

The Louis Calder Center Handbook

2018

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Welcome to the Louis Calder Center

The Louis Calder Center (LCC) is the biological field station of Fordham University and is located just 25 miles north of New York City. The LCC consists of 113 forested acres with a 10 acre lake. We are one of the few field stations in North America with relatively undisturbed communities near a large urban center. The staff at the LCC is here to facilitate your research needs and help to make your time at the station as productive as possible.

We, the staff at the LCC, welcome you.

Dr. Tom Daniels, Academic Director

Mr. John Spaccarelli, Facilities Director

Ms. Alissa Perrone, Assistant Director

Ms. Petra Del Valle, Administrative Assistant

Mr. Michael Lambros, Facility Caretaker

About the Field Station

The Louis Calder Center property, located in Armonk, New York, is a protected, forested research station, which was previously a private estate named “Rockmoor”, owned by Louis Calder. Calder was born in Manhattan in 1879 and became chairman of the Perkins Goodwin Company, a paper manufacturing and marketing firm. He later originated one of the first drive-in, metered gasoline service stations in the country, under the name of Kesbec Oil Company, which was later sold to Standard Oil. Louis Calder died in 1963 and in 1967 the Calder family, through its charitable Calder Foundation, generously donated the estate to Fordham University, formally establishing the Louis Calder Center (LCC).

The Calder Center is just 45 km north of the center of New York City, in the middle of a 130 km-long urban-to-rural land-use transect (Urban-Rural Gradient) running from NYC to western Connecticut. In addition to supporting the longest continuous ecological field study of deer ticks in the country, Calder’s mix of habitats in a largely suburban location has provided students at several levels (doctoral, masters, undergraduate, and high school) opportunities to conduct experimental manipulations in natural systems, test ecological theory, and quantify the impacts of human disturbance on the land.

The field station encompasses seven major buildings that provide laboratory and office space, classroom and student study areas, and an administrative building. Research and educational facilities are contained within six of these: the Routh House, the Lakeside Lodge, McCarthy Laboratories, Calder Hall, and two greenhouses. The Vector Ecology Laboratory, a joint NY State Dept. of Health and Fordham research lab staffed by two of our faculty members is located in the Routh House. Calder Hall houses an ecological library for use by students and researchers. All buildings are connected to Fordham’s main campus in the Bronx via high-speed cable connection; internet access is achieved by both wired and wifi connections. An internet-based video conferencing space enables meetings and research collaborations across all campuses, and globally.

Mission

The Calder Center supports scientific and interdisciplinary research in ecology, evolution, and conservation. The station is in close proximity to New York City, providing opportunities to study the connections between human actions and the changing landscape using laboratories integrated within a field environment. We provide hands-on education for students of diverse backgrounds and academic levels. Our researchers engage the broader community in scientific understanding of the environment.

This handbook provides primary information to station users regarding guidelines and resources available at the Louis Calder Center. Any suggestions to improve this document are welcome.

Fordham University and Louis Calder Center Policies

We ask that all Fordham University and Louis Calder Center policies be observed while visiting and residing at the station. The policies, procedures, and fees of LCC are subject to change without prior notice. The station administrators reserve the right to update any LCC policies and add additional ones at any time. All visitors will be responsible for observing any and all updates to Fordham and LCC policies. Violation of these policies may result in termination of the project or activity on the station and may affect permission for future use of the facility. Our staff's goal is to provide a safe, inviting, friendly, and productive environment for you to conduct your work.

Fundamental Code of Behavior

Everyone visiting, working and living at LCC should abide by an honorable and considerate code of behavior. This means showing respect for others, the natural resources and facilities at LCC. Station users should remember that the management staff has a responsibility to conserve the flora, fauna, and other natural resources of the LCC.

Rules of the Center

The Louis Calder Center - Biological Field Station is a facility of Fordham University. As such, the LCC is subject to the all the laws, rules, regulations, and policies applicable to the University. These include the University Code of Conduct, Alcohol and Drug, Firearm, Sexual Harassment/Assault and Housing policies. No firearms or other potentially dangerous devices or materials are permitted at the station. Station users are responsible for knowing and employing appropriate laboratory and field environment research procedures and regulations.

We expect all members of the station community to be treated with respect, and act responsibly and courteously toward each other. At Fordham, these standards spring from the Mission of the University, and are integral to the development of each student.

Pets

No pets are permitted at the station. In rare cases, and only with advance permission, the Director may make exceptions for long-term residents living in single-family dwellings.

Smoking

Smoking is not allowed in any station building.

Administrative Office

All visitors and guests should check-in at the office upon their arrival. The hours of the Administrative Office are (8:30 am – 4:30 pm, M-F) and is located in the Carriage House (see map on page 7). The Business Administrator (Petra Del Valle; pdelvalle@fordham.edu or 914-273-3078 ext. 33801) and the Assistant Director (Alissa Perrone; aperrone@fordham.edu or 914-273-3078 ext. 33802) can be reached at this office. The Academic Director's office (Tom Daniels; thdaniels@fordham.edu or 914-273-3078 ext. 33834) is located on the second floor of the Routh House. The Administrative Office is open year round except during University holidays.

All small to medium-sized packages are delivered to the Administrative Office. Packages scheduled for pick-up can be placed in the Administrative Office, as well. Mail slots for campus mail and USPS business mail are also located here. Faculty, student, and staff mailboxes are located in a mail shed just outside of the Carriage House (Administrative Office).

Directions

GPS Address: 31 Whipoorwill Road, Armonk, NY 10504

From I-684 north or south: Take Exit 3 (Armonk exit). Follow the ramp and turn right onto Route 22 south. Drive only about a quarter mile to the first traffic light: TURN RIGHT. You will go down a small hill, straight through a traffic light and past a cute village park (1 block), complete with a pond. Then the road will turn 90 degrees to the left: stay with it.

About another block's distance will get you to another traffic light: this is Main Street (Route 128). You will see a Citibank on the corner. GO STRAIGHT through this light. You are now on Whipoorwill East. Follow this road uphill about 1.5 miles until it ends. You will be at a T-Junction with a new road (Whipoorwill Road). TURN LEFT and drive about 0.1 mile to #31 Whipoorwill Rd. TURN RIGHT at this entrance. You are now on the Calder Center property. Follow the signs to the Administrative Office (Carriage House) to check-in.

Access to the Station

The LCC is privately owned by Fordham University. The electronic gate at the main entrance (31 Whipoorwill Road) remains open during regular business hours (8:30 am – 4:30 pm, M-F).

During non-business hours the electronic gate is closed and you must have the gate code to gain entry. This gate code is only given to individuals who work or live at the LCC. The gate code should not be given to guests, visitors or contractors. For authorized users, the gate code can be obtained at the Administrative Office.

Calder Map



Safety/Emergencies

In the case of a serious emergency, such as fire or personal injury, **dial 911**. The Calder Center's 'physical address' for emergency responders is 53 Whippoorwill Road, Armonk, NY 10504. Each of the main buildings is assigned a number to help guide the emergency responders. The following table lists building numbers.

Building	Number
Lodge	49
McCarthy	51
Student Cabin	55
Routh House	33
Calder Hall	34
Carriage House	35
Caretakers House	31
New Greenhouse	44
Old Greenhouse	43

Example: **Student Cabin Emergency**

- Call 911
- Give 53 Whippoorwill Road as the physical address
- State that you are in building # 55, the Student Cabin.

Contacts

Facilities Questions:

During Business Hours (8:30 am – 4:30 pm, M-F)

Petra Del Valle: (914) 273-3078 ext. 33801

Alissa Perrone, (914) 273-3078 ext. 33802

During Non-Business Hours/ **Emergencies* ONLY**

Mike Lambros: (917) 858-5204 (cell); 914-445-0046 (pager)

John Spaccarelli: (917) 807-9138 (cell)

*Emergencies are:

Fire Alarm

No power

No heat

No water

Non – Facilities / Academic- Related Business Questions:

Alissa Perrone, (914) 273-3078 ext. 33802

Thomas Daniels, (914) 273-3078 ext. 33834

Petra Del Valle, (914) 273-3078 ext. 33801

Building Access

Faculty and staff are issued keys to the buildings for which they need regular access but during business hours, all main research buildings remain unlocked. Graduate and undergraduate students must have their faculty mentor request keys for both building and individual lab access on their behalf through the Administrative Office (Petra Del Valle,

pdelvalle@fordham.edu), and sign a [Key Agreement Form](#) (see appendix). Key sharing is not allowed. For buildings with an active alarm system (i.e., McCarthy Building), below is the procedure for opening and closing these buildings. If you have any questions regarding the following procedures please meet with Petra Del Valle before you attempt to disable/enable the alarm for the first time.

Opening

McCarthy Building - After entering McCarthy building immediately go to the alarm pad, and **enter the code and press 1/OFF button**. The alarm will be disabled. Next, find the sign-in sheet and enter your name, the date, time and OPEN (in comments section) on the sign-in sheet. Alarm code must be obtained from the Administrative Office (pdelvalle@fordham.edu).

Lodge - After entering the Lodge immediately go to the alarm pad, and **enter the code and press ENTER button**. The alarm will be disabled. Next, find the sign-in sheet and enter your name, the date, time and OPEN (in comments section) on the sign-in sheet. Alarm code must be obtained from the Administrative Office (pdelvalle@fordham.edu).

Closing

McCarthy Building - Before leaving the McCarthy building enter your name, the date, time and CLOSED (in comments) on the sign-out sheet. Go to the alarm pad and **enter the code and press 2/AWAY button**, exit the building, shut and lock the door. You will have 30 seconds from the time you enable the alarm to lock the door.

Lodge - After entering the Lodge immediately go to the alarm pad, and **press COMMAND and then 1**. The alarm will be disabled. Next, find the sign-in sheet and enter your name, the date, time and OPEN (in comments section) on the sign-in sheet. Alarm code must be obtained from the Administrative Office (pdelvalle@fordham.edu).

Fire Alarm

If a fire alarm goes off, the Fire Department will be notified and automatically dispatched to the LCC, regardless of whether there is an actual fire or a false alarm. In the event of a fire all persons should immediately evacuate the building. DO NOT RESET THE ALARM. Contact the Caretaker (917-858-5204) to notify him of the alarm. If the fire alarm goes off accidentally then a [False Fire Alarm Report](#) (see appendix) should be submitted by the person who unintentionally set off the alarm. Submit the report to the Administrative Office ASAP (pdelvalle@fordham.edu).

Burglar Alarm

There are two buildings, the McCarthy Lab and the Lodge, at the LCC which are burglar alarmed. If the alarm goes off, the Police Department will be notified and automatically dispatched to the LCC, even in the event of a false alarm. If it is a false alarm, you must stay at the building until the officers arrives. IN EITHER CASE, please contact the Caretaker (917-858-5204) to notify him of the alarm.

Bats and Rabies

Although the number of human deaths from rabies is small, usually fewer than 5 per year nationally, most human cases are the result of infection with bat variants of the virus. While the vast majority of bats do not have rabies, fatal human cases typically have been the result of exposure to bites that were not recognized or went unreported.

Bats are common at the LCC and, occasionally, one does enter a building where people may become exposed to bites from infected animals. Below are guidelines from the NY State Dept. of Health to help determine what should be done if you encounter a bat at Calder:

Definition of Exposure to a Bat

Treatment should be considered for the following types of exposure to a rabid or untestable bat.

1. A bite (the primary route of exposure to the virus)
2. Scratches
3. Saliva or nervous tissue (e.g., brain tissue if the bat is injured in killing it) in contact with a mucous membrane (e.g., the eyes, nose, mouth) or break in the skin.

What Does NOT Constitute Exposure to a Bat

People can't get rabies just from seeing a bat in an attic, in a cave, at summer camp, or from a distance while it is flying. Even if a bat is found in a building, exposure would require physical contact that permits entry of the virus into the victim (see above). However, in some situations the level of exposure may not be known. Because people can develop rabies after unapparent exposures, rabies treatment is also recommended when there is a reasonable probability that exposure has occurred. Circumstances in which this could occur include:

1. Direct physical contact with a bat
2. Bat found in a room with a sleeping person
3. Bat found in a room with an unattended child
4. In some cases, bat found in close proximity to an unattended child outdoors
5. Bat found in a room with a person under the influence of alcohol or drugs or with other sensory or mental impairment.

Determining the Rabies Status of the Bat

It is often easier to determine the rabies status of the bat in question than it is to determine the likelihood of exposure. Since rabies is always fatal once symptoms have developed, it is prudent to CAPTURE THE BAT and call the Westchester County Health Dept. (914- 813-5000); they will collect the bat and submit it to the state Rabies Lab for testing in Albany. On average, only 4% of the bats tested by the NYS Rabies Lab are positive for rabies, so most bat-related post-exposure treatments could be avoided if the bats were captured and tested.

[Details of the shipment procedure can be found at:

<https://www.wadsworth.org/programs/id/rabies/animal-specimen-testing>

Recommendations for Bat Capture in a Building*

First and foremost, notify the main office (Petra DelValle or Alissa Perrone) or the Caretaker (Mike Lambros) about the bat so that they can assess the situation and determine how best to proceed. While that is being done, maintain visual contact with the bat. Once the bat is out of sight it may be impossible to determine if the bat captured is the same one causing potential exposure. Since capture of the bat is preferable, the following steps should be taken by the LCC staff member or resident (only after consultation with LCC staff).

1. Wear gloves and avoid direct skin contact with the bat
2. Avoid damage to the bat's head
3. Confine the bat to one room (close windows and the room and closet doors)
4. Turn on lights if the room is dark
5. Wait for the bat to land before attempting to capture it
6. Calmly cover the bat with a coffee can or similar container
7. Slide a piece of cardboard under the can, trapping it inside
8. Tape the cardboard to the can or carefully replace the cardboard with another lid
9. If necessary, use a net (or long pole with sticky tape facing outward) for a bat that is out of reach
10. Do not use glue board traps to capture the bat (it cannot be easily removed for testing)
11. Immediately contact the Westchester County Health Dept. (914- 813-5000) to arrange for the bat to be tested.

If the bat capture takes place at night or on weekends, place the container in a larger plastic bag, seal it, and place the entire bag in a freezer (preferred) or refrigerator. No chemical means should be used to euthanize the bat.

*If you are unable or unwilling to capture the bat, try to confine it to a single room so that LCC staff or a professional animal trapper can arrive and remove the animal. The Westchester County Health Dept. will transport the dead bat to Albany for rabies testing.

What to do if you are bitten

If you are bitten, scratched, or have some other exposure immediately wash the area with warm soapy water and call your doctor or hospital. Call the Westchester County Health Dept. at (914) 813-5000, 24 hours a day seven days a week for assistance. Whether this assistance is in the form of a referral or action by the department will depend upon the circumstances.

Problems/Grievances

Problems or complaints having to do with the LCC's policies, procedures, actions, or facilities should be brought to the attention of the Assistant Director, Alissa Perrone (aperrone@fordham.edu) or the Director, Tom Daniels (thdaniels@fordham.edu). They are here to make sure the station is working for you. This includes all research and teaching issues. Issues not related to LCC's policies are best resolved by the parties involved.

Visitors to the LCC

The Louis Calder Center welcomes guests of faculty, students, and staff to visit our field station. Prior to their arrival, we ask that the guest's host notify the Administrative Office at pdelvalle@fordham.edu or 914-273-3078 ext. 33801. Upon arrival, **all** visitors/guests/contractors should check-in at the Administrative Office located in the Carriage House (via 31 Whippoorwill Road entrance). A visitor receives a Guest Pass to wear (lanyard) while on the property and a parking pass if the visitor arrives by car. A Guest Pass serves as a way of recognizing authorized visitors, and we ask that guests wear the pass for the first week while they become familiar with the staff and researchers at the LCC. Upon leaving the LCC, guest and parking passes should be returned to the Administrative Office staff or placed in the locked dropbox by the front door of the Carriage House.

During non-business hours, unplanned guests must place a hand-written note on the car dashboard that includes the name of the Calder host the guest is visiting, and date(s) of visit. As soon as possible, the guest's host should contact the Administrative Office (email: pdelvalle@fordham.edu; phone: 914-273-3078 x33801) notifying the Administrative Office about the guest.

Housing

Located on the LCC property are two single family homes for faculty, 1 single family home for professional development attendees (up to 6 people), a 12-room log cabin for students, and two rooms in Calder Hall for visiting scientists and guests. Availability of housing at the LCC is always changing. All requests for housing and information should be made through the

Administrative Office (Petra Del Valle; pdelvalle@fordham.edu or 914-273-3078 ext. 33801. Applicants will be notified as soon as a decision is made.

Faculty Housing

Housing may be available to new Biology faculty in the Biology Department whose work is centered at the LCC. Final decisions are made by the Director in consultation with the Biology Department Chair.

Student Cabin

The student cabin is a communal living space with shared kitchen, bathrooms, living room and twelve separate bedrooms. The rent currently is \$475/month and includes heat, electric, cable, and Wi-Fi access. Cabin housing decisions are made in consultation with Residential Life. Rents may change; contact pdelvalle@fordham.edu for most current information. For more details go to the link below:

[Louis Calder Center – student housing](#)

Staff Housing

Housing for staff is limited and only occasionally available. Requests are made through the staff member's faculty supervisor to the Director and, if approved, an occupancy agreement must be signed. Terms of the occupancy agreement are determined in consultation with the University and faculty supervisor.

Guest Rooms (Calder Hall)

Two rooms, one with a single bed and the other with a double bed, can be used for overnight accommodations by guests of LCC faculty, staff or residents. The guest's host should notify the Administrative Office (pdelvalle@fordham.edu) a minimum of two full days prior to when a room is needed, and should provide the Administrative Office the number and name(s) of guest(s) and the make/model of the guest's vehicle. Guests should arrive between regular business hours (9:00 am to 4:00 pm) for checking in at the Carriage House. At check-in the guest will receive their guest pass, parking pass and keys to the guest room.

The station requests that guests bring their own linens and towels.*

Fees for guest rooms are as follows:

Fordham Staff and Faculty

\$10/person/night

Guests of Fordham: Family/friends of LCC residents

\$15/person/night

Non-Fordham Student / Researcher

\$15/person/night

A station use form for access to field sites, greenhouses, or the animal care facility (see appendix), must be completed two weeks prior to a station visit by any guest intending to use the LCC research facilities and field sites. To obtain these send an email to pdelvalle@fordham.edu

Invited Speakers

Stay at no charge; linens/towels provided

Longer Term Guest (4 weeks)

Monthly rate. Dependent upon availability.

Upon departure, all guests should leave the parking pass in the room, lock the door and place the key in the hallway drop box. Please make payment to the Administrative Office by the next business day. Payment should be made by check payable to “**Fordham University.**”

*In the event that a guest does not bring linens and towels, these can be provided at a cost of \$15/week or \$3 per day if less than a week.

Cleaning Services

All buildings except faculty houses (45 and 53 Whippoorwill Road) and staff apartments are cleaned once a week. The cleaners also remove the garbage and recyclables twice a week from these buildings. Trash and recyclables at residences not scheduled for cleaning should be handled by the residents. Garbage and recyclables should be placed in their respective dumpsters at the 53 Whippoorwill parking area.

Vehicles/Parking/Inter Campus Transportation

There are two general use parking areas at Calder: the 53 Whippoorwill parking area and the Calder Hall parking area. The Student Cabin and Routh House have their own parking areas. Residents, staff, and faculty who work and/or live at Calder should obtain a free parking decal through the Administrative Office (pdelvalle@fordham.edu) by submitting a [Parking Decal Application](#) (see appendix). The decal should be affixed to the inside front window on the passenger side. Short-term visitors arriving in their own vehicle should obtain a temporary parking pass from the Administrative Office when checking in at the Carriage House. If a visitor arrives during non-business hours (before 8:30 am and after 4:30 pm), then a note should be left inside the vehicle (on dashboard) with the name of the person he/she is visiting and date(s) of the visit.

Car Service/Uber

The 53 Whippoorwill parking area is the designated pick-up/drop-off for all car service providers. Please use the 53 Whippoorwill Road, Armonk NY 10504 address when scheduling car service.

Speed Limit

The speed limit at the Center is **15 mph**. Roads are narrow and driver courtesy is essential. In some locations, sight is limited and drivers are asked to honk their horn so that any oncoming traffic is alerted.

Research Vehicles

The station has three research vehicles (Rav-4, Toyota 4-Runner, Honda Pilot) available to support faculty and student research. All drivers must have completed the university-approved driving course (<http://www.newyorksafetycouncil.com>) and submitted a copy of their driver's license to the Administrative Office before being granted permission to use one of the station vehicles. Vehicles can be reserved and checked out through the Administrative Office (pdelvalle@fordham.edu or 914-273-3078 ext. 33801). Changes to an initial vehicle request (such as a later departure time or canceled trip) should be updated on the calendar as a courtesy to others who may also need to use the vehicle.

Our priorities for vehicle use are as follows:

- Travel to/from field sites for research projects (max. 7 days for a long-distance trip).*
- Transporting students on field trips.
- Travel to/from local or regional scientific meetings (if no conflicts with research programs).
- Faculty and students may also request to use a vehicle to transport lab equipment (e.g., computers, balances) or supplies (e.g., liquid nitrogen, plants from the greenhouse) around Calder and to and from other University Campuses.

* During busy times, especially in the summer, it may not be possible to use a field vehicle for 7 or more days consecutively. Many labs in the past have rented a vehicle for longer uses during peak periods. During less busy times, use of a field vehicle for more than 7 consecutive days may be arranged.

Vehicles returning from the field should be parked in the barn parking area (by the 53 Whippoorwill Rd. entrance) and keys returned to the business office.

General Rules:

- Keep a record of the mileage. There is a log book in each vehicle that we use to plan maintenance schedules. If a log book is not in the vehicle, please alert the administrative office.
- Clean the vehicle after you use it. Each vehicle is a LCC community resource and should be returned to the station ready for the next person.
- Report any problems to the office ASAP. The sooner we know there is a problem the sooner we can address it and have the vehicle ready to resume operation.

- Contact the office if your plans for the vehicle change or if you will not be able to return when expected. The staff must be informed so that changes to subsequent reservations for the vehicle can be addressed. It is the driver's responsibility to keep the office informed.

Inability to abide by these rules may result in a loss of driving privileges for Calder vehicles.

Other Uses: local Calder-related business (e.g., collecting the mail, making purchases for the station). Except under unusual circumstances, the research vehicles should not be used for personal travel to Rose Hill campus, for teaching, or attending classes. Research vehicles should not be used for personal errands.

Expenses: All of the maintenance costs, some fuel costs (see below*) and research related tolls for station vehicles will be covered by a Calder budget. The LCC maintains a charge account at the Armonk Shell station that will pay fuel costs but a change in university budgets has drastically reduced our ability to pay for fuel obtained elsewhere.

* Calder can only guarantee to cover fill-ups at the Shell station. Fuel for longer trips (in which going to the Armonk Shell station is impractical) may need to be covered by the lab using the vehicle. However, if a lab group lacks funding, the station will attempt (but cannot guarantee) to reimburse some of these costs. Whenever possible, we ask that those with research funds to cover fuel costs incurred on their research projects do so. In future grant proposals, please include a fuel reimbursement line in your proposed budgets (based on current IRS per mile rate), if possible.

Shuttle Vehicle

The LCC has a Rav-4 that is available for local travel by Student Cabin residents only. The LCC covers the cost of maintaining the vehicle and the residents cover the cost of gas. Requests to use the Rav-4 should be made through the Administrative Office (pdelvalle@fordham.edu or 914-273-3078 ext. 33801).

Ram Van

The Ram Van is Fordham University's inter-campus transportation system for those who need to travel between Rose Hill (Bronx, NY) and Calder Center (Armonk, NY). The Ram Van also makes stops at the nearest train station (North White Plains). The cost of the Ram Van for riders to Calder is free at present (subject to change). The Ram Van provides transportation between Rose Hill and the LCC 3x/day; M-F. Riders must sign-up for the Ram Van in the Administrative Office. For the most recent schedule, contact Petra Del Valle at pdelvalle@fordham.edu.

Mail/Deliveries

Mail Shed

The Louis Calder Center has a mail shed located in the parking area outside of the Carriage House (Administrative Office). Delivered mail is placed in faculty, student, and staff mail slots. The shed will remain unlocked during regular business hours (8:30 am - 4:30 pm; M-F). Outside of business hours, during weekends, and holidays the shed will be locked but will be accessible by using a combination code. This code can be obtained from the Administrative Office (pdelvalle@fordham.edu). The combination should remain confidential.

The LCC has two mailing addresses for letters and small packages delivered by the USPS. One is a street address and the other is a post office box. [For larger packages or packages delivered by UPS/FEDEX, see below in the **Deliveries** section.]

Street Address (USPS)

Louis Calder Center
31Whippoorwill Road
Armonk, NY 10504

PO Box

Louis Calder Center
Box 887
Armonk, NY 10504

Mail from both locations is picked up M-F during business hours (8:30 am – 4:30 pm). UPS/FedEx packages ready for delivery need to be scheduled for pick-up and placed in the Administrative Office before 4 pm, M-F. UPS/FedEx packages delivered to the LCC will be placed in the mail shed (see exceptions under **Fragile/Frozen Samples**). Business related mail to be sent USPS can be placed in the ‘First Class’ mail bin (inside the Carriage House), and it will be taken to the post office for you. Inter Campus mail is picked-up every Tuesday and Thursday and it can be placed in the ‘Campus Mail’ slot also located in the Carriage House. If you have any issues/problems with receiving mail contact Petra Del Valle at pdelvalle@fordham.edu.

Deliveries

Due to narrow roads and low overhead wires, a truck restriction is in place at our site. Freight trucks (tractor trailers) are **NOT** permitted on the property beyond the gates. Box trucks are okay. Below are guidelines when shipping to our location.

For shipments coming via UPS or FED EX (non-freight) use **31 Whippoorwill Rd. as the delivery address.**

If the merchandise has to be delivered by freight trucks use **53 Whippoorwill Rd. as the delivery address. Advance notice (48 hours) of delivery is required** by calling the Administrative Office at 914-273-3078 ext. 33801 or ext. 27. We can only receive shipments during the weekday between the hours of 8:30 am and 4:30 pm. PLEASE BE SURE TO INFORM THE CARRIER OF THESE RESTRICTIONS WHEN YOU PLACE AN ORDER

When accepting a delivery of a large item or a delivery by freight trucks please notify the Administrative Office (pdelvalle@fordham.edu) so that we can inform the caretaker of its arrival.

Fragile or Frozen Sample Deliveries

Concerns about deliveries of sensitive or fragile materials (i.e., temperature sensitive biological or chemical materials) to the unheated/uncooled mail shed have prompted us to develop a special mail procedure for these samples. If you are expecting a package that requires special handling or requires immediate attention, we ask that you inform the Administrative Office (Petra or Alissa) prior to its arrival date, so that they can be on the lookout for it and contact you when it arrives. Any additional information you can provide (approximate or exact delivery date, source, addressee) may be helpful in identifying packages that are not clearly labeled as containing sensitive material. In addition, these packages will be held in the Carriage House (administration building) foyer until they can be picked up rather than leave them in the mail shed. If special arrangements have to be made to access those packages during off hours or on weekends, when the Carriage House is locked, we will accommodate those requests.

Communications

Telephones

Most of the main rooms, offices and labs have a telephone. Each phone has its own extension and is connected to the other Fordham University campuses through voice over IP. Each phone has access to a Corporate Directory which can be used to find specific people throughout the university. Below is a list of Calder Faculty and their labs:

CALDER STAFF	ext.
Clark, J. Alan	33848
Daniels, Thomas	33834
Del Valle, Petra	33801
Falco, Richard	33829
Frank, Craig	33819
Lambros, Michael	33804
Lewis, James	33812
Munshi-South, Jason	33809
Perrone, Alissa	33802
Piedmonte, Nicholas	33831
Rizzitello, Richard (RC)	33833
Robinson, Guy	33815
Wehr, John D.	33822

CALDER LABS	ext.
Balance Room (Calder)	33808
Clark Student Lab (Calder)	33847
Frank Lab (McC)	33825
Lewis Lab (Calder)	33813
Lodge Lab / Classroom	33826
Microscope Room (McC)	33818
Munshi-South Lab (Calder)	33811
Pollen Lab (Calder)	33815
Shared Molecular (Calder)	33816
Teaching Lab (Calder)	33807
Vector Pool Lab (Routh)	33833
Vector Garage Lab (Routh)	33828
Wehr Lab (McC)	33825

Telephones should be used for local and long distance business calls only.

Cell Phones

Cell phone coverage at the LCC is spotty.

Fax

There are three fax machines available for use at the LCC. There is no charge for outgoing faxes. The locations and fax numbers are below:

Administrative Office (Carriage House): 914-273-2167

Calder Hall: 914-273-6346

Routh House: 914-273-0829

Photocopiers

There is one photocopier available for research and professional use at the LCC and it is located at Calder Hall (1st floor). There is no charge for these copies. We ask users to refrain from using copiers for personal matters.

Email and Internet Access

The Louis Calder Center email is caldercenter@fordham.edu. There are computer stations located in the Routh House (2nd Floor Student Room) and Calder Hall (Library) that have Internet access for all web and email needs. Wireless access is available in all of the main buildings: Lodge, McCarthy Building, Calder Hall, Routh House, and the Calder Cabin. Users must have a Fordham email account to access the network. Guests of faculty, students, and staff must contact the Administrative Office to obtain the WI-FI Connect Instructions for the wireless network. If users experience trouble with the network they should contact Fordham's IT Customer Care Support Group (718-817-3999).

Audio/Visual (AV) Unit

A projector and camera unit that can be used for presentations and video conferencing is located in the seminar room of Calder Hall. The AV equipment to operate both is locked when not in use; you must contact the Administrative Office (pdelvalle@fordham.edu or aperrone@fordham.edu) to obtain the key. When finished with the AV unit lock the cabinet and return the key to the Administrative Staff. If you should have any issues with operating the AV unit, contact Alissa Perrone at aperrone@fordham.edu, 914-273-3078 x 33802 or Petra Del Valle at pdelvalle@fordham.edu, 914-273-3078 x33801. The following are directions to operate both the projector and initiate a video conference.

Projector (e.g. PowerPoint) only

- Turn on computer monitor.
- Turn on master switch located on the bottom instrument in the control stand.

- Check that all instruments in the control stand are turned on. This includes the following:
 - Computer
 - DVD/VHS player
 - Video conferencing box
 - Amplifier
- Hit “DOWN” arrow button on wall to lower the screen
- Access wall-mounted control panel
 - If green POWER light is on then touch the screen to “wake-up” the panel
 - If green POWER light is off then press the power button to the left of the screen to turn it on. After unit indicates connection is good (green symbol) touch screen to begin.
- Choose box labeled COMPUTER SOURCE. Choose either:
 - Laptop. Connect computer using the provided USB cables.
 - Rack computer. Insert your memory stick.
- Once you access your file on the computer it will be projected onto the screen
- When finished select MAIN MENU and then EXIT on the wall-mounted control module.
- Hit “UP” arrow button on wall to raise the screen.

Videoconference Call

- Turn on computer monitor.
- Turn on master switch located on the bottom instrument in the control stand.
- Check that all instruments in the control stand are turned on. This includes the following:
 - Computer
 - DVD/VHS player
 - Video conferencing box
 - Amplifier
- Hit “DOWN” arrow button on wall to lower the screen
- Access wall-mounted control panel
 - If green POWER light is on then touch the screen to “wake-up” the panel
 - If green POWER light is off then press the power button to the left of the screen to turn it on. After unit indicates connection is good (green symbol) touch screen to begin.
- Choose box labeled VIDEO CONFERENCE
- Hit the POWER button on the POLYCON remote control (large and silver with digital screen). Dial a location by hitting the HOME button
 - If the IP address is known for the site type it in the space provided.

If the IP address is unknown for the site then use the directory to find it.

- When finished press and hold the POWER button on the remote control until the screen becomes blue. Select MAIN MENU and then EXIT on the wall-mounted control module.
- Hit "UP" arrow button on wall to raise the screen.

Computers

To help minimize computer viruses and/or crashes, the LCC has installed anti-virus software on all the computers in the computer stations in the Routh House Student Room and Calder Hall Library. This software prevents users from storing any files on the computer for more than 2 hours. **After 2 hours of non-activity the computers will shut down and all files will be deleted.** Therefore, it is very important that the user has an external memory device to backup all files within the 2 hour period.

Users should not install unauthorized programs onto the computers. Any requests for specific software to be installed or issues with the computers should be sent to the Assistant Director at aperrone@fordham.edu or 914-273-3078 ext. 33802.

Recreation

There are a number of hiking trails open to users of the Calder Center. Those interested in lake related activities must first inform the Administrative Office (email to pdelvalle@fordham.edu or call 914-273-3078, ext. 33801).

Boating/Fishing

Unless professionally trained in water safety (see administrative office for approval) NO BOATING ALONE; MUST HAVE A BUDDY

Life jackets must be worn at all times!

No alcoholic beverages in boats.

Boats must be off the water by 8 p.m.

Be sure to tie up boat and close boathouse door after use.

Clean out your boat after using it - don't leave a mess.

Report any equipment problems (faulty life jacket, lost oar, boat leaks, etc.) to the office ASAP.

Fishing is catch and release only.

No barbed hooks permitted; flatten or clip off before use.

No outside baitfish permitted.

Guidelines for fish data recording (request spreadsheet from aperrone@fordham.edu)

One sheet per person-visit (if two in boat, use two sheets)

Use a separate line on the sheet for each fish caught

Use the weighing scales and measuring board provided

Indicate approximate location of fish caught on the map
Comments may include condition of the fish, tag info, weather, etc.

Swimming

Realize that open water swimming is not the same as swimming in a pool. Every swimmer should know his/her physical limitations and remember that distances in water can be deceiving.

There is NO SWIMMING ALONE – everyone entering the water must have a “buddy”.

Swimming is prohibited before dawn and after dusk.

Swimming is NOT PERMITTED in any inclement weather i.e., in a rain/thunder storm.

There is NO LIFEGUARD, *swimming is at your own risk*.

Ice Skating

Is permitted on Calder Lake by station users only after the Caretaker (Mike Lambros) has tested the ice thickness and determined it is safe for skating (station users will be notified through email).

Periodic checks of ice thickness will be performed.* Station users will be notified when ice is no longer safe for skating.

There is NO ICE SKATING ALONE - everyone must have a “buddy” while skating.

Ice skating is prohibited before dawn and after dusk.

*General ice thickness guidelines can be found at

<http://www.dnr.state.mn.us/safety/ice/thickness.html>.

Research at LCC

The LCC has a number of distinct habitats and resources available to researchers. All individuals conducting research at the LCC should follow the requirements listed below. Individuals must obtain proper State and Federal Permits for collecting specimens regulated by New York State or the Federal Government.

New York State DEC

<http://www.dec.ny.gov/permits/28633.html>

U.S. Fish and Wildlife Department

<http://www.fws.gov/permits/instructions/ObtainPermit.html>

Student Research at LCC

The mission of the Louis Calder Center is to provide research and training opportunities for students interested in conducting ecological studies at the station. Any student working at the LCC is required to complete a [Student Information Form](#) (see appendix), and submit it to Petra

Del Valle in the Administrative Office on or before the student's first day at the LCC. This form can be obtained by contacting Petra Del Valle at pdelvalle@fordham.edu.

Graduate Student Research

Ecology graduate students pursuing either a M.S. or Ph.D. in Biology at Fordham have opportunities to conduct their research at the LCC. Access to LCC resources is obtained at the request of the graduate student's research advisor.

Undergraduate Student Research

The LCC welcomes undergraduate research. Interested undergraduates should contact a faculty mentor, and work with that mentor to design a research project at Calder. Undergraduates should be under the on-site supervision of a faculty member or graduate student while working at Calder.

High School Research Students

Faculty scientists conduct research on a wide range of ecological and environmental topics, and have received national and international recognition for their work. High school students interested in working in a LCC lab, in conjunction with an approved science research program at their high school, may apply to work in a particular lab by contacting a LCC faculty member. If accepted to work in a laboratory at the Louis Calder Center, the student should complete a [Student Information Form](#) (see appendix) and submit it to the Administrative Office no later than the student's start date. Faculty mentors should also inform the Assistant Director (ext. 33802 or aperrone@fordham.edu) of their plans to accept the high school student into their lab, prior to the student's start date. Mentors should give the students a general orientation of the Station that includes, but is not limited to, a tour of the LCC and a review of lab/field safety procedures, including providing a copy of the LCC Handbook. Mentors should also review the [Contact Numbers for LCC Staff](#) (see P. 8) in the event problems arise.

General Procedures for High School Students

Due to the fact that high school students are minors, additional precautions are in effect to protect their safety.

- Students should provide the station with a list of contact names and phone #'s in the event of an emergency.
- Students should plan to work within the station's business hours: 8:30am–4:30pm; M-F.
- **Students may not work unsupervised** in any of the laboratories, field sites, or other facilities at the station. Students may conduct research under the on-site supervision of their mentor or a designated supervisor (technician, graduate student).* This is essential if the student's research requires them to work outside of normal business hours.

- Students arriving by car driven by a family member should arrange to be dropped off and picked up at the Carriage House (Administrative Office). High school students should check-in at the Administrative Office upon their arrival.
- Students who drive their own cars should park in the Calder Hall parking area, and provide vehicle information (make, model, license plate #) to the Administrative Office (and receive a parking decal at no charge).

*Faculty mentors should determine if certain lab procedures (e.g., working with harsh chemicals, using a Bunsen burner) or field work require closer supervision of the student.

Visiting Scientists

For the latest User Fees contact Petra Del Valle at pdelvalle@fordham.edu. Faculty must request keys for visiting scientists with whom they are collaborating, and a Key Agreement Form (see appendix) must be completed by the scientist and submitted to Petra Del Valle in the Administrative Office before receiving keys.

Resources

The LCC solicits requests for new equipment and does its best to acquire items that will be of general and long term value, when funds are available. Forward requests to the Director (thdaniels@fordham.edu).

Long Term Forest Plots/Field Sites

Researchers should complete a Field Site Request Form (see appendix) if they intend to use any of LCC's ecosystems (forest, meadow, wetlands, lake, or open field) for their research. Request for field research space must be submitted to Assistant Director (aperrone@fordham.edu). Research supplies or equipment that is abandoned is a major nuisance for all station users and staff. All researchers are required to clean up completely all plots, materials, labels, and equipment at the end of their project. Unless other arrangements have been made, any items not removed after the project's end date becomes the property of the Louis Calder Center.

Calder Lake

The LCC has a 10-acre meso-eutrophic, dimictic, temperate lake. A water quality monitoring station collects measurements of pH, temperature, oxygen, and turbidity. The real-time data are accessible online at (www.stormcentral.waterlog.com). Researchers must complete a Field Site Request Form (see appendix) and submit it to the Assistant Director if they intend to use the lake as a sample location for their project. This form can be obtained by contacting the Assistant Director (aperrone@fordham.edu) prior to the start of their project.

Greenhouses

First time users of the greenhouses must read the [Greenhouse Standard Operating Procedures](#) manual (available upon request; contact Assistant Director) and sign/submit the [Greenhouse User Agreement](#) before requesting space in the greenhouse. These documents can be obtained from the Assistant Director (aperrone@fordham.edu). In addition, a [Greenhouse Space Request Form](#) (see appendix) must be submitted to the Assistant Director at least 3 weeks prior to the start of the project.

Experimental Lake Facility (ELF)

This resource is comprised of twenty-six 5400L tanks, which can be filled with lake water from Calder Lake. These mesocosms are used for experimental studies on trophic interactions and biogeochemistry. Researchers should notify the Assistant Director (aperrone@fordham.edu) at least 3 weeks prior to the start of any ELF experiment by submitting a [Field Site Request Form](#) (see appendix). Since water is pumped uphill from Calder Lake to fill the ELF tanks, there is much needed preparation before an experiment can begin.

Animal Care Facility

Limited space for vertebrate animal studies is available upon request and approval of research plan by the University IACUC. Researchers should complete an [Animal Care Facility Space Request Form](#) (see appendix) and submit it to the Assistant Director (aperrone@fordham.edu) for approval. Along with this form, researchers should submit a copy of all IACUC approvals and State/Federal specimen collecting permits to the Administrative Office.

Shared Molecular Laboratories

Two shared laboratories are located in Calder Hall (1st and 2nd floor) and each space has instruments and equipment to perform a variety of molecular techniques. Under the supervision of a faculty member this space is available for use by post-docs, staff and students. Anyone interested in using this space should contact the laboratory supervisor, Dr. Jason Munshi-South (jmunshisouth@fordham.edu), for availability and to arrange for any necessary supplies and equipment.

Lodge Teaching Classroom and Lab

House in the lakeside lodge, there is a meeting space for classes, meetings and workshops. In addition, there is a small teaching laboratory. Anyone interested in using the Lodge for teaching a class must contact the Assistant Director at aperrone@fordham.edu to confirm its availability and schedule its use.

Balance Room

There is an ultra-sensitive microbalance in a temperature controlled room located adjacent to the Teaching Lab on the 1st floor of Calder Hall. Anyone interested in using this balance must be

trained on the equipment. To schedule a training session, contact the Assistant Director at aperrone@fordham.edu.

Herbarium and Insect Collections

Plant and insect specimens are housed in cabinets that are located in the Routh House (1st floor). The LCC currently has in its collections 302 plant genera and 186 insect families. Access to these collections is available to researchers by contacting the Assistant Director (aperrone@fordham.edu).

Laboratory and Equipment Use

Laboratory Safety

Fordham University's Laboratory Safety Plan is found at the following link. All laboratories should have a copy of the plan (provided by the LCC) in an area easily accessible to anyone working in a LCC laboratory.

http://www.fordham.edu/download/downloads/id/79/lab_safety_plan_pdf

All individuals working in a laboratory at the LCC are responsible for knowing and following proper and safe laboratory procedures. The Lab Safety Workspace website (<http://labsafetyworkspace.org>) is a great resource for short on-line training videos regarding lab safety. The LCC recommends that any student working in one of the station labs watch the "Introduction to Laboratory Safety video" and take the short quiz at the end. Information about general laboratory safety can also be found in the following sections of Fordham's Laboratory Safety Plan. Particularly relevant topics include:

Section 2.1(A): General Safety Rules, pg. 17

Section 2.1(B,C): Hygiene and Housekeeping, pgs. 17-19

Section 2.1(F): Handling glassware, pgs. 21-22

Section 2.2(A,B,C,D): Fire Extinguishers, Safety Showers, Eye Wash Stations, and First Aid Kits, pgs. 22-25

Section 2.3(A,B,C,D): Eye Protection, Clothing, and Gloves, pgs. 29-33

Chemical safety/storage /disposal

If there is a chemical/radiation/biohazard spill, follow the steps in Section 1.1, 1.2, and 1.3 (pages 4 – 13) of Fordham's Laboratory Safety Plan.

http://www.fordham.edu/download/downloads/id/79/lab_safety_plan_pdf

For guidelines on proper storage of chemicals in laboratories refer to Section 3.3(J), pages 58-59 of Fordham's Lab Safety Plan.

The LCC has a solvent shed on the property where larger quantities of chemicals can be stored. However, it is recommended that a lab not order large quantities (bulk orders) of hazardous chemicals, which have the potential to be stored for more than 6 months on site. This policy will achieve two goals: help to cut down on the cost of purchasing/storing and the cost of disposing of unused chemicals. If your lab needs access to the solvent shed for storage contact the Assistant Director at aperrone@fordham.edu.

All chemical waste must be placed in appropriately labelled containers. Seal the container tightly and label it as “hazardous waste.” Record a list of the contents (with approximate percentages) for every container and tape the list to the container.

Acids and bases must be stored separately.

Discarding chemical waste improperly is illegal so if there is any doubt, do not dump it down the drain. Contact the lab director (faculty member) or the Assistant Director if you have any questions.

The LCC requests that the research groups fund the cost of waste removal related to the labs’ activities; however, if a lab is lacking funds then the LCC will assist to subsidize the cost. To coordinate a waste pick-up, contact the Assistant Director (aperrone@fordham.edu). There are special containers for sharps and biohazards. *Sharps are collected every 6 months from one location at the LCC-the Vector Ecology Lab located in the Routh House. The Assistant Director will notify all research groups of the collection date(s) at least two weeks prior to scheduled pick-up.

Electronic waste and battery disposal

Contact the Assistant Director (aperrone@fordham.edu) who will arrange for a pick-up. A request for a pick-up should be accompanied by a list of items for removal. Each lab should have a battery disposal bin. If not, request for a bin can be made by emailing pdelvalle@fordham.edu. Place used batteries in the container and inform the office when disposal is necessary.

Sample storage

All stored research material in community freezers and refrigerators must be labeled with your name, date, and type of sample. Unlabeled material will become the property of the station or discarded.

When storing samples in any freezer/refrigerator at the LCC, be sure to respect other’s samples by not disturbing or moving samples to another location (i.e., shelf, compartment, another unit) unless you have made contact with the owner of the samples and received permission to do so. If circumstances (emergency) require you to move freezer contents, please notify owners of those other samples as soon as possible.

All main buildings have back-up generator power should the LCC experience a power outage. However, on a rare occasion, one of our community storage freezers or refrigerators will fail. If this occurs, contact the Assistant Director (aperrone@fordham.edu) to schedule a service call. Depending on what you need, immediately make arrangements to move the samples to the back-up -80C freezer in the Routh House garage or a refrigerator in another lab.

Multi-user Instrumentation

To use a shared piece of equipment at the LCC, you must first check with the research laboratory that the instrument is located to determine its availability. First time users should check with the Research Technician, Richard Rizzitello (rrizzitello@fordham.edu) before using equipment in the McCarthy Building, or Dr. Jason Munshi-South before using equipment in the Shared Molecular lab (2nd floor Calder Hall). Since there is a high cost to running these instruments, there may be a charge for their use.

Field Safety

The essence of life at a field station is fieldwork. Whatever the scientific question being asked at the LCC, the field work needed to address that question involves a separate set of spatial, temporal, and logistic issues that must be considered before stepping out of the lab and into nature. The safety of our faculty, students, and visitors is paramount, and the best way to insure that you are safe is to be prepared for field work.

At the start, we will assume that everyone undertaking field work at the LCC has had some training in the field methods that are going to be used on their project. This training is generally obtained from faculty mentors and fellow students in the lab that is sponsoring that particular project. Nobody should be conducting field work on their own until they are proficient in the sampling methods being employed, are familiar with the terrain or aquatic habitat at their site, and have a plan for making regular contact with other lab or staff members who are aware of their activities in the field.

Below are some general guidelines regarding field work that you should find helpful. Still, it is important to realize that every field site and every field situation is unique. The best advice we can offer for remaining safe and productive in the field, in addition to being prepared, is to use common sense.

Permits

Research involving lab or wild animals requires approval from Fordham's Institutional Animal Care and Use Committee (IACUC) in addition to any necessary state or federal permits needed to trap and handle wild animals. The LCC has limited animal care facilities and their use must be requested through the Assistant Director (aperrone@fordham.edu).

Weather

Please check the weather forecast prior to going out into the field; myriad web sites are available with accurate, timely information. If your field work is hampered by the rain (e.g., butterflies and bees will not be active in rain or thunderstorms), there is no sense making the trip out to the field. Some field work, such as garden mapping and area measurements, can be safely and reliably conducted in the rain (so don't let a little rain stop you) but no field work should be conducted during a thunderstorm. Schedule your activities to avoid many high-risk situations. Those hot, muggy days are just the conditions that can start a thunderstorm.

If you are caught outdoors in a thunderstorm, seek shelter immediately. (You can gauge how close lightning is with the '30 second rule': if the time between a lightning flash and the resulting thunder is 30 seconds or less (aka 6 miles (9.7 km) or less), it is urgent that you find shelter right away).

If on/in the water (sampling, fishing, etc.), your priority is to get out of the water immediately, and move away. Being near water is extremely dangerous during a lightning storm.

If on land, either at Calder or at another field site, it is best not to be the tallest object in the area. If in an open field when lightning begins, move indoors if you can, or into the forest. Do not seek shelter under lone trees (the forest canopy is OK) or against cliffs or overhangs - lightning may be attracted to a tree and can pass down the face of an overhang, especially if it is wet. Avoid exposed shelters with metal roofs and tents with metal poles. If you are out with a metal frame backpack, remove it as soon as you detect lightning. Make sure to leave it at least 100 feet (30.5 m) from wherever you are taking shelter.

If you are caught in a lightning storm with a group of people, spread out and maintain a distance of at least 50–100 feet (15.2–30.5 m) between each person. This will reduce the risk of lightning traveling from one person to another.

If there is no safe shelter, hunker down low to the ground, minimize your contact area with the ground and try to make the contact an insulated one; wearing rubber boots, if appropriate for your particular field work, is particularly helpful if you're working in or near water since rubber is not a good conductor. One particular position, the "lightning crouch", may help. Squat down with your feet together, your head tucked to your chest or between your knees, and your hands covering your ears or flat against your knees (see below). The idea is to be as small an object as possible while minimizing your contact with the ground. Do NOT lie flat on the ground, as this gives the lightning a larger target.



If lightning is about to strike you or strike near you, your hair may stand on end, or you may feel a tingling in your skin. Light metal objects may vibrate, and you may hear a crackling sound or "kee kee" sound. If you detect any of these signals, assume the "lightning crouch" immediately.

Communication

On days that you will be in the field, it is strongly encouraged that you take someone with you. Make sure the lab knows your schedule and knows when you will need field help well in advance of your actual field days. Keeping your lab mates in the loop makes recruiting help much easier. [Also understand that, because others will lend you a hand in the field, you are expected to reciprocate in kind. This makes the lab function much more smoothly for all members].

If it is not possible for you to bring another person into the field with you, you MUST let at least one person in the lab know where you will be, when you are leaving, and when you are expected to return. It is also a good idea to let your mentor/lab group know the nature of the work you will be doing (terrestrial vs. aquatic sampling) and as specific a location as you can provide. Please send out an email or text to the lab group with this information prior to entering the field. If you are going into the field with someone else, let the lab know the name of your assistant as well. Solo field work is discouraged and should only be conducted by advanced graduate students who have adequate knowledge of their site and of safety precautions.

Cell phones are great for field research, and we generally get good service at our urban and suburban sites. However, if you are conducting field research at the LCC, cell phone reception is spotty. If this is the case, it is especially important to let others know of your intended location and what time you are expected to depart and return.

For emergencies, 911 can be dialed to access emergency personnel in the greater New York City area. Also, make sure that you know the number of the Louis Calder Field Station (914-273-3078) and all necessary extensions (Your Mentor's Lab - Ext. ____; Your Mentor's Office - Ext. ____; Alissa Perrone – Ext. 33802; Petra Del Valle – Ext. 33801). You should also make sure to get the cell phone and home phone numbers of your mentor and your lab mates.

Field Equipment

You are responsible for packing all of your own field gear for each and every field trip. Please do not assume that someone else has packed your equipment for you. This means that you should know what you will be doing in the field before departing for your sites, and that you should have all the equipment necessary for conducting your research, recording data, collecting your samples, and having as comfortable a day in the field as possible. Below, please find a list of equipment that you may find useful, or that may be absolutely necessary, depending upon your particular field circumstance for the day.

Field book/journal - you should always carry your field book with you. This book is extremely useful for recording data, noting spontaneous observations, keeping track of what you have actually done (or what others have done on your behalf!), and planning for future field trips. Many researchers consider their field book a 'diary' in which they record everything they do on a given day, no matter how incidental the task may seem. Three years later, when you finally get around to writing up a paper on the study you conducted (though we don't recommend as long a delay!), having an exhaustive description of your work in a field book will help you reconstruct what was actually done in the field.

Hand lens: Very useful for identifying small insects or other arthropods in the field.

Binoculars: If you're a birder, these are critical. Otherwise, they are just fun to have in the field.

Camera: during the course of your research, you should remember to take photos of your field site, your study organisms and of yourself conducting work in the field. Also, take photos of your experimental set up so that others can get a good sense of what you actually did in the field, based on your photos. Besides the standard photos, it is often a good idea to carry a camera (or cell phone with a camera) in the field to capture those unplanned, 'cool' things that you might see (a new species of butterfly, for instance!).

Field guides – Many prefer the Peterson field guides, but you may prefer another series. We have many field guides (e.g., insects, garden plants, wildflowers, trees and shrubs, etc.) in the LCC library that are available for loan. Please remember to sign out a field guide if you borrow it, so that we know who to contact if we need it back for another project. A number of good field guide apps are also available for your mobile devices, if circumstances permit their use while you're out sampling.

Day pack – Very useful for toting your gear, food, and water.

Sun protection – Getting a tan is a great benefit of fieldwork but getting sun-burned is not. You should wear sunblock (at least 30 SPF; may need to reapply several times over a long field day), UV resistant clothing, or long pants/long-sleeved shirts as necessary. The value of a hat or cap cannot be overstated. Also, chapstick with sunblock is highly recommended in sunny locations.

First Aid Kit – This is something you should have in your field vehicle and/or on your person. For those with known allergies to bee stings, an epi-pen should also be on hand. (Also see below).

Transportation & Driving

Field vehicles are available from the Louis Calder Center for day use (pg. 14). Please make sure to check with Petra Del Valle regarding the procedure for checking out a field vehicle.

First Aid

First Aid Certifications - If you are Red Cross certified for CPR or first aid, please let your mentor know. Such skills are useful to have, as is the knowledge of who is or is not Red Cross certified.

First Aid Kits: First aid kits are available in all Calder laboratories. All field vehicles are also equipped with a travel first aid kit. However, do not assume that the travel first aid kit is pre-packed in the field vehicle you are using. Please check to make sure you have a travel first aid kit prior to departure. Also, please let your mentor know when you use items from the first aid kit (lab or travel). First aid kits are only useful when they are fully stocked. First aid kits are available upon request through the Administrative Office.

Field Hazards

Accidents: Report any accidents or injuries to your mentor immediately. Treat even minor injuries promptly. Let your mentor and lab mates know about any medical conditions you might have that could require special attention (e.g. allergic to bee stings, diabetic, etc.). You are responsible for your own safety in the field, so be careful. We affirm to land owners that we will not hold them responsible in any way for accidents that may befall us while on their land. If you should be involved in an accident at the LCC, an [Accident Report Form](#) should be completed and submitted to the Administrative Office (pdelvalle@fordham.edu).

Poison Ivy: If you are exposed to poison ivy (it is fairly common at the LCC), remove and wash all clothes and shoes with hot water and a strong soap. Keep your hands away from your eyes, mouth and face. Do not scratch or rub areas you think were exposed. Apply “Tecnu Outdoor Skin Cleanser” (Tec Laboratories) to potentially exposed body parts (e.g., hands, face) as soon as you come in from the field; rub it in and let it stand for a minute before rinsing it off. We’ve found this product to be extremely effective in removing the plant oils that cause the allergic reaction. If a rash develops, apply Calamine (not Caladryl) lotion, zinc oxide or baking soda paste (3 parts baking soda:1 part water) to the rash. It may ease the itching to take a lukewarm bath with Aveeno colloidal oatmeal. Benadryl may also help (take as directed). If symptoms persist, if you are unusually miserable, or if you are having trouble breathing, please seek medical attention.

Ticks and Mosquitoes: Field work at the LCC involves exposure to potentially infected ticks and mosquitoes. The use of repellents is recommended and there is a wide range of commercially available products known to be effective against these pests. Compounds containing DEET (N,N-diethyl-m-toluamide), IR3535 (3-[N-Butyl-N-acetyl]-aminopropionic acid, ethyl ester), Picaridin, and SS220 are all effective. Botanicals such as Neem oil (*Azadirachta indica*) and essential oil of lemon eucalyptus (*Corymbia citriodora*) have also been shown to be effective repellents but usually require more frequent reapplication to the skin. As always, it is recommended that label directions be used as a guide for each product. Some simple precautions to take when working in tick infested areas: wear light-colored (easier to see dark ticks on a light background) long-sleeved shirts and long pants, tuck your shirt into your pants and your pant legs into your socks (the idea is to reduce the amount of exposed skin and points of access where ticks might be able to find a place to attach) before applying repellent to your boots and pants. Once in from the field, be sure to check yourself thoroughly for ticks and remove them as quickly as possible. Tick removal is best accomplished with a pair of fine-tipped forceps, grasping the tick as close to the skin as possible, and pulling straight out with steady pressure. Do not squeeze the abdomen as this may inadvertently aid in transmitting any pathogens. Do not be concerned if the mouthparts break off as you remove the tick; they may be a source of slight irritation (a small dab of antibiotic ointment at the site is a good idea) but will not contribute to disease transmission.

Regarding mosquitoes, many species are active at dawn and dusk so limiting your field work at those times will help reduce exposure to host-seeking mosquitoes.

Additional information on blacklegged (deer) ticks (*Ixodes scapularis*) and Lyme disease, as well as the local mosquito species and West Nile virus, is available from Drs. Daniels (thdaniels@fordham.edu) and Falco (rfalco@fordham.edu) of the Vector Ecology Laboratory at the Louis Calder Center.

Field Clothes

Dress appropriately, or bring appropriate clothing with you, for all possible conditions. A layering system works well in most situations. Use your discretion regarding what works well for you. The following are some general recommendations.

Wind-proof, outer-shell jacket, Fleece Sweatshirt or Pull Over: Very useful on chilly mornings.

Bandana/Hat: To keep the sun off of your face and to keep your head cool.

Footwear: field boots are often appropriate at many field sites. However, if you are working in a suburban garden site, or some other such site where you are concerned about leaving heavy tracks on the land, please wear lighter shoes that will not rip up the ground.

Socks: the secret to a comfortable field day is a good pair of socks. Wool socks retain heat, even when wet. Synthetic fibers are great for wicking and warmth, but use whatever works best for you. Carry an extra set in the field if there is any chance that your socks may get wet (nothing is worse than working in soggy socks).

Field Etiquette

Urban/Suburban-Specific Concerns – Your field sites outside of the LCC may be located in urban or suburban neighborhoods. In many cases, you will be the guests of landowners who have given you permission to do field work on their property or will be on public land that is used by many other people. Your conduct has a direct effect on how Fordham University, the Biology Department, and the Louis Calder Center are viewed, and it significantly affects whether we or any other university-affiliated persons will be welcome on this property again. Please conduct yourself with the utmost concern for the property, the owners, and future users. Following are some specific guidelines but they are not comprehensive.

- Because you may be working in high-traffic areas, it is important that the local attendants/residents/home owners know who you are. Take time to chat with them; the better they know you, the more they can look after you and help look after your research equipment.
- Although most sites are located in relatively safe areas, you should still exercise caution. Be aware of your surroundings (i.e., don't chat mindlessly on your cellphone or listen to music with headphones). Do not surprise homeowners or park attendants when you visit their sites – it is always a good idea to call ahead and inform them that you will need to sample there on a given date. Let them know when you arrive and leave their site. If no one is in attendance during your visit, be sure to touch base with them afterward (or leave a note) informing them of your visit.
- For many reasons, there is NO SMOKING IN THE FIELD.
- Give any animal lots of space in the field. In the gardens, you may encounter ducks, cats, or dogs. At the Louis Calder Center, you are likely to see deer, coyotes, snakes, turkey vultures, and chipmunks. Leave all domestic animals and wildlife alone (this includes feeding them). If you see any unusual animals or behaviors, or have any unusual encounters with wildlife or domestic animals in the field or at the field station, please report these incidents to your mentor and/or the Administrative Office.
- Do not leave litter of any kind behind in the field (including at the field station). Even what you might consider to be "biodegradable" (such as orange peels, banana peels, apple cores, etc.) remains unsightly garbage for a long time. Heavily-used public land cannot retain its character if everyone thinks "just one" piece of garbage will not matter. Private land owners do not want to find refuse left by people who are their guests. Carry plastic bags with you to store such garbage until you can dispose of it properly.

- Whether working on private or public lands, bringing pets into the field is prohibited.
- Sampling should be limited to those species that are necessary and authorized for your research. In most cases, we will have already obtained permission to sample those organisms pertinent to our research. Out of respect for the property owners/caretakers, please collect only what you need.
- Unless working in the woods at a familiar site, the use of headphones with an MP3 player or other such device is discouraged. Basic safety requires that you are aware of your surroundings at all time. Thus, you need to be able to hear what is going on around you.
- Alcohol is not permitted in the field under any circumstances (except ethanol for sampling). Open bottles or containers of alcohol are not permitted in University vehicles at any time and drinking alcohol while conducting field work may result in removal from the research study you are working on.

Additional field safety and related information may be found at the following sites:

General Field Safety Guidelines.

<https://ehs.utexas.edu/programs/labsafety/documents/FieldResearchers-SafetyGuidelines.pdf>

Medical Information. <http://my.webmd.com>

General Disease information. <http://wwwn.cdc.gov/travel/contentDiseases.aspx>

Tick Borne Disease Information. <http://www.cdc.gov/lyme/resources/tickbornediseases.pdf>

Library

The Library at the LCC has books available to faculty, staff, and students. Access is also available to students and researchers from other institutions with permission by sending an email to pdelvalle@fordham.edu or by phoning the Administrative Office: 914-273-3078, ext. 33801.

Borrowing books from the LCC library is done on the honor system, by filling out a sign-out sheet located at the desk of the Calder Hall Library administrator's desk.

The LCC does accept donations of recent books in natural history and ecology. If you have a donation, contact the Administrative Office at pdelvalle@fordham.edu.

Calder Publications

The LCC has created an internal tracking system for publications in which some part (lab or field) of the research was conducted at the LCC. Authors can obtain a Calder publication number by providing the Administrative Office (pdelvalle@fordham.edu) with the publication title, journal name, volume, and page numbers. We ask that this number be included in the

acknowledgements section of any paper submitted for publication, and that the administrative office be notified of the publication date of such article.

Student Desks

Desks with lockable filing cabinets are available for use by graduate students who are currently working with a faculty member. Any graduate student interested in a desk should contact Petra Del Valle (pdelvalle@fordham.edu) to obtain keys.

Facilities Management

The Director of Facilities at the Louis Calder Center is John Spaccarelli. He directs the maintenance, repair and construction of all buildings and utilities at the LCC. Mike Lambros, property Caretaker, and Petra Del Valle, Business Administrator, are part of the Facilities team. If an individual working or living at the LCC has a non-emergency facilities need then he/she should first contact Petra Del Valle (pdelvalle@fordham.edu or 914-273-2078 ext. 33801). If the facilities issue is an emergency (ie. no heat, electric or hot water) then Mike Lambros should be contacted at 917-858-5204.

Work Orders

Non-emergency facilities requests should be directed to Petra Del Valle by completing and submitting a [Work Order Request Form](#) (see appendix). This can be done by submitting an electronic form to pdelvalle@fordham.edu or a copy directly to Petra Del Valle in the Administrative Office. Once this form is received an email will be sent as a confirmation of receipt. Within two business days after receipt you will receive a status update. All Work Order inquiries should be sent to pdelvalle@fordham.edu.

Infrastructure Maintenance

In addition to necessary repairs, there is constant maintenance that must be performed on all of the buildings at the LCC. The LCC staff will do their best to minimize any inconveniences to station users by notifying users, as best as possible, in advance.

Severe Weather Events

The LCC is maintained by a small staff and handling storm damage and snow removal takes time. These events affect the LCC differently than Fordham's larger campuses because these campuses employ a much larger facilities team where normal operations can resume more quickly than at the LCC. We ask that station users be patient.

LCC Closures

University closures are intended as warnings; when the Louis Calder Center is closed or has a delayed opening, it means there will be limited access to the laboratories and there won't be Ram Van service. Those who live at the LCC or need to travel to the station to conduct

important, time-sensitive aspects of their research (such as feeding animals) should do so at their own risk.

Station users should check the Fordham web site (www.fordham.edu) or call any of the following phone numbers for up to date information regarding weather related closings or delays.

(718) 817-5555

(212) 636-7777

(800) 280-7669 [(800) 280-SNOW]

(877) 375-4357 [(877) 375-HELP]

Appendix: Forms

Louis Calder Center

Key Agreement Form

Name:

Date:

Faculty Supervisor:

Keys Issued/Date:

- Routh House x 2
- Lodge
- McCarthy lab
- Calder Hall/Mansion front door
- Lewis lab
- Munshi-South lab
- Greenhouse
- Gate
- Teaching Lab

Keys Returned/Date:

- Molecular Shared Lab A
- New Cabin front door
- Calder Cabin Room # (key code#)
- Vector Lab (Pool house)
- Vector Lab (Garage)
- Greenhouse 2
- Other: _____

This is to certify that I have received the above keys and understand these keys are my responsibility. I also agree to return them to the business office prior to my departure from the center or at the completion of my studies. I also understand that lost keys should immediately be reported to the office.

Signature: _____ Date: _____

Louis Calder Center

False Fire Alarm Report

Name: _____ Date: _____

Location: _____ Time of incident: _____

Alarm company called (circle): Y or N

Person who reported fire alarm: _____

Reason for fire alarm: _____

Additional comments: _____

For Official Use Only

Name of reviewer: _____ Date of review: _____

Fine assessed by fire department (circle): Y or N. If yes, amount? _____

Additional steps to be taken: _____

Louis Calder Center Parking Decal Application

Please complete and return form to the Business office

Print Full Name: _____

Residential Address: _____

Email Address: _____

Home Telephone: _____

Cell # _____ Office # _____

Vehicle Make & Model: _____

Vehicle Year: _____

Vehicle Plate Number & State: _____

Vehicle Color: _____

FOR OFFICE USE ONLY

Decal Issued on:

Decal Number Issued:

LOUIS CALDER CENTER

STUDENT INFORMATION FORM

Please complete **(in print form)** the information below and return this form to the Business Office. The information provided will be kept confidential and will only be used in case of an emergency

Status: Undergraduate Graduate Fellow CSUR HS Student Other_____

Date: _____ Email address: _____

Full Name: _____ School: _____

Home Address: _____

Home telephone number: _____

Cell number: _____

Emergency Contact Name and Telephone
Number: _____

Relationship to Emergency Contact: _____

Regular Physician's Name and Telephone
Number: _____

Do you have health insurance: Yes No
If, yes please attach a copy (**front & back**) of your insurance card to this form.

Medical History/ Information (Optional)

Do you have any previous significant medical and/or mental history (i.e. asthma/diabetes/depression/epilepsy)?
 Yes No

Are you presently under a physician's care? Yes No

If yes, please explain your condition(s):

List ALL medications (with doses & frequency) that you are taking now (indicate vitamins, herbal, etc.):

Do you smoke cigarettes? Yes No
Are you allergic to any foods, medications, or other substances? Yes No
If yes, please list;

Signature: _____ Date: _____

Louis Calder Center

Field Site Request Form

(pg. 1 of 2)

Date of Request: _____

File # (office use only): _____

Researcher Name: _____

Research Lab (Faculty Name): _____

Project Start Date: _____

Project End Date: _____

Daytime Phone #: _____

Evening Phone #: _____

Email: _____

Brief Project Description: _____

Requested Field Site Location(s) (Be specific. If possible, include GPS coordinates that define the area):

Habitat type (e.g., forest, old field, etc.): _____

Approximate plot size(s) and number: _____

Any unique habitat features (e.g., rare species, temporary ponds, etc.)? _____

Louis Calder Center

Field Site Request Form

(pg. 2 of 2)

Calder infrastructure needed (e.g., deer exclosures, experimental lake facility, etc.)? _____

On-site Calder owned equipment needed (yes or no)? If yes, specify: _____

Collection of organisms* (yes or no)? If yes, specify (species, numbers, and time of collection):

*Collection of vertebrates requires IACUC approval

Administrative Notes:

Reviewed by: _____

Decision: Approve or Reject request (circle one) Date: _____

Reason for Rejection: _____

Suggested follow-up: _____

Louis Calder Center
Greenhouse Space Request Form

Date of Request: _____ File # (office use only): _____

Project Start Date: _____ Project End Date: _____

Researcher's Name: _____ Research Lab (Faculty Name): _____

Daytime Phone#: _____ Evening Phone#: _____

Species (scientific and common names): _____

Brief Project Description: _____

Approximate Bench/Floor Space: _____

Watering Requirements (sprinkler, mister, hand, none): _____

Watering Frequency (daily, weekly, x/week, x/day): _____

Light Requirements (day/night hours, none): _____

Louis Calder Center
Animal Care Facility Space Request Form

Date of Request: _____ File # (office use only): _____

Project Start Date: _____ Project End Date: _____

Researcher Name: _____ Research Lab (Faculty Name): _____

Contact Information. Day phone: _____ Evening phone: _____

Species (common and scientific): _____

of Animals Held: _____ (each animal should have a specific ID #, as well)

Brief Project Description: _____

Temperature Requirements: _____

Light Requirements (day/night hours, none): _____

Special equipment/supplies needed: _____

Keys to facility. Date provided: _____ Date returned: _____

IACUC Approval Received ? Y / N / Pending (please circle one)

Date of IACUC Approval: _____

Please list relevant IACUC Protocol Numbers: _____

Louis Calder Center

Fordham University Accident Form

PERSONAL DATA

NAME: _____ AGE: _____

HOME ADDRESS: No. & Street: _____

City/State/Zip: _____

Telephone: () _____

Check one category (to which accident individual belongs):

- (1) _____ Fordham employee (i.e., faculty, administrators, clerical, maintenance)
- (2) _____ Student employee (work/study, etc., accident while performing student employment duties).
*Write your school address and phone on reverse side of the form.
- (3) _____ Student (regular student; accident NOT connected with student employment on Fordham campus)
- (4) _____ Others (i.e., visitors; IBI Guards; or food service personnel)

ACCIDENT DATA

Date (of occurrence): _____ Day: _____ @ Hour ____: AM or ____: PM
(Month/day/year) (of week)

Place: (Bldg. name and /or specific location on campus) _____

Witnesses: _____

Description: (What were you doing when accident occurred) _____

Nature and extent of injury (body part(s) affected): _____

Describe immediate medical care: (Treated at infirmary? And/or list name & addresses of doctor and/or hospital, etc.) _____

Did employee return to work same day? _____ If no specify: _____

Other Information (use additional space on reverse, if necessary) _____

The above statements are correct to the best of my knowledge.

Employee's Signature: _____ **Date:** _____

Authorized signature: _____ **Date:** _____
(Employee's Supervisor)

Louis Calder Center Work Order Request Form

Date: _____ Requestor's Name: _____

Telephone #: _____

Email Address: _____

Alternate Contact and phone # (If different from above): _____

Building/Room where service required: _____

Description of problem/work to be completed (Indicate only one service request per form submitted)

Submit completed work order request to Petra Del Valle via fax (914-273-2167) or email (pdelvalle@fordham.edu)

-----**Below to be completed by Caretaker**-----

Date Reviewed: _____

Recommendation/Action Required

Action Taken: _____

Date: _____

Action Taken: _____

Date: _____

Action Taken: _____

Date: _____

Resolution: _____

Date: _____

Date: _____

Revised November 2017
Revised October 2018