

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: SECOND YEAR FISH & WILDLIFE  
FIELD CAMP

Code No.: NRT 2510-2 Semester: 3

Program: FISH & WILDLIFE TECHNICIAN

Author: Valerie Walker and Harold Cooper

Date: JUNE 2002 Previous Outline Date: JUNE 2001

Approved: \_\_\_\_\_  
Dean, Natural Resources Date

Total Credits: 2 Prerequisite(s): none

Length of Course: 5 DAYS

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## I. COURSE DESCRIPTION:

This 5 day field camp provides a hands on, practical experience specific to F&W students. Emphasis will be placed on field techniques and surveys to evaluate fish and wildlife populations and assess their habitats. Field work for the Aquatics Surveys course and the Wetland Management course will be conducted. All terrain vehicle operation, safety and basic maintenance will be reinforced.

## II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

### 1. **Correctly use field equipment to assess fish and wildlife populations and habitat**

#### Potential Elements of the Performance:

- effectively use passive and active fish capture techniques such as gill nets, trap nets, minnow traps and seine nets
- correctly set live traps and kill traps for small mammal inventory and nuisance animal control using leg hold, conibear and Bailey beaver traps, Aldrich foot snares , body snares
- properly operate telemetry equipment for determining animal presence and movement
- correctly operate and where necessary, calibrate the following instruments and equipment: oxygen meter, conductivity meter, pH meter, HACH kit, HYDROLAB, secchi disc, Juday plankton net, Kemmerer bottle, Wisconsin plankton net, sample tube, echo sounder (Lowrance X-1550), current meter, surber sampler, Ekman dredge
- correctly clean, repair, maintain and store field equipment
- safely operate and maintain an ATV under field conditions

### 2. **Use proper field techniques to assess fish and wildlife populations and habitat**

#### Potential Elements of the Performance:

- conduct a lake survey as outlined in MNR's Manual of Instructions - Aquatic Habitat Inventory Surveys

- map aquatic vegetation communities using the methodology described in MNR's Ontario Wetland Habitat Evaluation Manual
- practice efficient and human procedures to capture, handle and mark wild animals
- identify , determine vital statistics (sex , age, weight, maturity) of captured wildlife species
- process fish by determining and recording species identification; total length; fork length; weight; sex; stomach contents; state of health; presence of parasites, tags or marks and by removing scales, fin rays cleithrum and/or otoliths for age determination
- properly conduct a King Strip Census to assess a ruffed grouse population
- properly conduct a Peterson Index to estimate local small mammal populations
- select and use appropriate field equipment to collect, document and preserve small littoral fish and aquatic invertebrates
- estimate stream velocity and discharge
- design and conduct a habitat evaluation survey for a game species such as grouse, wild turkey, deer, elk or moose
- Monitor movements of a wildlife species using telemetry

3. **Organize field data into neat, accurate and complete standardized field forms or field maps**

Potential Elements of the Performance:

- construct a accurate transect map and produce corresponding depth sounding recordings
- construct an accurate lake physical features map
- construct a accurate aquatic vegetation community map
- neatly and accurately complete a Lake Summary form, Gill Net Catch Record Forms, Field Collection Records, Scale Sample Envelops associated with a lake survey
- neatly and accurately complete field forms associated with the King Census , Peterson Index, monitoring protocol
- neatly and accurately complete field forms associated with a habitat evaluation survey
- perform basic calculations to summarize survey data

### III. TOPICS:

1. Wetland Habitat Evaluation
2. Lake Survey
3. Wildlife Population and Habitat Surveys
4. Wildlife Trapping

### IV. REQUIRED RESOURCES/TEXTS:

1. Dodge, D.P et al. 1986. Manual of Instructions - Aquatic Habitat Inventory Surveys. Fisheries Branch, OMNR
2. Kurta, Allen. 1995. Mammals of the Great Lakes Region. Fitzhenry and Whiteside. Toronto. 376 p.
3. Newmaster, S.G., A.G. Harris and L.J. Kershaw. 1997. Wetland Plants of Ontario. Lone Pine Publishing. Edmonton, Alberta. 240 p.
4. OMNR. 1993. Ontario Wetland Evaluation System (Northern Manual). NEST Technical Manual TM-001. 171 p
5. Second Year Fish & Wildlife Field Camp Manual. Sault College, Sault Ste. Marie
6. Scott W.B. and E.J. Crossman. 1998. Freshwater Fishes of Canada. Galt House Publications Ltd., Oakville, Canada

### V. EVALUATION PROCESS/GRADING SYSTEM:

The following semester grades will be assigned to students in post-secondary courses:

<u>Grade</u>	<u>Definition</u>
S	Satisfactory
U	Unsatisfactory

The grade received will be based on attendance and participation. **MANDATORY** attendance and participation is required for all field activities for a satisfactory (S) grade.

**NOTE:** This course provides an opportunity for field data collection fundamental to mapping exercises and analysis in both Aquatic Surveys (NRT 246-3) and Wetland Management (NRT 108-3). Failure to receive a satisfactory (S) grade in

F&W Field Camp may seriously hamper success in both Aquatic Surveys and Wetland management.

**VI. SPECIAL NOTES:**

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the instructor.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.