SAULT COLLEGE
of Applied Arts and Technology
Sault Ste. Marie

COURSE OUTLINE

WILDLIFE INVESTIGATIONAL
TECHNIQUES
FOR-312-8

revised May 12, 1981 by HaroldCooper

TOPIC #	PERIODS (HOURS)	TOPIC DESCRIPTION	REFERENCE
1.	6	Introduction and Problem Solving	
		- Criteria of effective techniques - Scientific method and problem solving - wildlife literature, field notes and map preparation	Text Ch. 1, 2, 3, 4, 5, 17
2.	10	Analytical Procedures for Food Habit Studies	
		- uses of food habit information - field techniques - laboratory techniques - digestive tract analysis	Text Ch. 9
3.	20	Habit Evaluation Techniques	
		- Major groups of techniques - Nutrition and food analysis - Nutritional carrying capacity determination - Food availability, and utilization techniques (Varner, Aldous, Passmore- - Hepburn Clipping Surveys) - Condition Indicators in game species - Energy relationships and reproduction - Cover evaluation and assessment	Text Ch. 8, 10, 20
4.	28	Population Analysis and Estimation	
		- Definition of terms - Methods of census including: - total counts - sample census (strip census, etc) - mark-recapture techniques (Peterson, Schnobel, etc) - Census indices (drumming survey, pellet group survey etc) - Use of harvest statistics	Text Ch. 14, 15
5.	20	Criteria of Sex and Age	
		- various age classes - importance of knowing age and sex classes and ratios - A. Ageing and sexing fish species, and game birds by various features - B. Sexing and ageing criteria for all important game and furbearing mammals - Histological techniques for scale and fin ray preparation, tooth sectioning and preservation	Text Ch. 11

TOPIC #	PERIODS (HOURS)	TOPIC DESCRIPTION	REFERENCE
6.	20	Methods of Capturing, Handling and Marking Wild Animals	
		- A. Methods of Capture of Animals and Birds	Text Ch. 6
		- Kill trapping - trap types and sets	
		- Live trapping	
		- Use of drugs for capture and handling	
		- B. Marking Game and Fish	
		- rationale	
		- Methods including mutilation, Colouring and Tagging	
7.	6	Collection and Preservation of Biolgical Materials	
		- use of preservatives	Text Ch. 32
		- preparation of study skins	
		- skin preservation by fanning	
		- preserving meat or flesh	
8.	12	Evaluation of Wildlife Damage	
		- identifying predators or nuisance species from damage or signs	Text Ch. 22
		- assessing wildlife damage	
		- control of nuisance species by mechanical or chemical means	
9.	10	New Tools in Wildlife Research	
		- new tools and techniques	Text Ch. 18, 28-31
		- modern technology and equipment	
		- infra-red imagery	
		- advanced remote sensing equipment	
		- new instrumentation	
		- radioistopes	