

Knowledge Test Description

License/Cert Description

Other Competency Description

Additional Documents

Declare As Read

Close

Appendix 5. Safe use during COVID-19

Any breach or non-compliance with any COVID-19 requirements may lead to a direction being issued to you and/or your guests to immediately leave the Field Station. If such a direction is issued you must comply with it.

These guidelines are subject to change at any time in response to changes in Government and/or UNSW policy.

7.1 Vaccination and face mask requirements for Smiths Lake Field Station

Wear a mask as required by NSW Gov: https://www.nsw.gov.au/covid-19/stay-safe/rules/face-mask-rules#toc-when-face-masks-are-required

It is strongly recommended to wear a mask when working is close proximity.

7.2 What you need bring to Smiths Lake Research Station

The field station is mainly self-provisioned, and visitors are expected to bring their own consumables during times outside of the COVID-19 pandemic (Section 5, page 19).

During COVID-19 restrictions, visitors are also expected to bring the following safety and cleaning consumables:

- Gloves to wear when cleaning
- Detergent based cleaning products
- Dish washing detergent
- Hand sanitiser (amount appropriate to the group size)
- Spray sanitiser (to clean touch points throughout the day).
- Hand wash soap
- Sleeping gear as usual (Section 5) and additionally a bottom/fitted sheet for each person (SL3: king-single size mattress; student dorms: regular single mattress size).
- Highly recommended to bring RAT tests

Some of these consumables are likely to be onsite; however, due to the remote nature of the site, we cannot guarantee they will be there and so you are expected to bring your own supplies.

We provide paper towel and toilet paper.

7.3 Who can visit guest develops symptoms

Do not visit the station if you are required to self-isolate: https://www.nsw.gov.au/covid-19/stay-safe/testing/self-isolation-rules

If a guest develops COVID-19 symptoms during their stay.

1. They must get tested immediately and place themselves in isolation.
    - Groups should bring a stock of RAT tests.
    - For COVID clinics, search under postcode 2423 here: https://www.nsw.gov.au/covid-19/stay-safe/testing/clinics
2. The group leader must notify all guests at the Field Station.
3. The person being tested should isolate from other group members and wear a mask

If there is a confirmed case of COVID-19

If any guest tests positive to COVID, either during a stay or within 48 hours after departure, please notify the Field Station Manager after following any NSW Health requirements.

If a guest tests positive to COVID at the field station, you must return to your normal place of residence. You cannot isolate at the field station.

The UNSW Case notification and management process will also be enacted:

https://www.covid-19.unsw.edu.au/covid-19-case-notification

If a guest is a household or close contact

Follow all NSW Government recommendations https://www.nsw.gov.au/covid-19/stay-safe/testing/self-isolation-rules

7.4 Station capacity and physical distancing

Physical distancing at Smiths Lake Field Station follows NSW Government recommendations:

- All rooms have posters indicating the occupancy based on the four-square metre rule.
- Please check NSW Government website for current physical distancing requirements.

Guests should try to physically distance where possible, such as sleeping in different rooms, spreading out in bunk rooms etc.

7.5 Hygiene and cleaning

The station is generally cleaned by casual staff between visits; however, due to the remote nature of the site, this cannot be guaranteed particularly if bookings are back-to-back. Cleaning staff are NOT on site for cleaning during a visit.

- Visiting groups are responsible for maintaining cleanliness and hygiene practices to prevent COVID-19 spread.
- Groups should clean and disinfect any points of contact on arrival and before departure.
- The group leader is responsible for ensuring their group complies with tasks outlined in the Smiths Lake Station User Guide.

When using cleaning chemicals, you must have access to the safety data sheet and wear the appropriate personal protective equipment.

7.5.1 Maintain good hygiene

1. Adopt good hand hygiene practices.
    - making sure to clean your hands thoroughly for at least 20 seconds with soap and water
    - This includes before and after eating and after going to the toilet and cleaning
    - use alcohol-based hand sanitisers when you can't use soap and water, e.g. if you are doing fieldwork.
2. avoid touching your eyes, nose and mouth
3. cover your nose and mouth when coughing and sneezing with tissue or a flexed elbow
4. avoid close contact with anyone with cold or flu-like symptoms.
5. Clean/sanitise frequently touched surfaces
6. Minimise physical contact keep 1.5 m away from others
7. Wear a mask when you cannot maintain 1.5 m separation from others.

7.5.2 Cleaning guidelines

All staff and guests are expected to follow the following cleaning guidelines. These are taken from the following sources:

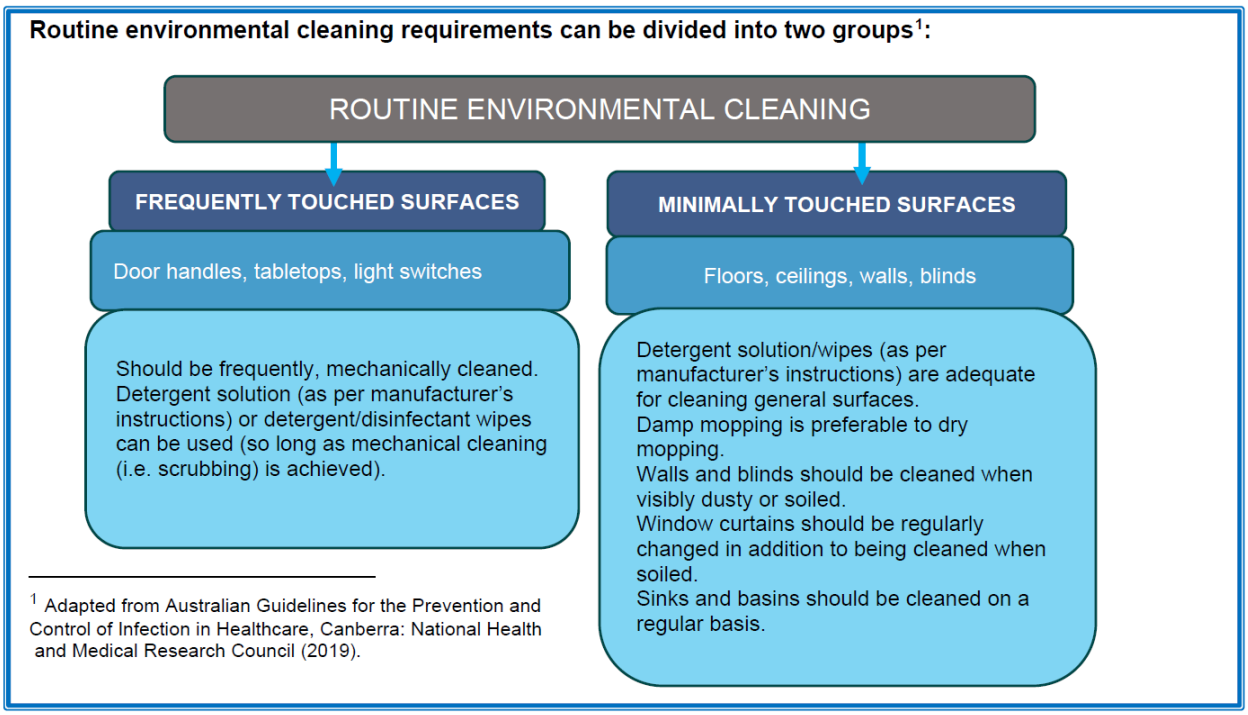
- https://www.health.gov.au/resources/publications/coronavirus-covid-19-information-about-routine-environmental-cleaning-and-disinfection-in-the-community (accessed 27/10/2020)

- https://www.safeworkaustralia.gov.au/covid-19-information-workplaces/industry-information/hospitality/cleaning?tab=tab-toc-employer#heading--3--tab-toc-which_areas_should_be_cleaned_and_disinfected,_and_how_often? (accessed 27/10/2020)
- https://www.safeworkaustralia.gov.au/sites/default/files/2020-05/cleaning-table-covid19-26May2020.pdf (accessed 27/10/2020)

Cleaning – key principles

- Detergents
    - Break down grease and remove organic material (dirt and grime) from the surface.
    - Should be used separately before using disinfectants.
    - For most general cleaning tasks, a neutral detergent with pH between 6 and 8 should be used.
- Disinfectants
    - Disinfectants are liquids, sprays and wipes that are designed for use on surfaces to kill germs (microorganisms such as bacteria and viruses).
    - They are not to be taken internally or used on the skin.
    - It is important that you check that the selected disinfectant is suitable for the surface(s) that wish to disinfect.
- Wear disposable gloves to clean and disinfect. Visiting groups should bring their own gloves.
- Clean first with detergent and water before using disinfectant to remove visible dirt and reduce the number of microorganisms.
- Ensure more regular cleaning of frequently touched surfaces (e.g. tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, sinks, etc)
- Discard disposal items such as gloves and wipes immediately after use
- Clean reusable cleaning items such as buckets after use
- Wash hands with soap and water when cleaning is completed

Cleaning steps



1. Wear gloves when cleaning. Gloves should be discarded after each clean. If it is necessary to use reusable gloves, gloves should only be used for COVID-19 related cleaning and should not be used for other purposes or shared between workers. Wash reusable gloves with detergent and water after use and leave to dry. Clean hands immediately after removing gloves using soap and water or hand sanitiser.
2. Thoroughly clean surfaces using detergent and water. Always clean from the cleanest surfaces to the dirtiest surfaces. This stops the transfer of germs to cleaner surfaces and allows you to physically remove and dispose of the largest possible amount of germs.
3. If you need to use a disinfectant, clean the surface first using detergent then apply a disinfectant or use a combined detergent and disinfectant. A disinfectant will not kill germs if the surface has not been cleaned first. Apply disinfectant to surfaces using disposable paper towel or a disposable cloth. If non-disposable cloths are used, ensure they are laundered and dried before reusing.
4. Allow the disinfectant to remain on the surface for the period of time required to kill the virus (contact time) as specified by the manufacturer. If no time is specified, leave for 10 minutes.

	Small groups	Large groups*	Cleaning staff
Door handles, taps, toilet flushes and doors, shower taps, tables, sanitiser dispensers, fridge handles, stair rails, chairs, lab benches and other frequently touched surfaces	Clean and disinfect on arrival, before departure and at least daily.	Clean and disinfect on arrival, before departure and at least daily. Multiple times a day as required (e.g. after using tables each session)	Clean and disinfect before a group visit.
Equipment (e.g. microscopes)	Clean and disinfect before and after using.		n/a
Food preparation areas and cooking equipment/utensils	Cleaned with a detergent based product before and after using.	Before and after using: Clean with a detergent based product before and after using. Sanitised with a food grade sanitiser (at the appropriate concentration so that it effectively sanitises but can be used for cooking/eating after the sanitiser dries without the need for further rinsing).	Surfaces cleaned and disinfected
Fridges	Clean and disinfect on arrival and before departure.		Spot cleaning
Ablutions and kitchen floor - surfaces other than frequently touched surfaces	Mop with detergent based cleaning on departure		Clean and disinfect before a group visit

7.6 Contactless payment

- Payment for all Smiths Lake bookings is online via UNSW Webpay.
- After the visit, an invoice is emailed with a link to the payment system

7.7 Record keeping

~~The field station uses the NSW Government QR check-in system. The group leader must ensure all guests check-in and out using the QR code.~~

Check in via NSW Government QR code is not required (as of 26/04/2022)

7.8 Booking changes

- Bookings may be cancelled at any time due to changes in Government or UNSW guidelines or due to suspected/confirmed cases.

End of Document