



THE WILDLIFE SOCIETY
NUTRITIONAL ECOLOGY WORKING GROUP



SKILLS WORKSHOP REGISTRATION
MEASURING FORAGE QUANTITY AND QUALITY FOR HERBIVORES

June 10th – 12th, 2025 (+ June 13th for optional half day)

UAF Matanuska Experiment Farm and Extension Center, Palmer, AK

Cost \$500 (+\$85 for extra half day)

Organizers: Rachel Cook, Kristin Denryter, Ryan Long, David Hewitt, Lisa Shipley, Don Spalinger

The TWS Nutritional Ecology Working Group, in collaboration with Alaska Department of Fish and Game, are pleased to announce registration is now open for the third skills workshop focused on measuring forage quantity and quality for herbivores. The workshop will include a mix of lectures taught by a diverse panel of instructors, hands-on exercises in the laboratory and in the field, and interactive group problem solving sessions. Our workshop qualifies for 15 continuing education units (CEUs) in Category 1 of the Certified Wildlife Biologist® Renewal/Professional Development Certificate Program.

Example Course Topics

- What's in 'food' and how do different foods vary in composition and nutritional value?
- Plant structure, composition, and phenology and how they relate to key nutritional assays.
- Nutritional requirements and secondary compound tolerances.
- Approaches to measuring plant abundance and quality.
- Strategies for sampling vegetation and interpreting results (e.g., sources of variation, sample sizes, sampling design, choosing methods, plant parts, animal requirements).
- Nutritional carrying capacity and animal 'foodscapes'.
- Case studies: integrating these techniques into research and management



Example Hands-On Exercises and Demonstrations

- Sample preservation/preparation for nutritional quality assays.
- Sequential fiber, crude protein, tannins, gross energy, digestible protein, in vitro digestibility, ether extract, total dietary fiber assays.
- Biomass sampling (clipped plots, double-sampling techniques).
- Interpreting laboratory results and how to spot mistakes
- FRESH deer model
- Relationships among plant traits, foraging behavior, diet selection and nutrient intake (optional half day).

<https://wildlife.org/newq/>

Optional Half Day (June 13th; Cost: \$85): Our main workshop will focus on how to measure quality and quantity of forage for herbivores. However, as we will emphasize, not all food is created equal. Even within plant species animals select to eat, plant characteristics can influence foraging attributes like bite size and bite mass which in turn influence daily nutrient intake. We will use a number of very tame caribou and feeding trials to offer a hands-on demonstration of relationships among plant traits, foraging behavior, diet selection and nutrient intake. Participants will gain an understanding of foraging behavior by measuring bite rate, bite mass, and diet selection on tame caribou in a captive facility. Those data will then be used in the lab to explore effects on daily nutrient intake. In addition, we'll explore the ability of commonly used surrogates of nutrition (e.g., remotely sensed metrics) to quantify variation in forage characteristics at broad scales.



For more information or questions on this workshop contact Rachel Cook rachierae@gmail.com

See below for registration form.

Registration Form

NEWG Skills Workshop – Measuring Forage Quantity and Quality for Herbivores

Organizers: Rachel Cook, Kristin Denryter, Ryan Long, David Hewitt, Lisa Shipley, Don Spalinger

Date: June 10th – 12th, 2025 (3 full days) (June 13th for optional half day)

Location: UAF Matanuska Experiment Farm and Extension Center, Palmer, AK

Registration Deadline: Registration will remain open until all spaces are filled.
May 1st, 2025 is the last day to cancel without forfeiting registration fees

A minimum of 14 attendees will be required and registration is limited to 24 participants. The cost is \$500 per participant for the main 3-day workshop. If also attending the optional additional half day, the cost is \$585. Registration fees may be paid by check, credit card, money order or PO.

To register, complete the form below and submit to Patience Mateer by email (pmateer@uidaho.edu). For questions about registering, Patience can be reached at (208) 885-9160.

Registration Form

Name:

Title:

Organization:

Street Address:

City

State

Zip

Work Phone

Email:

Desired Method of Payment:

<https://wildlife.org/newg/>