Scientific Conferences & Society Meetings

Poster Sessions
Guidelines on sources of data for wildlife senior projects

**Prerequisites.** 311
(another class with project helpful – 430, 431, 420, 475)

**Senior Thesis.** 495
Class meets, one instructor.

**Honor’s Thesis.** 490
Work more closely with chosen & consenting advisor
Minimum GPA 3.0
Higher standard – potential for publication
Guidelines on sources of data for wildlife senior projects

Proposal will be submitted before data collection
Previously collected data are not allowed.
(summer data permissible if proposal approved in spring)

Project will be new & unique.
Projects shared with another class project are not allowed
(except dream proposal if show improved design)

Extensions of other projects
Allowed if leads to new learning & exceptional quality.
1. Scientific Hypothetico-deductive method – Hypotheses & Predictions

Hypotheses:
Potential explanations for phenomena
Biological assertions for missing information

Predictions:
Logical deductions
If—then statements
Wildlife Techniques *Retrospective*

2. Sampling design
   - Haphazard
   - Random
   - Systematic
   - Stratified
   - Combinations
3. Sampling animals

Mark-recapture

Line transects

Point Counts

Techniques for mammals, Birds, herps...without handling
4. Overview of some trapping, marking, and ageing/sexing techniques for vertebrates

*Practice on fieldtrip*
- Mist-netting
- Small mammal trapping
- Track plate surveys
- SpotLighting
Wildlife Techniques *Retrospective*

5. Map & compass navigation

- Rectangular system
- UTM system
- Compass declination
- Azimuth, bearing, triangulation
- Clinometer use
Wildlife Techniques _Retrospective_

6. Telemetry techniques & approaches

Transmitters & frequencies

Receivers & antennae

Homing vs. triangulation

Home range analysis
Wildlife Techniques *Retrospective*

7. Vegetation sampling

Plots

Plotless

Line intercept

% Frequency, etc.

Field measurements…
8. Analytical tools

$t$-tests – the hammer

Chi-squared tests – the pliers

Spearman rank correlation tests – the screwdriver