

QUEEN'S UNIVERSITY
Ontario Universities Program in Field Biology

Course Title:	Field Ecology
Instructor(s):	Dr. Bob Montgomerie, Dept. Biology, Queen's University email: mont@queensu.ca
Dates:	Saturday 17 August – Friday 30 August 2019
Location:	Queen's University Biological Station (QUBS)
Cost:	\$1200, not including transportation to and from QUBS
Prerequisites:	introductory ecology and statistics courses
Enrolment*:	12
Course Description (brief):	<p>This is a 12-day field course at the Queen's University Biological Station at the end of August, starting at Saturday evening dinner (17 Aug) and ending at Friday lunch (30 Aug) before the Labour Day weekend. The course provides an introduction to behavioural, evolutionary, population and community ecology with studies of a wide variety of organisms (e.g., birds, mammals, fishes, insects, arachnids and flowering plants). The focus is on experimental design, data collection, analysis and the presentation of research by seminar, written work, and social media. The course is structured around four 2-day-long modules each involving a different organism or habitat, plus an independent research project for the final 4 days.</p> <p>Please see the QUBS website <qubs.ca> for information about this setting, and especially the User Guide at https://qubs.ca/sites/default/files/2016-05/QUBS_Guidelines_for_fieldcourse_users_2014.pdf</p>
Evaluation:	Independent project 50 (written report 40, seminar 10); 2 group research reports via blogs and social media 40 (20 marks each); participation 10. Group reports and social media submitted during the course; independent study report by the end of September, but can be completed during the course.

Deadline to apply is **Feb 8, 2019**

If interested please complete the application form and submit it to the OUPFB course coordinator at your school.
Deposit of \$350 is due at the time of registration.

Tuition at your home institution is *in addition* to any field module costs.

Students who drop a field course should not expect a refund of any field course costs.

Students are encouraged to purchase cancellation insurance if airline tickets are required.

Students are responsible for all fees incurred by the home or host university due to any bounced cheque.

An Average Day – What to Expect

(a) Daily timeline	A typical work day for the first 10 days— 7:00 breakfast, 8:00 field work rain or shine, 11:00 morning recap and plans for afternoon, 12:00 lunch break, 13:00 continuing field work, 16:00 lectures and presentations, 18:00 dinner, 20:00-21:00 pm daily recap and plans for next day. The final 4 full days are for independent projects.
(b) Work habitat & Physical exertion	We will be outdoors for two 3-hour periods each day, mainly walking in different habitats on the QUBS property. The property is wooded and hilly but the walking is not at all strenuous. The planned research is not physically demanding.
(c) Common activities	<ul style="list-style-type: none"> • common activities: walking in woods and fields, often sitting on ground/logs/rocks to take measurements • associated risks: the main risk at QUBS is Lyme disease that is tick borne. This is entirely preventable, though, and we will train all students in methods for preventing tick bites, inspecting for ticks, and treating bites. For walking in woods and fields, sturdy footwear is essential, and waterproof boots and rain gear may be needed on some days.
(d) Weather, dehydration, & biting insects	<ul style="list-style-type: none"> • the weather at QUBS at the end of August tends to be very pleasant with daily highs in the mid-20s and nighttime lows in the teens. It is rarely very rainy at this time of year but still worth bringing rain gear and waterproof boots. It is also worth bringing a light jacket for evening activities • at this time of year biting insects are on the wane, but sometimes deer flies can be bothersome. See below for information on ticks
(e) Toxic/poisonous, wildlife/ plants	Ticks are very common at QUBS though the peak season will have already passed by the end of August. While Lyme disease is serious, it is entirely preventable and we will teach you how to prevent tick bites, and how to deal with them effectively in the unlikely event that you are bitten.
(f) Sleeping, washroom & laundry facilities	<ul style="list-style-type: none"> • sleeping accommodations: dorm-like rooms or small cabins; you will need to bring your own sleeping bag and pillow • washroom facilities: flush toilets in the larger cabins, otherwise nearby • washing/laundry facilities: not available; you will need to bring enough clothing for two weeks
(g) Meal plans & food allergies	All meals are prepared and eaten in a large central modern operations building at QUBS. Allergies and most dietary restrictions can be readily accommodated
(h) Non-academic responsibilities	You are required only to keep your own living area reasonably clean and free from leftover food, and to bus your own tables after meals.
(i) Degree of isolation	<p>At QUBS the main operations centre is wired, so you should have no trouble (at least in that building)</p> <ul style="list-style-type: none"> • recharging cameras, laptops, devices (also in all of the accommodations) • using your cell phone (though we would recommend against it) • accessing wi-fi <p>Food is cooked in a central facility on a predetermined schedule so it is not possible to make last-minute requests to satisfy dietary requirements but</p> <ul style="list-style-type: none"> • every few days we will make a run to a nearby town for additional supplies/treats • there is no food (except fruit) available between meals <p>QUBS is well equipped with first aid supplies but</p> <ul style="list-style-type: none"> • you should bring your own meds, and even first aid supplies if you have favourites • is not close to a doctor or hospital. This is a relatively remote location so it takes 30 min or more to get professional medical attention
(j) Alcohol & drugs	Alcohol is permitted in small quantities in the residences
(k) Vaccinations/ Insurances	No unusual vaccinations are needed. Check to see if you require travel insurance for coverage at a field station like QUBS
(l) Social Situations	There is unlikely to be many researchers or visitors to QUBS at this time of year, so we will probably only see the QUBS staff and the other participants on this course for the entire period. While this is not particularly isolated, it is important to realize that you will be working and living with the same group of about 15 people for the entire two-week period. We try our best to make this a fun and rewarding educational experience, and that works best if everyone is fully engaged in the course. This is a unique opportunity to completely immerse yourself in field research.
(m) Final comments	<p>This is a fun but intensive course where we try to explore a lot of topics in ecology, immersing ourselves in both field work and data analysis for the full 12 days. It should be possible to complete almost all of the course requirements (including the final report) during this 2-week period but only if you give the course your full attention. For that reason I would recommend taking this opportunity to get immersed in a topic without distractions. I would recommend this course both for seasoned naturalists and anyone who wants to learn more about natural history and the study of ecology.</p> <p>Please also see the QUBS website https://qubs.ca for more detailed information about many of the above topics and especially https://qubs.ca/sites/default/files/2016-05/QUBS_Guidelines_for_fieldcourse_users_2014.pdf</p>