



GEM3

Genes by Environment
Modeling · Mechanisms · Mapping

Module Name: Chukar Dissection

Institution: Boise State University

Principle Investigator(s): Jen Forbey, jenniferforbey@boisestate.edu

Summary:

In this module, students will:

- Process animal carcasses, specifically demonstrating techniques to sex, age, and assess the body condition of wild birds (Lab 1)
- Dissect tissues and link these to physiological function (Lab 1)
- Isolate the intestines and use to test diet selection (Lab 1)
- Understand the relevancy of game birds for: advancing science, management of natural resources by state agencies, understanding the value of hunters, connection with the land and public (Lab 2)
- Use scientific practices to dissect and measure the intestinal tissues and link these to interactions with the environment and physiological function of animals (Lab 2)
- Use scientific practices to measure features of intestinal contents and prepare contents for future analysis of dietary quality (Lab 2)
- Archive digital data on morphometrics of your animal to compare to past data and for future iteration, collaboration and discovery (Lab 2)

This module has been used in BSU's Animal Physiology & Nutrition (ZOOL 409) course.

Contents:

- Guide: *A Guide to Aging & Sexing Grouse and Ptarmigan*
- Guide: *Bird Dissection 305*
- Guide: *Bird Dissection 306*
- Guide: *Bird Dissection 307*
- Guide: *Sexing and Aging Training* (Power Point)
- Guide: *Segments of Avian GI Tract*
- Video: Bird Dissection with Jen Forbey
- Lab 1: Avian Dissections
- Lab 2: Avian Dissections Intestine Morphology and Diet Preparation
- Group Data Sheet: Avian Dissections
- Lab Supply List (for Lab 1 and Lab 2)

Notes:

- At BSU, this module is followed by the Chukar Diet module (Lab 3).
- The plan is to have a prestocked supply tote for this module that can be sent to participating colleges and universities.

- If the supply tote is not available, these labs could still be done remotely via digital technologies, items found at home, or smaller-scale prestocked kits sent to the students. You could also purchase cornish game hens or find a local hunter and ask for one of their birds (upland game bird or duck).
- Graduate students are available to assist in teaching this lab remotely. Depending on travel and availability, they may be able to teach in person.

Questions? Contact the PI or the GEM3 PUI Liaison, Stephanie Sevigny, stephanieseigny@boisestate.edu

Last Updated: 08/10/2020