

Field Safety Guidelines
College of Agriculture and Life Sciences
Cornell University

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Background: Fieldwork and field trips are an important part of teaching and research for the College of Agriculture and Life Sciences at Cornell. Most fieldwork and field trips require travel to remote areas where individuals may be away from normal support services.

Purpose: These guidelines are intended to help you plan and prepare for health and safety problems you might encounter in the field. CALS faculty, staff and students should be properly trained, equipped, and prepared to assess and minimize risk and provide aid to themselves and their colleagues.

Note: Specific first aid procedures are not covered in these guidelines. A first aid kit and manual should be carried on all fieldwork trips, and should be referred to in case of injury or illness. See page 5 for more information on first aid kits.

Trip leaders should consider taking a First Aid/CPR class offered by the American Red Cross and other local providers.

In An Emergency

- An emergency can arise at any time - be prepared!
- Every trip leader should know the local number(s) to call for emergency assistance.
- Every trip leader should also be aware of the Cornell department contact in the event of a trip-related emergency.
- Therefore, every trip leader should complete *Appendix D: Emergency Information for Field Location* before beginning any trip of any distance away from the central campus.
- See pages 10-11 for more information about Emergency Procedures.

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Cornell University Field Programs

Cornell University units operate three types of field programs: permissive programs, collaborative programs, and extension programs.

Permissive programs are those programs where Cornell is merely an intermediary between students and travel programs owned or operated by other entities. Our involvement should not go beyond the posting of flyers or making travel opportunities known to students. Typically, we have no direct or indirect liability for the planning or operation of these programs.

Collaborative programs are those programs where there is some verbal or written agreement between Cornell and another organization for the conducting of a travel program. Typically, to be considered in this category, Cornell would not be responsible for the structure, content or staffing of the program. Units should contact the Department of Risk Management and Insurance and/or University Counsel for review and approval of all agreements.

Extension programs are those programs sponsored and operated by Cornell as an extension of campus. Typically, these are programs where we may lease or own facilities, plan and operate the academic activities, or employ faculty or other staff. This category includes "resident instruction" classes that have an outdoor laboratory and/or field trip component. In these cases, Cornell may be directly and/or indirectly liable for the planning or operation of the program.

Insurance

Student Insurance Requirements

1. All program participants are required to have adequate accident and medical insurance that will provide coverage at their off-campus location.
2. All student participants traveling outside the United States are required to have medical evacuation and repatriation insurance.

Students admitted to Cornell are required to have Accident and Medical insurance and must complete a waiver form or purchase the Cornell plan. For students who do not purchase Cornell's plan, their insurance may not be able to respond everywhere in the world and they may have no coverage once they leave a specific area. Faculty should advise students that they should check with their own plan to make sure it can respond in the area that is visited.

University Insurance Requirements

The Department of Risk Management and Insurance is the only department at the University that is authorized to purchase insurance on behalf of the University. Units are encouraged to contact the Department to discuss their insurance needs. There are four primary areas that need coverage. They are:

1. Property leased or owned by Cornell University. The University requires both a liability insurance policy and a property insurance policy to protect the University from loss. Generally, the University's liability policy is available to respond to incidents worldwide. For property insurance, units will normally be responsible for the deductible of \$500 for covered and insured property damage.
2. Portable property (computers, scientific instruments, etc.) must be reported to the Risk Management and Insurance Department to obtain coverage under the University's All Risk Program.
3. Vehicles owned by Cornell University should be covered by a business auto insurance policy. Please refer to the rental vehicle policy for additional details on purchasing the appropriate coverage for your rental car.
4. Workers compensation insurance for employees permanently stationed at overseas locations. Employees on temporary assignments are covered by the same policy as when they are in the States.

Caution: The University does not cover the personal property of faculty, staff or students.

Before You Go

Proper planning is critical to a successful program. Planning should include the program curriculum, housing, travel, cultural considerations, known hazards, and the engaging of service providers. In all aspects of the planning process, units should be mindful of the health and safety of the participants. In particular, units should:

- Avoid planning or promoting un-sponsored events.
- Clearly identify sponsored events and participants "free time."
- Provide adequate supervision and only sponsor activities that are a) appropriate for the venue, b) appropriate for the knowledge and skill of the participants, c) consistent with the educational mission of the University and your department.
- Provide information to students that will allow them to be successful in their off-campus activities. This information should include: a) basic information as to what to pack, b) cultural information and customs, c) what they can expect from the experience, and d) local laws, passport, medical services, and emergency information.
- Meet the US standard for safety or the local standard if it is higher than the US one.
- Screen students for their qualification to participate by evaluating the candidate.
- Ask University Counsel and Risk Management and Insurance to review all contracts prior to signing.
- Develop a crisis management plan to deal with student and staff injuries and property losses.
- For trips off Cornell property, ensure that students sign a release statement at the trip orientation meeting.
- Ensure that students meet all the insurance requirements prior to leaving campus or Cornell property. Faculty should advise students that they should check with their own insurance plan to make sure it can respond in the area that is visited.

Before you go, consider each of the following items:

- Learn about potentially hazardous plants, animals, terrain, and weather conditions in the area where you will be working. In addition to these guidelines, the CALS Occupational and Environmental Health office, Cornell Environmental Health and Safety, your supervisor/sponsor, other fieldworkers, local residents, and authorities, such as state park personnel, may be able to provide you with helpful information.
- Make yourself aware of local resources – for emergencies and non-emergencies. Consider medical care, vehicle repair, supply stores, food stores, etc.
- Prepare a written plan of your trip, and leave this with a responsible party (see Appendix A, Fieldwork Plan). Include the following:
 - Who: names, addresses and phone numbers of all trip leaders and fieldwork participants
 - Emergency contact information
 - Your itinerary: locations, arrival and departure dates and times
 - Activities: general nature of activities being conducted
 - Local contacts: Names and phone numbers of people at or near your fieldwork site who can reach you if necessary. Fieldworkers should check in with their home office regularly, and should advise that office of any changes in schedule or points of local contact. If possible, fieldworkers should also inform someone in their work locale (for example, local search and rescue personnel, police, sheriff, or motel employee) each day about the daily fieldwork location and the approximate time of return. After each day's work, the field workers should notify the contact when they return. The local contact should be provided with the telephone numbers of people to call (e.g., home office) if the workers do not return or report in within a predetermined interval of the scheduled return time.
 - Any individual or group traveling outside the United States should check in with the American embassy in the host country. Embassy contact information can be found on the U.S. State Department website, listed in the "Resources" section of this document.
- Identify any special requirements or special skills required for participation on the trip.
- Ask all participants to advise you any special disabilities, problems or needs that may need to be accommodated.
- Ask all participants to carry their own health insurance card, emergency contact information, and any personal medications.
- Take a CPR/First Aid class. Contact the American Red Cross or other local provider for more information.
- Assemble safety provisions and check everything before you leave (see Appendix B, Safety Preparation for Fieldwork – Checklist). Safety provisions may include:
 - First aid kit and first aid manual. These should be taken on any trip.

- Medications and allergy treatments
 - Appropriate clothing to prevent hypothermia or heat illness
 - Sunscreen
 - Clean drinking water
 - Water purification tablets or filter devices
 - Personal protective equipment for fieldwork activities (e.g., safety glasses or goggles, gloves, hard hat, steel-toed boots, etc. Environmental Health and Safety can recommend personal protective equipment depending on your activities.)
 - Vehicle safety kit (Appendix C, Vehicle Checklist)
 - Two-way radio or cellular phone
- Whenever possible, fieldwork activities should be done in teams of at least two people. The “buddy” system is the safest way to work.
- Ask your health insurance provider about how your coverage applies to medical treatment in the fieldwork locale, should that become necessary.
- Check the weather forecast for the area you will be visiting.
- Be aware of local hunting seasons. Wear “safety orange” when working outdoors during a local hunting season.
- Plan for emergencies, including theft, illness, vehicle emergency, weather delays, vandalism, etc. Complete Appendix D, Emergency Information for Field Location, before leaving and keep it with you at all times.
- Communicate your itinerary (see Appendix A, Fieldwork Plan) and expectations to all trip participants in advance. All participants should know the locations of emergency equipment and basic emergency procedures.
- You may not expect adverse situations, but you should always anticipate them.

Medical Care and First Aid

Emergency Medical Care

The following guidelines apply to all off-campus operations including field stations, academic field trips, excursions, etc., which involve employees and/or students:

- A first aid kit must be maintained at all times during the operation or exercise or at the remote field station (see information below, First Aid Kits).
- At permanent CALS field stations, arrangements for emergency medical treatment should be clearly arranged and posted where all visitors may find them, e.g., near the phone.
- For field trips and other fieldwork, travel with a cellular phone or 2-way radio, and carry a list of emergency phone numbers (see Appendix D, Emergency Information for Field Location).

If a CALS employee suffers a job-related injury or illness, his/her supervisor must complete a Cornell University Accident Report within 24 hours after the injury or illness is first reported.

A sick or injured student should seek medical attention as soon as possible and call his/her parents if and when appropriate. Other students, involved in an incident but not directly injured, should carefully follow any direction given to them by the Cornell staff person in charge. This may include seeking help, assisting staff, and getting themselves out of harm's way.

First Aid Kits

First aid kits are required for all off-campus operations. CALS departments must purchase and maintain first aid kits. Contact Gannett Health Center if special equipment or medication is needed. Kits and refills may be ordered from the Cornell Distribution Center or from safety supply companies. Environmental Health and Safety or CALS Occupational and Environmental Health can supply a list of vendors.

Vehicle Safety

Cornell University Policy 3.4, Use of Cornell Vehicles, provides administrative details for authorizing drivers of owned, rented or leased by the University for official business. Items addressed include: the driver's obligations, the department's or unit's obligations, and procedures for reporting accidents and damage.

General

- Always notify someone of your itinerary. Know your routes and carry maps. Complete Appendix A, Fieldwork Plan.
- Drivers should familiarize themselves with the vehicle and vehicle controls before driving.
- Carry a first aid kit and manual in the vehicle at all times.
- Use seatbelts at all times – during both road and off-road travel.
- Make sure you have an adequate number of approved drivers for longer trips to allow sufficient rest for drivers. The alternate driver should not sit in the passenger seat; the alternate driver will get more rest in another seat in the vehicle. The front seat passenger should stay awake, monitor the driver for signs of fatigue, and navigate for the driver.
- Generally, drivers should avoid driving more than 2 hours continuously. Drivers should rest and/or rotate every 2 hours.
- Drivers should avoid driving between midnight and 6 a.m. In some areas, drivers should be extra cautious and drive only during daylight hours.

- Perform your own safety inspection of the vehicle before leaving (see Appendix C, Vehicle Checklist).
- If pulling a trailer, check brake lights and turn indicators on the trailer to be sure the electrical connection between the vehicle and the trailer is working properly.
- Multi-vehicle groups should be able to communicate between vehicles or have pre-designated meeting areas to gather if vehicles become separated.
- All weights, compressed gas cylinders, and other heavy or large items shall be secured in the vehicle. Gasoline and other hazardous materials should be transported in leak-proof containers and secured to prevent movement.

Off-Road Travel

- Be aware of the following off-road hazards:
 - barbed wire and bailing wire, which can be picked up and wrapped around the vehicle axle
 - animals (cattle, deer, etc., especially at night)
 - objects such as logs, rocks, etc. which can damage the vehicle or cause hang-ups
- Know what is around the vehicle before moving it in locations such as woods and marshes.
- Use care in crossing dry and wet washes and attempting 4WD roads.
- Consider carrying the following if off-road operation is anticipated:
 - shovel.
 - axe or chain saw (for removing downed trees).
 - hand winch or come-along (for removing stuck vehicles).
 - fire extinguisher, which should be securely mounted and easily accessible.
- If you get stuck in sand or soft sediment, you can let some air out of your tires for better traction.
- Beware of approaching storms when traveling on dirt roads.
- If you plan to be in a very remote area, carry some survival gear in the vehicle, e.g., sleeping bags and extra food.
- Wear helmets and goggles when operating ATV's or snowmobiles.

Boats

Carry the following equipment when working with small boats (see Appendix E, Boat Checklist):

- Spare tire for trailer
- Paddles or oars
- Push pole

- Anchor and line
- Personal flotation devices (one per person, should be worn at all times) and cushion life preservers
- Gas tanks, hoses
- Oil for gas
- Credit cards
- Keys for boat and motor locks, on floating key ring
- First aid kit and manual
- Tool kit
- Spare motor
- Distress flares or other visual distress signals
- Bailing device
- Fire extinguisher
- CB radio, marine radio, or cellular phone
- Nautical map

A knowledgeable operator should train any employee or student using a boat. Training should include procedures for trailering, gassing the boat, launching, starting the motor, driving the boat, and emergency procedures.

Always file a float plan (see Appendix F). The plan should include the launch point, destination, routes traveled, and the latest expected return time. File the float plan with your department office or another local contact at the launch point. Leave a copy of the float plan in your vehicle.

Pests

A number of vertebrate and invertebrate pests may be encountered in fieldwork. Sometimes, these encounters are the objective of the field research. Contact with living and dead plants and animals, both benign and potentially injurious to humans, may be a normal and routine part of fieldwork. However, reasonable caution should always be the guide. Appropriate gloves and skin covering should always be worn, if at all practical for the activity at hand.

Some encounters are never the objective of fieldwork, and can be avoided by following these guidelines:

- Keep garbage in rodent-proof containers and stored away from your campsite or work area. Food crumbs and debris may attract insects and animals.
- Thoroughly shake all clothing and bedding before use.
- Do not camp or sleep near obvious animal nests or burrows.
- Carefully look for pests before placing your hands, feet or body in areas where pests live or hide (e.g., woodpiles and crevices).
- Avoid contact with sick or dead animals.

- Wear clothes made of tightly woven materials, and tuck pants into boots.
- Wear insect repellent.
- Minimize the amount of time you use lights after dark in your camp or work site, as they may attract pests and animals.
- Use netting to keep pests away from food and people.
- Carry a first aid manual and kit with you on any excursion so you can treat bites or stings. If the pest is poisonous or if the bite does not appear to heal properly, seek medical attention immediately.
- Be aware of the appearance and habitat of pests likely to be found.

Other Biological and Environmental Hazards

In addition to pests, other fieldwork exposures can be hazardous. Some of the potential hazards are described in more detail below.

Poison Ivy. The poison ivy plant has shiny, green leaves in groups of three and a red stem. The oils in the plant can cause an allergic reaction that results in various forms of dermatitis. Symptoms usually appear within 1-3 days of exposure, but may appear as long as 3 weeks later. Redness and extreme itching are the first signs, which are then followed by a rash. The rash may last 1-2 weeks. Reactions can vary from very mild to very severe, sometimes even requiring hospitalization.

Prevention: Learn to identify the poison ivy plant, and then avoid it as much as possible. Cover skin with clothing – including long sleeves, long pants, shoes and socks – when doing any work or travel through natural areas where poison ivy may be present.

Impure water. A variety of potentially harmful organisms and pathogens can live in water sources such as streams, lakes and rivers. Drinking impure water can cause gastrointestinal problems, hepatitis, giardia and certain viral diseases.

Prevention: If you are not near a municipal or treated water source, then you should carry your own water. If you must drink water from an untreated water source, treat the water first by using water purification tablets, by boiling it for three minutes, or using a commercial purification filter (available from sporting goods stores).

Exposure to the elements – sun exposure. Sun exposure increases your long-term risk of developing skin cancer. Some medications can make the skin more prone to burning.

Prevention: Wear appropriate clothing, including a long sleeve shirt and long pants, a hat and sunglasses. Wear sunscreens. These should be applied liberally and often. Sunscreens applied in advance of sun exposure in addition to during the exposure will be more effective. On days when the sun is extreme, confine your work hours to the early morning and late afternoons as much as possible.

Exposure to the elements – heat exhaustion, heat stroke. Heat exhaustion can effect anyone, even those in excellent physical condition. It is caused by an excessive fluid loss combined with high body temperature. Signs of heat exhaustion may include headache, fatigue, excessive thirst, weakness, heavy sweating, and cool and clammy skin. If heat exhaustion is not treated, the victim can suffer heat stroke. Heat stroke is far more serious than heat exhaustion. It occurs when the body's cooling mechanisms fail, sweating stops, and the body temperature rises to dangerous levels. Signs of heat stork include a burning sensation in the muscles, hot skin, rapid breathing, small pupils, severe headache, and possible loss of vision, unconsciousness, or even seizures.

Prevention: Acclimatize yourself to working in the heat, slowly increasing the amount of time you spend in extreme heat. Wear loose cotton clothing and a hat. Drink plenty of water and don't rely on thirst to tell you how much. You should drink 4 to 8 ounces of water before heat exposure, and then 4 to 8 ounces every 15 minutes during exposure. You cannot consume too much water, but you can easily not consume enough. Salt tablets are not recommended for preventing dehydration.

Exposure to the elements – excessive cold. On any trip, even a one-day excursion, where sudden changes in weather can occur, adequate clothing must be worn or carried. Prolonged exposure to excessive cold can led to hypothermia, a lowering of the body temperature. Symptoms include shivering, numbness, slurred speech and excessive fatigue.

Prevention: Wear adequate clothing; long pants, a long-sleeved shirt or sweater, a windbreaker or down jacket, and a cap are the minimal essentials. In cold or icy weather, it is best to wear clothing made of material that will wick moisture away from the body (e.g., wool or polypropylene instead of cotton). Wear several layers of clothing to allow adjustment to differing levels of physical activity. Avoid getting damp from perspiration.

Diseases

Tetanus. Tetanus is a disease caused by the toxin of a bacterium, *Clostridium tetani*. Spores of the bacterium can enter the body through puncture wounds, lacerations, or burns that become contaminated with soil or excrement. This potentially fatal disease causes painful muscle contractions and spasms. The incubation period varies from four days to three weeks, depending on the extent and location of the wound.

Prevention: Fieldworkers should be sure that their tetanus immunizations are current, and should immediately perform first aid on any wound to prevent tetanus.

Rabies. Rabies is transmitted from rabid animals to humans through saliva, when animals bite or lick open wounds. There is no known cure for rabies; it is usually fatal. The disease attacks the nervous system; clinical symptoms of rabies infection include a sense of apprehension, headache, fever, and malaise. The disease progresses to paralysis and often includes muscle spasms when swallowing, which leads to hydrophobia. Eventually the infected person will undergo delirium and convulsions. The cause of death is respiratory paralysis. The period prior to onset of symptoms is typically between 3-6 weeks; however, there can be wide variations.

Prevention: Avoid contact with any wild animals, particularly sick or dead ones. Anyone whose work involves a risk of animal bites should consider immunization against rabies. If an animal bites you, perform appropriate first aid and seek medical attention immediately, even if you have been immunized.

Lyme Disease. Lyme disease is spread by the bite of an infected tick, with symptoms appearing within about one week. Symptoms include a donut-shaped red discoloration around the bite, joint pain, fever, chills, headache and malaise. Untreated Lyme Disease can appear to go away, only to return in more serious form later. Secondary stages can include heart complications and meningitis-like symptoms. Months to years later, an arthritis can appear, and the later stages can involve paralysis and dementia.

Prevention: Wear light colored, long pants and a long sleeve shirt when working in tick-infested areas. Tuck your pants into your socks. Check your clothing and your skin frequently. Use an insect repellent if it won't interfere with your fieldwork.

Hantavirus Pulmonary Syndrome (HPS). HPS is a zoonotic respiratory disease caused by a Hantavirus that is transmitted by mice. HPS is fairly uncommon and the chances of becoming infected are low. However, HPS is difficult to diagnose and treat, and has a relatively high fatality rate. The source of infection is breathing dust or aerosols containing feces, urine or saliva from deer mice. The most likely ways to acquire the disease are by entering or working in buildings where there has been a heavy mice infestation, by excavating rodent burrows or sites very near the burrows, or by directly handling the rodents or their carcasses. The buildings with highest risk are those that have been unoccupied for long periods (i.e., storage areas or seasonally occupied areas). Aerosols are made during the handling of live or killed rodents or their traps.

Prevention: When cleaning up mice feces from infested areas, use a HEPA-filtered mask or respirator. Also, wet mop, rather than sweep or vacuum, when cleaning buildings prior to use. Other barriers, such as eye protection, gloves, and outerwear, and modified practices for handling rodents and traps are also recommended where appropriate.

Standard Operating Procedures

Fieldworkers should develop written standard operating procedures (SOPs) for specific activities conducted in the field. Examples of activities requiring an SOP might include using a chain saw, electroshocking fish, trapping wildlife, and collecting water samples. CALS Occupational and Environmental Health and the department of Environmental Health and Safety should review written SOPs. As SOPs are developed, they will become shared resources that can be modified for individual projects.

Emergency Procedures

- Contact the local police or sheriff to report theft, vandalism or any other criminal activity.

- Contact the local emergency medical provider for medical emergencies.
- Report all hazardous materials spills to the Environmental Compliance Office (ECO), at 607-254-8722 during business hours. Report spills to the Cornell police (607-255-1111) after business hours.
- Report all injuries or illnesses to your supervisor. The supervisor or department head must complete a Cornell University Accident Report within 24 hours of notification.
- Report vehicle accidents to the local police department, the Department of Risk Management and Insurance, and your supervisor.

There are at least six different areas to be addressed in the event of a crisis. They are all interrelated. They are:

1. Emergency response and rescue.
2. Stress and psychological issues for students, faculty and staff (including rescue personnel) affected by the incident.
3. Post-incident responses: getting students home or back to campus, medical care, follow-up information, debriefing, etc.
4. Dealing with the family (University Crisis Management Team).
5. Dealing with the press (Cornell News Service).
6. Dealing with the legal and liability issues (Risk Management and Insurance; University Counsel).

Departments are required to develop a crisis management protocol for their off-campus activities that address each of these six areas. It is the unit's responsibility to notify the appropriate University service providers to timely address each area. Each of these areas requires a certain amount of information and follow-up effort.

References

Employee Safety Manual. Subtropical Agricultural Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture.

Field Trips: A Guide for Faculty and Staff. Bowling Green State University.
[<http://www.bgsu.edu/offices/riskmgmt/fieldtrips.htm>]

Proposed College of Natural Sciences Field Safety Policy. 20 July 1999. College of Natural Sciences, University of Texas at Austin.
[<http://www.utexas.edu/cons/safety/fieldsafety/policy.html>]

Safety Guidelines for Field Research. March 1996. Office of the Environment, Health and Safety. University of California, Berkeley.

[<http://www.ehs.berkeley.edu/pubs/fieldresearchsfty.pdf>]

Safety Manual. Louisiana State University. [<http://130.39.86.58/safman/sect8e.htm>]

Resources

On Campus

CALS Occupational and Environmental Health (OEH)

607-255-2557

<http://oeh.cals.cornell.edu/>**Department of Environmental Health and Safety (EH&S)**

607-255-8200

<http://www.ehs.cornell.edu/>**University Health Services (Gannett Health Center)**

607-255-5155

<http://www.uhs.cornell.edu/>**University Health Services – Travel Medicine Department**

607-255-6954

<http://www.uhs.cornell.edu/Travel>**Risk Management and Insurance**

607-277-1188

University Counsel

607-255-5124

Crisis Management

607-255-1111

<http://www.cupolice.cornell.edu/Crisis.htm>

Off-Campus

American Red Cross

Tompkins County: 273-1900

Phone numbers for other chapters of the American Red Cross can be found in local telephone directories.

Tompkins County Health Department: 274-6674

Phone numbers for other county health departments can be found in local telephone directories.

Centers for Disease Control and Prevention Travel Information<http://www.cdc.gov/travel/travel.html>**U.S. State Department/ Bureau of Consular Affairs (list of US Embassies & Consulates)**<http://travel.state.gov/>**U.S. State Department Travel Warnings**http://travel.state.gov/travel_warnings.html

Appendix A: Fieldwork Plan

File this fieldwork plan with your department office or another local contact.

Date: _____

Trip Leader(s): _____

Names and emergency contact numbers for all participants, including trip leaders (attach list as necessary):

| <u>Name</u> | <u>Emergency Contact Person</u> | <u>Emergency Contact Phone #</u> |
|-------------|---------------------------------|----------------------------------|
|-------------|---------------------------------|----------------------------------|

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Itinerary

Departure Location (“Home”): _____

Departure Date/Time: _____

Destination: _____

Routes: _____

Expected return (date, time): _____

Latest expected return “Home” (date, time): _____

Briefly describe field activities and locations: _____

Check-in/Check-out arrangements, with local contact or home office: _____

Local contacts near field location:

| <u>Name</u> | <u>Address</u> | <u>Phone #</u> |
|-------------|----------------|----------------|
|-------------|----------------|----------------|

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
|-------|-------|-------|

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
|-------|-------|-------|

Accommodations for overnight trips (facility, phone number): _____

Appendix B: Safety Preparation for Fieldwork - Checklist

- _____ Fieldwork plan (Appendix A) completed and filed
 - Filed with whom? _____
- _____ Checked weather forecast
- _____ Vehicle safety kit (Appendix C)
- _____ First aid kit and first aid manual
- _____ Two-way radio or cellular phone
- _____ Extra food and water
- _____ Water purification tablets or filter devices
- _____ Sunscreen and hat
- _____ Winter weather gear, including extra clothing and blankets if overnight
- _____ Personal protective equipment (PPE) for work tasks. List PPE below:
 - _____
 - _____
 - _____
 - _____
 - _____
 - _____
- _____ Medications/allergy treatments
- _____ Immunizations current
- _____ Limitations – physical and medical – of anyone in the field party

Appendix C: Vehicle Checklist

Check the vehicle:

- _____ Headlights, Tail lights
- _____ Turn indicators
- _____ Mirrors
- _____ Brakes
- _____ Acceleration
- _____ Steering
- _____ Spare tire (two may be necessary)
- _____ Tire inflation
- _____ Tire condition
- _____ Jack and other functional tire-changing tools
- _____ Door locks
- _____ Fuel level
- _____ Water level
- _____ Transmission fluid
- _____ Oil
- _____ Power brake fluid
- _____ Window washing fluid
- _____ Windshield wipers

Pack the following in a vehicle safety kit:

- _____ Traffic warning devices
- _____ Fire extinguisher (charged and inspected)
- _____ Appropriate road maps
- _____ Flashlight with fresh batteries
- _____ Communication equipment (CB, cellular phone)
- _____ Chains
- _____ Flares
- _____ Clean and filled water jug or cooler, particularly for summer trips

Plan ahead for fuel stops. Know:

- _____ Fuel capacity
- _____ Fuel consumption rate
- _____ Distance you are traveling

Appendix D: Emergency Information for Field Location

Fill in the requested information for the area where you will be working. Keep this form in your field notebook or first aid kit.

Phone Numbers

Ambulance:

Sheriff:

Police:

Hospital:

Fire:

Nearest Cornell facility:

Home office contact:

Home office alternate contact:

Other:

The address or description of the location where you are working (to provide to emergency responders): _____

Appendix E: Boat Checklist

- _____ Spare tire for trailer
- _____ Paddles or oars
- _____ Push pole
- _____ Anchor and line
- _____ Personal flotation devices (one per person; should be worn at all times) and cushion life preservers
- _____ Gas tanks, hoses
- _____ Oil for gas
- _____ Credit cards
- _____ Keys for boat and motor locks, on floating key ring
- _____ First aid kit and manual
- _____ Tool kit
- _____ Spare motor
- _____ Distress flares or other visual distress signals
- _____ Bailing device
- _____ Fire extinguisher
- _____ CB radio, marine radio, or cellular phone
- _____ Nautical map

Appendix F: Float Plan

File this float plan with your department office or another local contact at the launch point. Leave a copy of the float plan in your vehicle.

Date: _____

Trip Leader(s): _____

Names and emergency contact numbers for all participants, including trip leaders (attach list as necessary):

| <u>Name</u> | <u>Emergency Contact Person</u> | <u>Emergency Contact Phone #</u> |
|-------------|---------------------------------|----------------------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Itinerary

Launch Point: _____

Launch Date/Time: _____

Destination: _____

Routes: _____

Expected return (date, time): _____

Latest expected return to launch site (date, time): _____

Briefly describe field activities and locations: _____

Check-in/Check-out arrangements, with local contact or home office: _____

Local contacts near field location:

| <u>Name</u> | <u>Address</u> | <u>Phone #</u> |
|-------------|----------------|----------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Accommodations for overnight trips (facility, phone number): _____
