

MINUTES

Coordinating Committee Meeting Pennsylvania Cooperative Fish and Wildlife Research Unit

June 14, 2017

9:30 AM

To be held in Room 217 in the Forest Resources Building

1. The first hour of the meeting was attended by Dean Roush, College of Agricultural Sciences at the request of cooperators to provide the dean with an overview of the activities of the Unit. In addition, the meeting was an opportunity to share with him the importance of fish and wildlife to Pennsylvania's economy and the importance of the WFS program and the Unit to Cooperators. The department and Unit provide research expertise for the agencies and undergraduate and graduate students are potential employees.
2. **Approval of minutes from July 28, 2016 meeting – Motion to approve by J. Arway, seconded by W. Laroche, all approved.**
3. **Completed Projects (Summaries in Appendix A; yellow pages)**
 - 3.1. Diefenbach
 - 3.1.1. Fall harvest and annual survival rates of female eastern wild turkeys in New York
 - 3.2. Wagner
 - 3.2.1. Characterization of spatial and temporal variability in fishes in response to climate change
4. **New & Continuing Projects (* Requires approval by Committee; See Appendix B)**
 - 4.1. Diefenbach
 - 4.1.1. Influences on the timing of denning in female black bears and its effect on harvest rates and estimates of population size
 - 4.1.2. Harvest and survival rates of hen wild turkeys in Pennsylvania
 - 4.1.3. Genetics of an insular population of bobcats and coyotes
 - 4.1.4. Deer abundance and its relationship to factors that affect forest vegetation conditions
 - 4.1.5. Fawn survival in central and northcentral Pennsylvania
 - 4.1.6. Distribution of predators and their relation to fawn survival
 - 4.2. Wagner
 - 4.2.1. Linking fish health, contaminants, and population dynamics of smallmouth bass populations in the Susquehanna River, Pennsylvania
 - 4.2.2. Establishing a strategy for assessing risk of endocrine-disrupting compounds to aquatic and terrestrial organisms
 - 4.2.3. Can plasticity protect populations from rapid environmental fluctuation?
 - 4.2.4. Comparing relative abundance and population characteristics of Flathead Catfish across a range of establishment levels at the Susquehanna
 - 4.2.5. An investigation into the role of groundwater as a point source of emerging contaminants to smallmouth bass in the Susquehanna River

4.2.6. A macrosystems ecology framework for continental-scale prediction and understanding of lakes

4.3. Walter

4.3.1. Landscape genetics of white-tailed deer to assess population structure for surveillance of chronic wasting disease

4.3.2. Modeling potential habitat for pheasant population restoration

4.3.3. Assessment of PRNP genotypes and stress levels to determine potential susceptibility of elk to chronic wasting disease

4.3.4. Analysis of stable isotopes to differentiate between pen-reared and wild-born pheasant in Pennsylvania

4.3.5. * Feasibility of using non-invasive genetic sampling and spatial capture-recapture models for population estimation of fisher (*Martes pennanti*)

4.3.6. * Epidemiology of West Nile virus in ruffed grouse (*Bonasa umbellus*)

5. Proposed Budget – (next page)

6. Roster of Current Graduate Students and Post-Doctoral Researchers

6.1. Diefenbach

6.1.1. Danielle Begley, PhD Wildlife and Fisheries

6.1.2. Ethan Kibe, MS Wildlife and Fisheries

6.1.3. Tess Gingery, MS Wildlife and Fisheries

6.1.4. Lacey Williamson, MS Wildlife and Fisheries

6.1.5. Asia Murphy, PhD Ecology

6.2. Wagner

6.2.1. Megan Kepler-Schall, PhD Ecology

6.2.2. Shannon White, PhD Ecology

6.2.3. Tyler Thompson, MS Wildlife and Fisheries

6.3. Walter

6.3.1. Will Miller – PhD Ecology

6.3.2. Lacey Williamson – MS Wildlife and Fisheries

7. Service on Graduate Committees (other than advisees)

7.1. Diefenbach

7.1.1. N. Navarro, MS Soil Science

7.1.2. S. White, PhD Ecology

7.2. Wagner

7.2.1. Courtney Davis, PhD Ecology

7.2.2. Didem Ikis, PhD Ecology

7.2.3. Staci Amburgey, PhD Ecology

7.3. Walter

7.3.1. Megan Kepler-Schall, PhD Ecology

7.3.2. Tess Gingery, MS Wildlife and Fisheries

7.3.3. Ethan Kibe, MS Wildlife and Fisheries

7.3.4. Ellen Brandell, PhD Ecology

7.3.5. Casey Weathers, PhD Wildlife and Fisheries

8. Courses and Workshops Taught by Unit Staff

8.1. Diefenbach

8.1.1. Advances in Ecology, fall 2016

8.2. Wagner

8.2.1. Quantitative Methods in Ecology, spring 2017

8.2.2. Introduction to R and hierarchical models (workshop)

8.3. Walter

8.3.1. Applied Spatial Ecology, spring 2017

9. Comments from Cooperators

- 9.1. John Arway, PFBC – Next week the PFBC is testifying before the legislature regarding a license fee increase. However, a license increase is likely to reduce number of license buyers by as much as 10% so additional sources of revenue are ultimately needed. The PFBC is working with Dr. Judd Michael to look at fishing from a marketing perspective. Payments to the pension fund have increased 20% and resulted in the agency deferring about \$110 million in infrastructure maintenance and improvements.
- 9.2. Wayne Laroche, PGC – Similar to the PFBC the PGC needs a license fee increase and is meeting with the legislature next week. In the past year the Bureau of Wildlife Management has sustained large cuts in personnel so there are likely funds available for research. Diseases having a substantial negative effect on wildlife populations are West Nile virus and chronic wasting disease. Also, mange in bears and tick-borne diseases are in issue.
- 9.3. Michael Messina, PSU - Undergraduate enrollment is about 210 students with 2/3 being WFS students. The college is providing targets to departments for increasing the number of graduate students. The average age of ESM faculty is 56 years so it is expected that a substantial number of faculty will be retiring in the next 5 years.
- 9.4. Michael Tome – USGS – The president’s budget includes a 15% budget cut for USGS but the National Cooperator’s Coalition is working to encourage Congress to increase funding to CRU. However, given the large number of vacancies and recent federal budgets, most Units may only be staffed by 2 rather than 3 scientists for the foreseeable future.
- 9.5. Meredith Bartron and Lora Lattanzi, USFWS – The Lamar Fish Technology Center is providing in-kind support to Tyler Wagner’s research projects. The FWS has no discretionary funding and even priority at-risk species are unfunded (to prevent listing under ESA). A large part of Ecological Services funding in PA goes to address fish passage projects.

10. Adjourned at 12:30 pm

11. An Executive Session of the Coordinating Committee followed

11.1. New projects (noted by asterisk) were approved.

Appendix A – Abstracts of Completed Projects (yellow pages)

Appendix B – Summaries of New and Continuing Projects (blue pages)

Appendix C – Awards, Publications, and Presentations (green pages)