2020 DEPARTMENT OF FOREST RESOURCES
ADVANCED FOREST AND NATURAL RESOURCE MANAGEMENT FIELD SESSION
March 27-28, May 14 –27 and two additional dates to be announced
Cloquet Forestry Center
University of Minnesota
175 University Road
Cloquet, MN 55720-9594
http://cfc.cfans.umn.edu/

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Program information: Charlie Blinn – (612) 624-3788, cblinn@umn.edu, 330b Green Hall
Registration information: Tracene Marshall – (612) 625-0266, marsh318@umn.edu, 130 Coffey Hall
Grant McCormack – (612) 624-3521, grantkm@umn.edu, 130 Coffey Hall

The field session is coordinated by the Department of Forest Resources, the Cloquet Forestry Center and the Student Services Office located in 190 Coffey Hall, 1420 Eckles Avenue, St. Paul, MN 55108.
WHO SHOULD ATTEND

The Department of Forest Resources’ Advanced Forest and Natural Resource Management Field Session is designed for students who wish to become involved in forest land management or find positions in specialized areas such as resource measurements, analysis and planning, silviculture, timber harvesting, hydrology, forest protection, or policy development. It provides unique hands-on learning experiences that build upon previous coursework and knowledge while demonstrating the integrated nature of those courses.

All undergraduate Forest and Natural Resources Management majors within the Forest Ecosystem Management and Conservation (FEMC) specialization are required to attend. FEMC specialization students admitted before Fall Semester 2020 must attend at least two of the three classes offered but are strongly encouraged to take all three classes due to the integrated nature of the courses. Students admitted for Fall Semester 2020 or later must take all three classes.

Graduate students who are interested in on-the-ground practices and field skills development are encouraged to attend. Additionally, graduate students focusing on how society values and makes decisions about the use, management, and protection of natural and environmental resources will benefit from attending the session.

WHAT STUDENTS STUDY

The session is an intensive experience where students learn the field techniques and applications of resource survey, silviculture, and timber harvesting and road planning. Extensive time is spent examining and applying advanced concepts in the field. While each course includes unique meeting dates, there are times when content is integrated across the three courses through joint instruction and assignments. One way in which that integration occurs is through a final project in each course where students will meet with a private landowner, determine their ownership objectives, conduct a resource survey of their parcel to provide input for writing a “stewardship plan”, and designing a harvest and road access plan. The three courses included in the session are described below. For additional information on the courses and faculty, see www.forestry.umn.edu.

FNRM 4515 (1 credit) Field Resource Survey – John Zobel, Instructor

This course builds student knowledge and skills in sampling and measurement methods for inventory, monitoring and analysis of forest and related natural resources. Students conduct exercises in field data collection, data synthesis and reporting, and learn about resource survey design options. These exercises expose students to a range of approaches and technologies for data capture, analysis and reporting. Problems considered range from describing trees and stands on the Cloquet Forestry Center to larger landscape and regional levels and issues from describing land use, resource condition, future condition, and management practices, including the impact of practices. Students work in groups to develop and conduct a forest and natural resource inventory for a Cloquet-area landowner’s property. Prerequisites for undergraduate students: FNRM 3218 and 3262 or instructor consent.
FNRM 4511 (2 credits) Field Silviculture – Marcella Windmuller-Campione, Instructor

Students learn how to collect field data and prepare/write silvicultural prescriptions for achieving management objectives within the context of stand, landscape, watershed, and wildlife habitat/biodiversity issues. They conduct field exercises that consider forest entomology, pathology, tree improvement, forest soils, and nontimber forest products. As a major part of the course, students work in groups to develop a “stewardship plan” for a Cloquet-area landowner’s property. This involves identifying landowner goals and objectives, inventorying and evaluating the land, and developing short- and long-term management prescriptions. Prerequisites for undergraduate students: FNRM 3104, 3411, or instructor consent.

FNRM 4521 (2 credits) Field Timber Harvesting and Road Planning – Charlie Blinn, Instructor

Students learn about the process of designing a forest road and timber harvest considering the economic, environmental, and social influences which impact those operations. The intent is to present and discuss those issues in the context of implementing natural resource management plans. Course emphasis is on providing field-based experiences with the various aspects of timber harvesting and road planning. As site and stand conditions, landowner objectives, regulations, and other factors vary across the landscape, there are a variety of approaches used to accomplish timber harvesting and road planning. The course will address many of the different methods, presenting more detail for some than others. Students work in groups to develop a harvest and road access plan for a Cloquet-area landowner’s property. Prerequisites for undergraduate students: FNRM 3411 and 3431, or instructor consent.

REGISTRATION

Registration is on-line. If you do not fulfill course prerequisites, you will need to get permission from the faculty member in charge of the course.

For students who are currently admitted to a degree program at the University of Minnesota, registration for this session began on November 12, 2019 on a rolling basis based on student registration timeslots.

For students who are not currently enrolled in a degree program at the University of Minnesota, registration for this session began on December 6, 2019. Non-degree seeking students who wish to attend the Advanced Field Session are required to follow these instructions.

Non-major students may register for the Advanced Field Session if they have completed the prerequisites or if they get permission from the faculty member(s) in charge of the course.

Graduate students may register for the Advanced Field session beginning on November 12, 2019. If they have not completed course prerequisites, students should discuss their enrollment in a course with their advisor and the appropriate instructor(s) prior to registering for the session.

Undergraduate students may not register for more than 20 credits per semester without college approval (15 for summer session). Students must petition the college to request permission using the Academic Policy Petition form available in the CFANS Student Services Office or through One Stop.
APP  ROXIMATE TUITION AND FEES

There are no additional tuition expenses for undergraduates who register during Spring Semester for at least 13 credits or graduate students who register during Spring Semester for at least 6, but not more than 14 credits.

**Undergraduate tuition per semester:**
- According to the **13-credit policy**, a degree-seeking undergraduate student must pay a flat tuition rate based on 13 credits, no matter your credit load. For residents, the flat rate is $6,659. For non-residents, the flat rate varies from $12,792 to $15,808, depending on when you started your degree.

**Graduate tuition per semester:**
- The general graduate tuition rate includes a 6-14 credit band for full-time registration. Each credit above or below the plateau is assessed on a per-credit basis. For residents, the full-time tuition for 6-14 credits is $8,790 and each credit above or below that band costs $1,465. For non-residents, the full-time tuition for 6-14 credits is $13,602 and each credit above or below that band costs $2,267.

The following are estimated course fees for transportation and lodging at the Cloquet Forestry Center

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Fee</th>
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<tbody>
<tr>
<td>FNRM 4515</td>
<td>$70.00</td>
</tr>
<tr>
<td>FNRM 4511</td>
<td>$84.00</td>
</tr>
<tr>
<td>FNRM 4521</td>
<td>$84.00</td>
</tr>
</tbody>
</table>

**Note:** Undergraduate students may be eligible for financial aid. Additionally, the College and/or Department of Forest Resources may be able to provide scholarship support for the session for those undergraduate students who applied through the CFANS scholarship process.

A billing statement for tuition and fees will be sent to your student account when you register for Spring Semester. These charges must be paid in full by the due date indicated on your billing statement. A late fee will be assessed if payment is not received by that time.

**STUDENT HEALTH**

The Advanced Field Session involves sustained physical activity, working alone or in teams, often on uneven terrain and in a variety of weather conditions. A medical examination prior to the session is advised. Immunization clearance is not required for the session; however, students attending the session should have had a tetanus booster vaccination within the last five years.

Because the session begins the day after the last day of Spring Semester finals, the instructors are aware that this may put a strain on student well-being and mental health. As any individual may at times experience an impact on their well-being or mental health during a field session, it can be important to have a plan. This may involve taking some time before the session to establish social/therapeutic/self-care supports and strategies that can be accessed remotely, planning around consistent access to medication if applicable, and academic accommodations if needed. Field session instructors are always a resource so please feel free to reach out to us at any time.

The Disability Resource Center (DRC) can be a resource to those who would like to explore accommodations related to a disability or health condition. Students can contact 612-626-1333
or drc@umn.edu to make an appointment if they would like to explore accommodations for the field session. If possible, students should register with the DRC in advance of the field session if they think they may need accommodations during the session.

Students who are required to complete the field session, but will not be able to do so due to medical reasons, should contact Dr. Michael Kilgore (612/624-3400) within the Department of Forest Resources.

While at Cloquet, students who have paid their Student Service Fee are regular members of the University Health Service with medical services provided through Raiter Clinic (218/879-1271), 417 Skyline Blvd., Cloquet. Directions to the Raiter Clinic are noted below. Coverage is similar to that available on the Twin Cities Campus. All injuries must be reported immediately to Dr. Andy David (Director, adavid@umn.edu 218-244-6794) or Stephanie Oberg (Facility Coordinator, oberg086@umn.edu 218-726-6401) at the Cloquet Forestry Center and the course Instructor.

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Directions to Raiter Clinic from the CFC

Head northeast on University Rd toward Cartwright Rd for 0.6 miles

Turn left onto Brevator Rd for 0.6 miles

Turn right onto Big Lake Rd for 2.4 miles

Turn left onto MN-33 N for 1.4 miles

Turn right onto Skyline Blvd. and proceed for 0.1 miles

Make a U-turn. Destination is on the right in 0.1 miles
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Raiter Clinic's hours are 8:00 a.m.-5:00 p.m. Monday-Friday by appointment. After hours medical services are available at the Community Memorial Hospital emergency room (218/879-4641), 512 Skyline Blvd., Cloquet. Directions to the Community Memorial Hospital are noted below.
All medical bills must be submitted to the student's hospitalization insurance carrier first. After their insurance carrier determines the amount they will pay, the student should send the emergency medical service bill and the insurance company's explanation of benefits worksheet (which indicates how much the insurance company paid) to: Boynton Health Service, 410 Church St. S.E., Minneapolis, MN 55455, Attention: Patient Accounting Supervisor.

The Cloquet Forestry Center does not stock any medications. If you are susceptible to allergic reactions to pollen, insect bites, or stings, etc. bring your own medication to the session. Northern Minnesota is an area where you should be concerned about tick borne diseases. Additional information about Lyme disease is presented below on Pages 11 – 15 and through the Center for Disease Control, the Minnesota Department of Health and the Minnesota DNR.

HOUSING

Students must live on the Center because it greatly simplifies schedules and group assignments and it provides a better learning experience. The Center will apply housing regulations defined within the University’s Community Behavioral Standards. By staying in Center housing, you are agreeing to abide by those policies. Housing is available on the Center in Cabin 46. Students should expect to double up in rooms. Camping facilities are not available. Cabin 46 has wireless internet access, as does the Administration Building.

Pillows and mattresses are provided. However, pillow cases, linen for a twin bed, towels, and blankets must be furnished by students. The occupants of each room are expected to keep their room clean (cleaning supplies will be available). The quarters are clean when students arrive and must be clean when they leave. Students are responsible for room clean up prior to their departure. Pets are not allowed in the dorm rooms under any circumstances.

Please respect the buildings. Do not deface any walls by carving or writing. Do not put nails or tacks in the walls. Abnormal breakage or damage to dormitories or dorm rooms will be assessed against the individuals involved. Do not wear hobnail or caulk boots in buildings. Do not move any beds or furniture from one area to another. Smoking is prohibited in all buildings.
MEALS

Students are responsible for providing their own meals. Complete cooking facilities (e.g., two full-size refrigerators, a range with an oven, microwave, coffeemaker, dishes, pots and pans, silverware) are available in Cabin 46. Cooking is not permitted in the dorm rooms. You may bring a mini-refrigerator for your room.

SPECIAL ACCOMMODATIONS

To request a disability-related accommodation, please contact Stephanie Oberg at the Cloquet Forestry Center (218-726-6401 oberg086@umn.edu) at least two weeks prior to your arrival.

CLOQUET FORESTRY CENTER LOCATION

The Advanced Field Session is held at the University of Minnesota Cloquet Forestry Center in northern Minnesota. For directions, see the map below.

ARRIVAL AND DEPARTURE IN MAY

The Session will begin at the Center on Thursday, May 14 at 8:00 a.m. in the Administration Building with class and lodging check-in, equipment sign-out, briefing, and an introductory tour of the forest focused on measurement concepts. This tour is considered a part of the first course, FNRM 4515. Park your car in the large parking area next to Cabin 46. If you are unable to report to Cloquet by 8 AM on May 14, please contact John Zobel (jzobel@umn.edu) beforehand.

Please be advised that your post-session schedule for employment or other activities should take into account the end date for whatever course(s) you are registered to take. Requests for early releases to accommodate personal plans will not be approved. Dorm rooms will be inspected at the end of the session or after your last course to make sure they are clean.
COURSE SCHEDULE

Each class will participate in a) an organizational meeting in March to introduce the overall structure of the Advanced Field Session, b) a field trip in University vans to Cloquet and Grand Rapids on March 27 – 28 which will depart at approximately 1 PM on March 27 and return to campus by 6 PM on March 28, c) a debriefing meeting in April to discuss the March field trip, and d) specific dates for each course, as noted below. Dates for the pre-March field trip and April post-field trip discussion will be announced. Note that all students need to participate on May 27 for group project presentations.

<table>
<thead>
<tr>
<th>Course</th>
<th>Dates</th>
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<tbody>
<tr>
<td>FNRM 4515 (Field Resource Survey)</td>
<td>March 27 – 28, May 14 – 16 and 27</td>
</tr>
<tr>
<td>FNRM 4511 (Field Silviculture)</td>
<td>March 27 – 28, May 17 – 20, 22, 27</td>
</tr>
<tr>
<td>FNRM 4521 (Field Timber Harvesting and Road Planning)</td>
<td>March 27 – 28, May 21, 23 - 27</td>
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There will be two additional meeting dates, to be determined. One will occur before March 27 to discuss the March 27 – 28 field trip and organization of the classes in May. The second meeting date will occur in April to discuss the March field trip.

During May, approximate class times are from 8 AM to 12 PM and 12:45 PM to 4:30 PM everyday. Some evening work will also be scheduled. Class will meet on Monday, May 25 (Memorial Day). Individual instructors may make adjustments in the schedule as necessary for their specific courses.

EQUIPMENT

Bring your course notes for all prerequisite classes. The following are required supplies that must be provided by students. The supplies are not available at the Cloquet Forestry Center. Purchase them before you leave the Twin Cities. Some items are available at the Books Underground Bookstore on the St. Paul Campus. For the most part, the expensive items will also be used in other courses and/or in your professional career.

- Hand compass
- Tatum holder or clipboard to hold 8 1/2 x 11 inch paper
- Paper for reports and a packet of graph paper
- Pocket calculator
- Flash drive
- Pencils, pens, colored pencils, etc. for note taking and report writing
- Ruler marked in inches and tenths

Personal needs

- Pillow cases, linen for a twin bed, towels and blankets must be furnished by students; pillows and mattresses are provided.
- Field clothes adequate for protection against cold and rain. A waterproof hat, jacket, pants, and waterproof boots are an absolute necessity because field work is carried out regardless of the weather.
- Field clothes treated with permethrin, either by the manufacturer or aftermarket, are recommended to reduce exposure to disease-carrying insects such as ticks and mosquitoes. Permethrin treated field pants, calf-high socks, and shirts can be more effective than DEET-based insect repellent for tick protection. Follow the directions on the container when applying insect repellant containing DEET or permethrin.
✓ Footwear appropriate for walking on uneven ground, through dense brush, and when the soil and vegetation are wet and soggy.
✓ Any other clothing deemed necessary for an extended field course.
✓ Toiletries.
✓ Sun protection.
✓ Any medications including kits for insect stings, bee stings, etc.
✓ Glasses or other eye protection for working in the woods

Each student will be issued equipment when they check-in for use in one or more courses. Each student is responsible for the care of the equipment they are issued. Tapes, increment borers, and other tools or equipment needing protection from rust should be kept dry. Losses or unwarranted damage will be paid for by the responsible student or crew. Hard hats will be issued and must be worn when you are visiting an active timber sale. Eye and ear protection are available, but if you have your own, bring it with you. Specific items that will be checked out to students at check-in and collected before checkout are:

**Equipment issued to all students**
100 ft. tape  
Diameter tape  
Suunto clinometer  
Increment borer  
Tree and Log Scale Stick with angle gauge (hinge attachment)  
Prism 20 BAF  
Hard hat  
Safety glasses and ear protection (optional)

**Equipment that may be issued or used for short periods**
Laser rangefinder  

For students with smartphones or tablet devices, the Avenza PDF maps application, or some other geoPDF map app, can add to a student’s field experience. Cloquet Forestry Center staff can provide appropriate geoPDF maps for student use while working at the Forestry Center and other experimental forest properties.

**COURSE-RELATED TRANSPORTATION**

University vans will be available for course-related activities. Students must sign and return a Release of Liability form before they will be allowed to participate in any course-related field trips.

**MISCELLANEOUS**

**Emergency Contact Information** – Students must complete and return the Emergency Contact Information form to Charlie Blinn by March 20.

**Telephones** – Individual dorm rooms do not have phones. The Cloquet Forestry Center office number is 218-726-6400. In addition, several courtesy telephones are located throughout the Center. One is located in the vestibule as you enter the Classroom Administration Building (218-726-6489). A phone is also located in the kitchen unit of cabin #46 (218-726-6493).
Computer availability – A 24-station computer lab is available to students for class assignments, e-mail, and internet access via a fiber optic line.

Mail – Mail can be sent to the Forestry Center using the following address. Mail arrives in the mid- to late-afternoon Monday - Friday.

    Cloquet Forestry Center
    175 University Road
    Cloquet, MN  55720-9594

Outgoing mail can be placed in the mailbox located on the road between the Administration Building (#44) and the Forest Management Building (#2). It must be placed in the box by 11:30 a.m. each day.

Laundry – A washer and dryer are available in the basement of cabin 36. Additionally, two laundromats are located in the City of Cloquet.

Alcoholic beverages – As a University of Minnesota campus, CFC adheres to the UMN policy regarding alcohol and drug use. In short, students or others housed on or visiting a UMN campus must follow state law, which prohibits possession or consumption of controlled substances without a valid prescription and the consumption, purchase, or possession of alcohol by individuals younger than 21.

Smoking – The Cloquet Forestry Center is a smoke and tobacco-free campus.

Room check for supplies – A member of the Center staff will enter student rooms weekly sometime between 10 AM – Noon on Mondays to check for supply needs, damage, etc.

Storage of miscellaneous items – Do not store items in your room which can block the way in an emergency situation, destroy the interior of a building, or which can cause fire. Specific items which have been a concern in the past include bicycles, car batteries, motorcycles, and canoe paddles. Please store these items outside. Bring a lock to secure them, if necessary.

Pets – Pets are not permitted—do not bring them! This policy is rigidly enforced.

Firearms – As per University Board of Regents Policy on the possession and carrying of weapons, no person, whether a student, employee, or visitor, shall possess or carry a weapon while on University property unless they are a licensed peace officer, security guard, other law enforcement agent or military personnel when acting in the course of their official duties and when authorized to carry weapons; they are participating in military training when acting in the course of their official duties or performing duly assigned tasks involving weapons; acting under University Presidential approval; or for the purposes of lawful storage of a firearm inside a personal motor vehicle.

Photos – Course instructors may take photos of the class at various times for a number of reasons in support of the Department of Forest Resources’ educational, promotional and publicity efforts. Students are requested to sign and return a Photo Release Form to allow the photographs to be used in a publication, print ad, direct mail piece, electronic media (e.g., video, CD-ROM, Internet/WWW), or other form of promotion.
LYME DISEASE
(Prepared by Mayo Clinic Staff)

Lyme disease is caused by four main species of bacteria: *Borrelia burgdorferi*, *Borrelia mayonii*, *Borrelia afzelii* and *Borrelia garinii* bacteria. *Borrelia burgdorferi* and *Borrelia mayonii* cause Lyme disease in the United States, while *Borrelia afzelii* and *Borrelia garinii* are the leading causes of Lyme disease in Europe and Asia. The most common tick-borne illness in these regions, Lyme disease is transmitted by the bite of an infected black-legged tick, commonly known as a deer tick.

You're more likely to get Lyme disease if you live or spend time in grassy and heavily wooded areas where ticks carrying the disease thrive. It's important to take common-sense precautions in areas where ticks prevalent.

**Symptoms**

The signs and symptoms of Lyme disease vary and usually appear in stages.

**Early signs and symptoms**

A small, red bump often appears at the site of a tick bite or tick removal and resolves over a few days. This is normal after a tick bite and does not indicate Lyme disease.

However, these signs and symptoms may occur within a month after you've been infected:

- **Rash.** From 3 to 30 days after an infected tick bite, an expanding red area might appear that sometimes clears in the center, forming a bull’s-eye pattern. The rash (*erythema migrans*) expands slowly over days and can spread to 12 inches (30 centimeters) across. It is typically not itchy or painful.

  Erythema migrans is one of the hallmarks of Lyme disease. Some people develop this rash at more than one place on their bodies.

- **Other symptoms.** Fever, chills, fatigue, body aches and a headache may accompany the rash.

**Later signs and symptoms**

If untreated, new signs and symptoms of Lyme infection might appear in the following weeks to months. These include:

- **Erythema migrans** appearing in other areas of your body.
• **Joint pain.** Bouts of severe joint pain and swelling are especially likely to affect your knees, but the pain can shift from one joint to another.

• **Neurological problems.** Weeks, months or even years after infection, you might develop inflammation of the membranes surrounding your brain (meningitis), temporary paralysis of one side of your face (Bell's palsy), numbness or weakness in your limbs, and impaired muscle movement.

**Less common signs and symptoms**

Several weeks after infection, some people develop:

• Heart problems, such as an irregular heartbeat.

• Eye inflammation.

• Liver inflammation (hepatitis).

• Severe fatigue.

**When to see a doctor**

**If you've been bitten by a tick and have symptoms**

Only a minority of blacklegged tick bites leads to Lyme disease. The longer the tick remains attached to your skin, the greater your risk of getting the disease. Lyme infection is unlikely if the tick is attached for less than 36 to 48 hours.

If you think you've been bitten and have signs and symptoms of Lyme disease — particularly if you live in an area where Lyme disease is prevalent — contact your doctor. Treatment for Lyme disease is more effective if begun early.

**See your doctor even if symptoms disappear**

It's important to consult your doctor even if signs and symptoms disappear — the absence of symptoms doesn't mean the disease is gone. Left untreated, Lyme disease can spread to other parts of your body from several months to years after infection, causing arthritis and nervous system problems. Ticks also can transmit other illnesses, such as babesiosis and Colorado tick fever.
Causes

In the United States, Lyme disease is caused by *Borrelia burgdorferi* and *Borrelia mayonii* bacteria, carried primarily by blacklegged or deer ticks. The ticks are brown and, when young, often no bigger than a poppy seed, which can make them nearly impossible to spot.

To contract Lyme disease, an infected deer tick must bite you. The bacteria enter your skin through the bite and eventually make their way into your bloodstream.

In most cases, to transmit Lyme disease, a deer tick must be attached for 36 to 48 hours. If you find an attached tick looks swollen, it may have fed long enough to transmit bacteria. Removing the tick as soon as possible may prevent infection.

Risk factors

Where you live or vacation can affect your chances of getting Lyme disease. So can your profession and the outdoor activities you enjoy. The most common risk factors for Lyme disease include:

- **Spending time in wooded or grassy areas.** In the United States, deer ticks are most prevalent in the Northeast and Midwest regions, which have heavily wooded areas where deer ticks thrive. Children who spend a lot of time outdoors in these regions are especially at risk. Adults with outdoor occupations also are at increased risk.

- **Having exposed skin.** Ticks attach easily to bare flesh. If you're in an area where ticks are common, protect yourself and your children by wearing long sleeves and long pants. Don't allow your pets to wander in tall weeds and grasses.

- **Not removing ticks promptly or properly.** Bacteria from a tick bite can enter your bloodstream if the tick stays attached to your skin for 36 to 48 hours or longer. If you remove a tick within two days, your risk of acquiring Lyme disease is low.

Complications

Untreated Lyme disease can cause:

- Chronic joint inflammation (Lyme arthritis), particularly of the knee
- Neurological symptoms, such as facial palsy and neuropathy
- Cognitive defects, such as impaired memory
- Heart rhythm irregularities
Prevention

The best way to prevent Lyme disease is to avoid areas where deer ticks live, especially wooded, bushy areas with long grass. You can decrease your risk of getting Lyme disease with some simple precautions:

- **Cover up.** When in wooded or grassy areas, wear shoes, long pants tucked into your socks, a long-sleeved shirt, a hat and gloves. Try to stick to trails and avoid walking through low bushes and long grass. Keep your dog on a leash.

- **Use insect repellents.** Apply insect repellent with a 20 percent or higher concentration of DEET to your skin. Parents should apply repellant to their children, avoiding their hands, eyes and mouth.

  Keep in mind that chemical repellents can be toxic, so follow directions carefully. Apply products with permethrin to clothing in a well-ventilated area or buy pretreated clothing.

- **Do your best to tick-proof your yard.** Clear brush and leaves where ticks live. Keep woodpiles in sunny areas.

- **Check yourself, your children and your pets for ticks.** Be especially vigilant after spending time in wooded or grassy areas. Deer ticks are often no bigger than the head of a pin, so you may not discover them unless you search carefully.

  It's helpful to shower as soon as you come indoors. Ticks often remain on your skin for hours before attaching themselves. Showering and using a washcloth might remove unattached ticks.

- **Don't assume you're immune.** You can get Lyme disease more than once.

- **Remove a tick as soon as possible with tweezers.** Gently grasp the tick near its head or mouth. Don't squeeze or crush the tick, but pull carefully and steadily. Once you've removed the entire tick, dispose of it and apply antiseptic to the bite area.

Preventing tick bites (Centers for Disease Control and Prevention)

Tick exposure can occur year-round, but ticks are most active during warmer months (April-September). Know which ticks are most common in your area.

Before You Go Outdoors

- **Know where to expect ticks.** Ticks live in grassy, brushy, or wooded areas, or even on animals. Spending time outside walking your dog, camping, gardening, or hunting could bring you in close contact with ticks. Many people get ticks in their own yard or neighborhood.

- **Treat clothing and gear** with products containing 0.5% permethrin. Permethrin can be used to treat boots, clothing and camping gear and remain protective through several washings. Apply the permethrin in a well-ventilated area. Alternatively, you can buy permethrin-treated clothing and gear.
• Use Environmental Protection Agency (EPA)-registered insect repellentsexternal icon containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus (OLE), para-methane-diol (PMD), or 2-undecanone. EPA’s helpful search toolexternal icon can help you find the product that best suits your needs. Always follow product instructions. Do not use products containing OLE or PMD on children under 3 years old.

• Avoid Contact with Ticks
  
  o Avoid wooded and brushy areas with high grass and leaf litter.
  
  o Walk in the center of trails.

After You Come Indoors

Check your clothing for ticks. Ticks may be carried into the house on clothing. Any ticks that are found should be removed. Tumble dry clothes in a dryer on high heat for 10 minutes to kill ticks on dry clothing after you come indoors. If the clothes are damp, additional time may be needed. If the clothes require washing first, hot water is recommended. Cold and medium temperature water will not kill ticks.

Examine gear and pets. Ticks can ride into the home on clothing and pets, then attach to a person later, so carefully examine pets, coats, and daypacks.

Shower soon after being outdoors. Showering within two hours of coming indoors has been shown to reduce your risk of getting Lyme disease and may be effective in reducing the risk of other tickborne diseases. Showering may help wash off unattached ticks and it is a good opportunity to do a tick check.

Check your body for ticks after being outdoors. Conduct a full body check upon return from potentially tick-infested areas, including your own backyard. Use a hand-held or full-length mirror to view all parts of your body. Check these parts of your body and your child’s body for ticks:

• Under the arms
• In and around the ears
• Inside belly button
• Back of the knees
• In and around the hair
• Between the legs
• Around the waist
Medical and Emergency Contact Information

Student/Participant name______________________________________

Date____________________

Course(s) (check all that apply)
☐ FNRM 4515 – Field Resource Survey
☐ FNRM 4511 – Field Silviculture
☐ FNRM 4521 – Field Applications of Timber Harvesting and Road Planning

Please list any special medical or dietary needs we should be aware of (e.g., bee/wasp sting allergy, diabetes, asthma, lactose intolerant, gluten-free) ________________________________

_____________________________________________________________________

*********************************************************
First Person to Contact____________________________________

Relationship ________________________________

Home Phone Number ______ Cell Number ______

Work Phone Number ________________________________________

*********************************************************
Second Person to Contact ______________________________

Relationship ________________________________

Home Phone Number ______ Cell Number ______

Work Phone Number _____________________________

*********************************************************
Third Person to Contact ______________________________

Relationship ________________________________

Home Phone Number ______ Cell Number ______

Work Phone Number ________________________________________

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RELEASE OF LIABILITY

I wish to participate in the field trip(s) associated with the Advanced Cloquet Session (FNRM 4515, FNRM 4511, and/or FNRM 4521) offered by the University of Minnesota. I knowingly and voluntarily assume the risk of any injuries, regardless of severity, and including death, and all risk of damage to or loss of property that I may incur due to negligence or accidentally while I am participating in these field trips.

In consideration for the opportunity to participate in these field trips, I, on behalf of myself, my agents, heirs, and next of kin, hereby release the Regents of the University of Minnesota, its Department of Forest Resources, the Cloquet Forestry Center, and their respective employees, agents, members, and representatives and, if applicable, owners and lessors of premises used to conduct the event (“Releasees”) from any responsibility or liability for personal injury, including death, and damage to or loss of property that I may incur due to negligence of the groups named above or my own negligence or due to accidental occurrences while I am traveling to or from, engaged in, or otherwise participating in these field trips.

Governing Law and Jurisdiction. The laws of the state of Minnesota shall govern the validity, construction and enforceability of this Agreement, without giving effect to its conflict of laws principles. All suits, actions, claims and causes of action relating to the construction, validity, performance and enforcement of this Agreement shall be in the courts of the State of Minnesota.

I, the undersigned, am at least eighteen (18) years of age and competent to sign this release on my own behalf. I have read carefully and understand and agree to the terms and conditions of this release.

Signature

Date

Print Name

Phone Number

NOTICE
Participants under 18 years of age must have this release co-signed by their parent or guardian.

This is to certify that I, as parent/guardian with legal responsibility for this participant, do consent and agree to his/her release as provided above of all the Releasees, and, for myself, my heirs, assigns, and next of kin, I release and agree to indemnify and hold harmless the Releasees from any and all liabilities incident to my minor child’s involvement or participation in these programs as provided above, EVEN IF ARISING FROM THE NEGLIGENCE OF THE RELEASEES, to the fullest extent permitted by law.

Signature of Parent/Guardian

Date

Print Name

Phone Number
Talent Release Form

Program: Advanced Cloquet Session
Department Conducting Program: Forest Resources

Program activities: FNRM 4515, FNRM 4511, and FNRM 4521

I authorize Regents of the University of Minnesota (the “University” and its agents to record my appearance and participation in the Program on videotape, audiotape, film, photograph or any other medium and to use, reproduce, modify, distribute and publicly exhibit such recordings, in whole or part, without restrictions or limitation for any purpose that the University may deem appropriate. I further consent to the use of my name, likeness, voice and biographical material in connection with such recordings. I further authorize the University to assign these rights to other educational institutions or non-profit organizations for use in training purposes or product development.

I hereby forever release the University, its successors and assigns, its agents, and all persons for whom it is acting from any liability by virtue of any blurring, distortion, alteration, optical illusion or use in composite form, whether intentional or otherwise, that may occur or be produced in the recording process, or any unintentional misspellings or inaccuracies, and expressing waive any right that I may have to inspect or approve the finished recordings.

Print name:________________________________________________________
Signature:__________________________________________________________
Address:____________________________________________________________
City/State/Zip:________________________________________________________
Phone:______________________________________________________________
Date:________________________________________________________________

NOTICE

Participants under 18 years of age must have the agreement co-signed by their parent or guardian.

This is to certify that I, as parent/guardian with legal responsibility for the Participant, do consent and agree to the release set out above, and for myself, my heirs, assigns, and next of kin, release and agree to indemnify and hold harmless the University from any and all liabilities incident to my minor’s involvement, EVEN IF ARISING FROM THE NEGLIGENCE OF THE UNIVERSITY, to the fullest extent permitted by law.

Print name:__________________________________________________________
Signature:__________________________________________________________
Address:____________________________________________________________
Date:________________________________________________________________