

THE WILDLIFE SOCIETY



NUTRITIONAL ECOLOGY WORKING GROUP

Est. March 2019

History behind formation of the Working Group

- For decades, the need has existed for a Nutritional Ecology Working Group within The Wildlife Society.
- More than 20 years ago there were discussions regarding creating a Working Group. At that time, the Comparative Nutrition Society was organizing, and many scientists thought this would fill that role.
- The Nutritional Ecology Working Group will provide a forum that facilitates communication and enables information sharing amongst wildlife professionals.
- We will emphasize the influence of nutrition on the dynamics of wild populations.

Nutrition is vitally important for every life process of every living creature – from optimizing growth and reproduction to decreasing susceptibility to disease, predation, and death.



Photo: Philip Walker



Photo: Rachel Cook



Photo: Tony Carnahan



Photo: Philip Walker

The science of nutritional ecology links food resources available to an animal with individual- and population-level performance. It involves data collected on nutritional requirements, food availability and quality, foraging and life history strategies under different environmental conditions, and body mass and condition.



Photo courtesy of Carly Wickhem



Photo: Philip Walker



Photo courtesy of Thomas McDonough



Photo: Lisa Shipley

When links between the food resource and the population are made, managers can predict how changes in one will impact the other – thus providing a clear path for managing food resources in a way that optimizes population performance, or alternatively, for managing animal populations to optimize the health of ecosystems.



Photo courtesy of Grant Hilderbrand



Photo: Rachel Cook

As global issues such as climate change, loss of habitat, and the spread of disease and parasites are increasingly impacting wildlife populations, the need for understanding the degree to which populations are limited by nutrition, and how we can best manage for nutrition, is increasing as well.



Photo courtesy of Dan Thompson



Photo: Philip Walker

Goals of the Nutritional Ecology Working Group (NEWG):

- Develop and maintain professional standards for wildlife research in nutritional ecology
- Facilitate communication and exchange of information to advance the science of nutritional ecology
- Advance professional stewardship of wildlife resources and their habitats in the context of nutritional ecology
- Encourage use of sound biological information for wildlife policy decisions relative to nutritional ecology
- Enhance knowledge and technical capabilities of wildlife professionals relative to nutritional ecology
- Increase public awareness and appreciation of nutritional ecology in wildlife management



Photo: Rachel Cook

Specific Goals and Projects

- *Symposia* – We are proposing a symposium for TWS 2020 in Louisville, KY on linking nutrition to population productivity.

- *Skills Workshops* – We are developing a hands-on workshop for sampling food abundance and quality during spring 2021. Location TBD.

- *Education* – Few universities offer courses in wildlife nutrition or nutritional ecology, and neither of these topics are part of the TWS certification program. Ideas being considered to address these gaps in education are:
 - Online classes
 - Developing university curriculum
 - Providing mentors for students
 - Skills Workshops
 - Training/Certification Programs



Photo courtesy of Tom Stephenson

Specific Goals and Projects

➤ Online Resources

- Benchmark Papers
- Comprehensive list of labs that perform nutritional assays
- Global vegetation database for sharing of nutritional quality data (i.e., species collected, location of collection, date of collection, plant part, storage method, nutritional chemistry results)

➤ Member and Study Spotlights

- Interviews with experts in the field
- Highlighting advances in nutritional ecology research

➤ Student Travel and Research Grants

- Fund through workshop fees

➤ Webinars

- Highlighting important nutritional ecology issues or studies



Photo: Deborah Monzingo

Membership

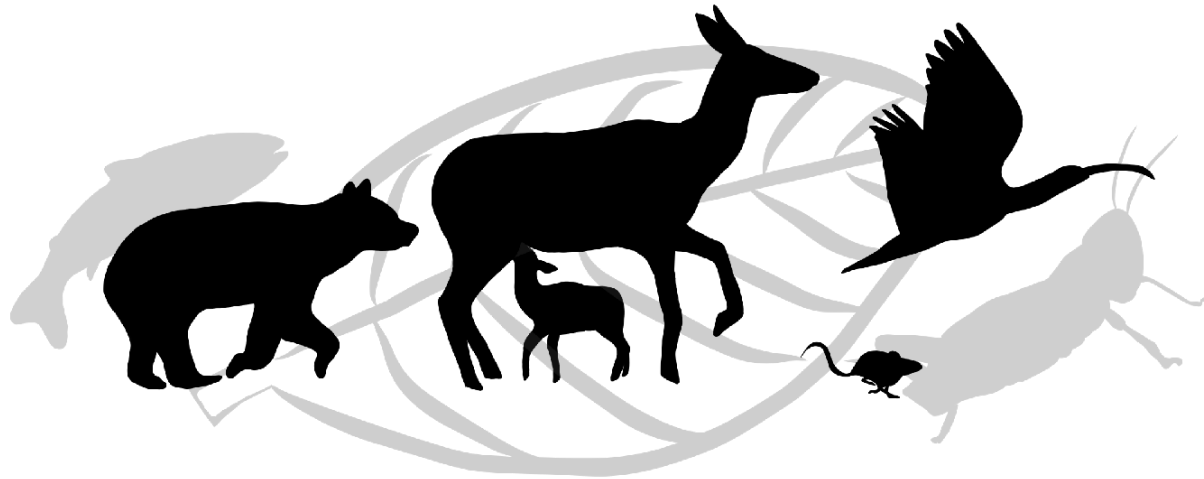
- Dues are \$5 annually
- By the end of **2nd year**, we need **30** members
- By the end of **3rd year**, we need **50** members
- Currently there are **22** members

- Diversity of membership is needed for Working Group to be a success.
 - Taxa
 - Geographic representation
 - Professionals (academic AND managers)
 - Career stages and level of experience



Photo: Miranda Crowell

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Contact us!

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