

CONNECTICUT FOREST BIRD STUDIES – FIELD SAFETY PROTOCOLS

Please read the following information and review it frequently. This document and any important fact sheets will be available in a field manual binder, copies of which will be placed in the lab and in the field vehicle.

FIRST AID AND INJURIES

Each field team should have a first aid kit. The main kit should be kept in the field vehicle; a smaller kit should be kept with the field gear for taking into the field. You should know where the first aid kits are at all times. If you do not know where the first aid kits are, then ask your coworkers and if they cannot be located contact the local PI (Eliza Grames or Chris Elphick) immediately. Each field crew leader should check each of the first aid kits frequently to ensure that they contain all basic supplies. If anyone gets injured in any way while doing research work, first take care of the injury, and then contact your supervisor and/or the PI (Chris Elphick) as soon as is possible. If you do not have contact information for these people, make sure you find it out now. All phone numbers and email information will be on the inside cover of the field manual, copies of which should be kept in the field vehicle and in the lab. If someone sustains an injury while conducting field work, it is likely that Worker's Compensation forms will need to be filled out – UConn employees should talk to Madeline Hennessey for details (860-486-4319; madeline.hennessey@uconn.edu) as soon as possible after the injury occurs. You should also mention that it is an employment-related injury when seeking treatment. If an injury occurs during animal handling, then the injury also should be reported to the Department of Environmental Health & Safety (EH&S; 860-486-3613). A copy of the EH&S document "First Aid Instructions for Animal Handlers" should be kept with each first aid kit. If you have not read this document, then you should familiarize yourself with it before going into the field. It can be found as Appendix 1 of the document posted here: <http://www.ehs.uconn.edu/Biological/ahp.pdf>. UConn students should be aware that they can seek treatment at the UConn Student Health Services. SHS can also help with Worker's Comp if a student is also a UConn employee.

ANIMAL HANDLING SAFETY

Personnel working on this project may need to handle wild birds as part of the research. This requires that you know the potential risks associated with exposure to feathers, bird feces, avian diseases, and in some cases blood. All personnel should read and familiarize themselves with the following documents describing the University's Occupational Health and Safety Program for Animal Handlers before they handle any animals: <http://www.ehs.uconn.edu/Biological/ahp.pdf>.

Staff should also do the following training sessions organized by EH&S (or seek equivalent training from the local PI, as appropriate):

- General Biological Safety in Animal Research (required for anyone who will work around animals): <http://www.ehs.uconn.edu/training/schedule/BioTrainingSchedule.php#4>
- Institutional Animal Care and Use Committee (IACUC) training (required for anyone who will handle animals): <http://iacuc.uconn.edu/training.html>

Shipping and Transportation of Biological Samples (required for anyone who will be transporting, by vehicle or mail, any biological sample—e.g., blood, eggs, salvaged animals, etc.): <http://www.ehs.uconn.edu/Biological/BioTransport.pdf>

Feather allergies: Feathers can cause allergies and this has been a problem for people working with poultry and other birds in laboratory settings. All of our work will take place outside in well-ventilated

areas, so the risk is very minimal. Nonetheless, personnel should be aware that feather allergies exist and if they begin to suspect that contact with birds is generating adverse effects, they should consult a doctor (UConn students can contact SHS).

Zoonotic diseases: Like people, any wild animal is potentially infectious and all personnel should be alert to the need to observe captured individuals for any unusual appearance or behavior. The risk of infection however is very small and basic hygienic practices should reduce the risk further. All personnel handling birds should use hand sanitizer after handling each individual bird.

The Ornithological Council—a consortium of 11 scientific ornithological societies in the Western Hemisphere—has prepared a fact sheet that covers avian influenza, West Nile virus, and other zoonotic diseases likely to be carried by wild birds. This fact sheet is updated regularly and documents current evidence-based recommendations related to the safe use of wild birds in research. It thus represents currently accepted best practice within the field of ornithology. All personnel should read this document and familiarize themselves with its contents. The fact sheet can be found here:

<http://www.nmnh.si.edu/BIRDNET/documents/WNV&H5N1-FactSheet.pdf>

Additional information about avian influenza can be found here: <http://www.cdc.gov/flu/avianflu/>

Basic practices that should be adhered to when doing any work that involves handling wild birds include:

- No eating and drinking while handling birds.
- Use antiseptic hand sanitizer or wipes frequently while in the field. Developing a habit of using them after handling each bird is ideal as it makes it a standard part of your routine, while potentially reducing the risk of transmitting bacteria among birds.
- Wash your hands with soap* and warm water as soon as possible after coming in from field work.
- Avoid direct contact with bird feces as much as possible. Use antiseptic sanitizer/wipes after contact.
- Take special care to avoid needle sticks when taking blood samples (see below).
- If you become ill during the period that you are handling birds, be sure to tell your doctor. After controlling bleeding, cleaning, and covering, seek medical attention immediately for any cuts, puncture wounds, needle sticks, or other wound associated with animal handling.

* Note that “antibacterial” soap is NOT necessary. According to the CDC, there is no evidence for an additional health benefit and there are concerns that unnecessary use of certain antibacterial chemicals contribute to antibiotic resistance. For more information on this topic see this article on the CDC web site: http://www.cdc.gov/ncidod/eid/vol7no3_supp/levy.htm

And this systematic review of the evidence:

http://cid.oxfordjournals.org/content/45/Supplement_2/S137.short

GENERAL FIELD WORK SAFETY

Most of our field work requires no greater risks than are encountered when hiking, camping, bird-watching, gardening, or conducting many other outdoor activities. Nonetheless, it is important to be aware of certain hazards. Forested areas can have uneven ground, steep slopes, and loose, rocky areas. Wear proper footwear at all times, and test your footing while hiking. Avoid travel on steep slopes and rocky slopes and avoid cliff edges. Do not attempt to cross rain or snowmelt-swollen streams or rivers. Do not drink untreated water; all water sources carry the risk of giardia. Take plenty of water to avoid dehydration. Never go into remote areas alone. Even when collecting data in well-travelled areas, make sure that someone always knows where you are going each data, and establish a system whereby you

will inform them when you expect to be done with field work and you will text/call them as soon as you are done for the day.

Black bears. Black bears are the only species of bear found in Connecticut. Preventing an encounter with a black bear is best. This can be done by never approaching a bear, not getting between a mother and her cub(s), wearing a bell or other noisemaker, and staying away from the bear's food supply. Never run away from a bear, move slowly. Yell loudly and gather in a group to appear larger and more intimidating. If attacked DO NOT PLAY DEAD (this advice works for brown/grizzly bears, but is not appropriate for black bears). Instead, try to escape to a car or building. If this is not possible then fight back, focusing blows on the bear's face. For more information about bear safety see this National Park Service web site: <http://www.nps.gov/subjects/bears/safety.htm>.

Insect bites and stings. Field work entails frequent exposure to mosquito bites, and occasional exposure to other biting and stinging insects. Personnel should take reasonable measures to reduce their exposure, by wearing protective clothing such as long sleeve shirts, long pants, and socks. Insect repellents should also be used as required.

Ticks and tick-borne disease. Lyme-disease carrying ticks are found in vegetation across the region. Follow standard precautions and check yourself carefully for ticks EVERY day. Familiarize yourself with symptoms of Lyme disease (which does not always produce a "bull's eye mark"). Lyme disease, and other tick-borne diseases, can lead to very serious illness. For more information see the websites below: <http://www.cdc.gov/lyme/>
<http://www.cdph.ca.gov/HEALTHINFO/DISCOND/Pages/TickBorneDiseases.aspx>

Poison ivy. Care should be taken to avoid exposure of poison ivy to skin and clothes. If you are not familiar with poison ivy then ask for help learning how to identify the plant. Additional information on the plant, its potential effects, and precautions you can take, are provided here: <http://www.cdc.gov/niosh/topics/plants/>

UV exposure. To reduce risk, wear long-sleeved clothing, a hat, sunglasses, and apply sunscreen at regular intervals. When banding birds, a temporary banding station will be created with a beach umbrella as necessary to provide shade both to the birds and to you while banding.

Thunderstorms. Summer thunderstorms are not infrequent during the field season. Check the weather forecast daily and be aware of changing weather conditions. They can bring heavy rain, hail, and lightning. If lightning or hail are likely where you plan to work, consider rearranging the work schedule so that you can visit a different field site. If the risk cannot be avoided, or if a storm develops while in the field, then cancel field work until the risk passes. Get away from peaks, passes, ridges, caves, water, and open areas. Seek shelter in low, forested areas. Avoid lone, tall trees. Similarly, avoid field work in the forest during wind storms strong enough to risk bringing down trees or large branches.