

Course Title:	Field Ornithology in Algonquin Park																	
Instructor(s):	Alex Mills, Department of Biology, York University, 4700 Keele Street, Toronto, ON M3J 1P3 (416) 451-3972 ammills@yorku.ca																	
Dates:	Saturday, May 14 to Friday, May 27																	
Location:	Wildlife Research Station, Lake Sasejewan, Algonquin Provincial Park (P.O. Box 49, Whitney, Ontario. Canada KOJ 2M0)																	
Cost:	Total \$1400 . Non-refundable deposit of \$350 to your home university upon enrolment. Balance of \$1050 to York University by April 30, 2022. The cheques should be mailed to: Cassie Schlosser, Dept. Biology, York University, 4700 Keele St., Toronto, ON M3J 1P3. Fee includes: all accommodations, meals, use of canoes and equipment, transportation during the course. Excluded: students are responsible for travel costs to and from the WRS, although arrangements can be made for pick-up (May 14) and return (May 27) at the Huntsville Bus Station (fare from Toronto is about \$42, one way).																	
Prerequisites:	A second-year Ecology course.																	
Enrolment:	14 (4)																	
Course Description (brief):	Algonquin is a large, rugged, world famous park about 240 km north of Toronto. It is celebrated for canoe tripping, wildlife viewing, and research. We will be immersed at the venerable Wildlife Research Station (WRS: https://www.algonquinwrs.ca/) on Lake Sasajewan, a research and teaching facility that is off limits to the public. Spring bird migration reaches its peak during our May visit, with many songbirds returning from winter sites thousands of km away. The first half of the course will involve exploring different habitats, learning to identify birds by sight and sound, observing their behaviours, learning field techniques (surveying, mist-netting and bird-banding), and analyzing the data we collect. The remainder of the course will be devoted to field research projects where pairs of students will design and execute a field protocol to address a particular ornithological question.																	
Evaluation:	<table border="0"> <tr> <td>In-course – Short AV presentation on an avian biology subject</td> <td>5%</td> </tr> <tr> <td>In-course – Active participation in the group field-survey exercise</td> <td>5%</td> </tr> <tr> <td>In-course – Benchmark mini-quizzes throughout</td> <td>20%</td> </tr> <tr> <td>In-course – Mist-netting and bird-banding practicum</td> <td>10%</td> </tr> <tr> <td>In-course – Field journal handed in at the end of the course</td> <td>10%</td> </tr> <tr> <td>In course – Field research project (2-person team) - design and execution</td> <td>15%</td> </tr> <tr> <td>In course – Field research project (2-person team) - team presentation</td> <td>15%</td> </tr> <tr> <td>After-course – Field research project (2-person team) - written report</td> <td>20%</td> </tr> </table>		In-course – Short AV presentation on an avian biology subject	5%	In-course – Active participation in the group field-survey exercise	5%	In-course – Benchmark mini-quizzes throughout	20%	In-course – Mist-netting and bird-banding practicum	10%	In-course – Field journal handed in at the end of the course	10%	In course – Field research project (2-person team) - design and execution	15%	In course – Field research project (2-person team) - team presentation	15%	After-course – Field research project (2-person team) - written report	20%
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An Average Day – What to Expect

Daily timeline	50% of days will begin before breakfast with mist-netting and bird-banding, as students will be on a 2-day rotation. After breakfast most days, students will be in the field. Initially, it will be the whole group, but after an acclimatizing period, students will work in sub-groups and eventually in pairs. Several locations will be accessible on foot near the station, but we will also taxi students to several nearby sites when required (<i>Old Airfield, Bike Trail, Two Rivers Trail, Bat Lake Trail</i>). Lunch will normally be back at the station. On some days, we will also be in the field in the afternoon, and occasionally in the evening – even after sundown once or twice. But there will be a break for personal time each day. Also, most days we will be in the classroom for at least one hour. This will be for varied purposes: (a) short lectures from the professor, (b) 3-minute presentations by students, (c) identification practice, (d) benchmark quizzes, etc. A course schedule will be provided at the start of the course, but weather will almost certainly require adjustments as we go. Each student will be in a group, also on rotation, that will require after-dinner clean-up duty two or three times during the course.
Work habitat & Physical exertion	Students will be on foot a lot, and will likely be walking at least several kilometers per day. The terrain is rugged and varied, but the change in elevation is not great, so there is not a lot of climbing. Good running shoes or light hiking boots will usually be appropriate. Some landscapes are low and wet underfoot. Once or twice we will be wading, and in such cases old running shoes that can get wet will probably be superior to boots. Once or twice we will be canoeing (with life jackets), although it will involve only relatively short distances. Inevitably, students will occasionally be in the field when rain arrives, so rain gear is highly desirable. Previous spring and summer field courses at the WRS have proved to present no major challenges where students have reasonable physical fitness.
Common activities	<p>More or less daily: Walking on quiet bush roads and trails, walking in wooded and open habitats off-trail, carrying survey equipment, sitting patiently and quietly during banding or fieldwork, working in the classroom.</p> <p>Less than daily, but likely at least once: Collecting vegetation samples, wading in shallow water (small river or marsh), hiking in steep terrain, near-shore canoeing (with life jackets), walking at night, mist-netting and handling birds, bird-banding.</p> <p>Associated possible inconveniences: long days, getting wet from rain, twisted ankles in uneven terrain, and, during the second week, being annoyed by biting insects (mosquitoes and black flies).</p>
Weather, dehydration, & biting insects	May is unpredictable. Frost is still possible at night, but summer temperatures are possible too. Don't pack based on the weather you are experiencing in southern Ontario! Warm hat, gloves, and layers (including long underwear) are recommended, but so are lightweight clothes for warm conditions. Most days are not likely to rain, but it will rain during the course at one or more points, so bring rain gear. Providing that you travel with a water bottle and are attentive, dehydration is unlikely. Days approach 15 hours of daylight in May at this latitude. Even in warm weather, hats and skin-covering clothing will be best suited for most field activities to minimize sunburn and insect bites. To avoid insect bites, repellent is recommended, but you may also wish to bring a "bug jacket" or a head net.
Toxic/poisonous, wildlife/ plants	Some plants and fungi are poisonous to eat. There is no poison ivy or stinging nettle in the area. There are no venomous snakes. Ticks that attach to humans are rare in Algonquin, and to date, Lyme disease has not been recorded. As is true everywhere, there are stinging bees and wasps, but stings are infrequent. There are black bears and eastern wolves in Algonquin, and we have been lucky enough to see both in the past; they pose little risk providing that students follow protocol.
Sleeping, washroom & laundry facilities	Students sleep in single-sex cabins shared with other students. Beds with mattresses are provided, but students should bring bedding (or sleeping bags) and their own pillow. Some cabins are not impervious to deer mice, but keeping a clean cabin minimizes their presence. Cabins have electricity but are not air-conditioned. The WRS has a utility building that includes single-sex washrooms with hot showers and flush toilets. Elsewhere on the WRS premises (e.g. more distant facilities, such as the classroom), outhouses (pit latrines) are also used. The utility building also has laundry facilities for occasional use.
Meal plans & food allergies	<p>The WRS has a kitchen and dining area that will accommodate the whole course at one sitting. Mostly, all students in the course will eat here three times per day (breakfast, lunch, dinner) at prescribed times.</p> <p>Breakfast is usually self-serve using cereal, toast, etc. but occasionally it is a hot breakfast. Lunches may be hot or cold, but are hearty. Dinners are usually a hot meal. On occasion, we may employ boxed lunches for consumption in the field. The WRS has kitchen staff who prepare the noon and evening meals.</p> <p>Good coffee is available each morning, but users are asked to contribute coins to the coffee fund if they consume it. Allergies are registered with the head cook, and vegetarian options are available. The facility cannot eliminate all allergens from the site, however. For instance, the site cannot be nut-free. Naturally, students who react to allergens with anaphylaxis should come prepared with an epipen.</p>
Non-academic responsibilities	Students will be on clean-up duty two or three times during the course. This includes evening dish duty and also sweeping / cleaning of the utility building and the dining hall, but not cleaning toilets. Students are expected to be fastidious in their sleeping cabins in consideration of their bunk mates and to minimize attracting deer mice.

Degree of isolation	<p>The WRS is about 1.5 km north of highway 60 and it is accessible by a bush road prohibited to the public (but not to the course). Students are expected to make their own way to and from the WRS. However, there is bus service from the GTA to the Town of Huntsville, and field course personnel will pick up (May 14) and return (May 27) students there by arrangement. Similarly, for enrolled students who are interested, we will try to facilitate car-pooling arrangements to and from the course.</p> <p>The station has power, so recharging devices is possible. There is no WIFI and cell service is intermittent. Occasionally but not daily, groups of students will be able to visit the Algonquin Visitor Centre where there is WIFI. During most of the course activities in the field and the classroom, cell phone use will be restricted anyway, so that students are “in the moment” occupying a non-virtual, non-electronic environment.</p> <p>The Two Rivers Store on highway 60 is about 2 km from the WRS, and it has fast food and some basic convenience items.</p> <p>There are first aid supplies at the Wildlife Research Station. The Huntsville Hospital is about an hour’s drive from the WRS.</p>
Alcohol & drugs	The WRS is not alcohol-free, but there is a no-alcohol course policy. At the end of the course, we plan to have an evening bonfire party where alcohol will be permitted. Smoking marijuana or marijuana products is not allowed.
Vaccinations/ Insurances	All students will be required to demonstrate they have been double-vaccinated against Covid-19.
Social Situations	Students are required to be considerate of those with whom they share sleeping quarters, and to work collaboratively with those with whom they will be working on course activities.
Final comments	One student comment from a past version of this course, about the beautiful landscape: “I feel like I’m living in a postcard”.