AGENDA

Coordinating Committee Meeting
Pennsylvania Cooperative Fish and Wildlife Research Unit

Wednesday, August 16, 2023
9:30 AM

1. **Approve minutes from August 17, 2022 meeting**

2. **Completed Projects (Summaries in Appendix A)**
   - 2.1. Wagner
     - 2.1.1. Pennsylvania stream fish communities
     - 2.1.2. Diet composition of invasive flathead catfish
   - 2.2. Walter
     - 2.2.1. Phase II: Genetic assignment of white-tailed deer to population of origin
     - 2.2.2. Optimizing CWD Surveillance: Regional Synthesis of Demographic, Spatial, and Transmission-Risk Factors
     - 2.2.3. Parturition timing and calf survival in Pennsylvania elk
     - 2.2.4. Management Strategies and genetics of deer in Minnesota
     - 2.2.5. Establishing a national tissue and reagents repository for chronic wasting disease

3. **New & Continuing Projects (* Requires approval by Committee; See Appendix B)**
   - 3.1. Diefenbach
     - 3.1.1. Decision model for fall turkey hunting regulations
     - 3.1.2. Estimating crippling loss in wild turkeys
     - 3.1.3. Snowshoe hare distribution and landscape genetics
     - 3.1.4. Deer abundance and its relationship to factors that affect forest vegetation conditions
     - 3.1.5. Genetics of an insular population of bobcats and coyotes
   - 3.2. Wagner
     - 3.2.1. A macrosystems ecology framework for continental-scale prediction and understanding of lakes
     - 3.2.2. Fish habitat restoration to promote adaptation: resilience of sport fish in lakes of the Upper Midwest
     - 3.2.3. Determining the consequences of land management actions on primary drivers influencing smallmouth bass populations
     - 3.2.4. Changes in stream fish distribution and occurrence in seven National Park Service units of the Eastern Rivers and Mountains Network
     - 3.2.5. Forecasting aquatic invasions in rivers: using riverscapes genetics to inform invasive fish species management at regional scales
     - 3.2.6. Collaborative Research: RAPID: lake ecosystem responses to fire along gradients of burn characteristics and hydrologic connectivity
     - 3.2.7. Aquatic food web changes to invasive Flathead Catfish along an invasion gradient
     - 3.2.8. Putting the sampling design to work: enhancing monitoring programs for improved management and inference of ecological responses to changes in climate
     - 3.2.9. *Quantifying per- and polyfluoroalkyl substances in aquatic environments

3.3. Walter
- 3.3.1. Linking Genetics to Movements of White-tailed deer to Assist Surveillance for Chronic Wasting Disease
- 3.3.2. Establishing a national tissue and reagents repository for chronic wasting disease
- 3.3.3. Agent-based models to inform management of white-tailed deer for chronic wasting disease
- 3.3.4. *Targeted surveillance of SARS-CoV-2 in White-Tailed Deer
- 3.3.5. *Crow use in an area endemic for chronic wasting disease

4. Proposed Budget

5. Roster of Current Graduate Students, Post-Doctoral Researchers, and Technical Staff

5.1. Diefenbach
- 5.1.1. Amanda Zak, MS Ecology
- 5.1.2. Veronica Winter, PhD Ecology (co-advised with Franny Buderman)
- 5.1.3. Jacob Trowbridge, PhD WFS
- 5.1.4. Justin Zweck, Post-doc
- 5.1.5. Kevin Lamp, Research Technician

5.2. Wagner
- 5.2.1. Paul McLaughlin, Post-doc
- 5.2.2. Christopher Custer, PhD Ecology
- 5.2.3. Morgan Strum, MS WFS
- 5.2.4. Justin Waraniak, Post-doc
- 5.2.5. Olivia Hodgson, MS, Ecology
- 5.2.6. Sydney Stark, Research Technician

5.3. Walter
- 5.3.1. Kristin Bondo, Post-doc
- 5.3.2. Alberto Fameli, Post-doc
- 5.3.3. Tyler Walters, MS Ecology
- 5.3.4. Chia-Hua Lue, Post-doc
- 5.3.5. Alec Baker, Research Technician
- 5.3.6. Jessie Edson, Research Technician

6. Service on Graduate Committees (other than advisees)

6.1. Diefenbach

6.1.1. Arun Regmi, PhD Forest Science (completed spring 2023)

6.1.2. Chyvonne Jessick, PhD Ecology

6.1.3. Nicole Palmer, MS Ecology

6.1.4. Joshua Gersey, MS Ecology

7. Courses and Workshops Taught by Unit Staff

7.1. Diefenbach

7.1.1. Modeling occupancy and population density, Spring 2023

7.2. Wagner

7.2.1. Analysis of Fisheries Data

7.3. Walter

7.3.1. Applied Spatial Ecology in R Workshop, Fall 2022

8. Comments from Cooperators

9. Adjourn

10. An Executive Session of the Coordinating Committee will follow after adjournment

10.1. New Projects (noted by asterisk) to be approved

Appendix A – Abstracts of Completed Projects

Appendix B – Summaries of New and Continuing Projects

Appendix C – Awards, Publications, and Presentations

Proposed Budget: July 1, 2023 to June 30, 2024

	Amount
Base Funding	
USGS - Cooperative Research Units	
Scientist support (FY2024 - pending approved budget)	$3,500
Salaries and benefits (Diefenbach, Wagner, Walter)	$578,697
USGS TOTAL	**$582,197**
PA Game Commission	
Diefenbach	
Carry-over from FY2022-23	$66,171
Post-doc Deer-Forest Study	$50,000
Operating expenses (travel, publications, etc.)	$12,000
Bobcat research	$6,000
Rollover to next FY	$48,171
SUBTOTAL	*$50,000*
Walter	
Carry-over from FY2022-23	$74,707
MS Tuition - Tyler Walters	$20,380
Deer/Elk genetics	$5,000
Post doctoral scholars supplement	$20,000
Operating expenses (travel, publications, etc.)	$10,000
Rollover to next FY	*$69,327*
SUBTOTAL	*$50,000*
PGC TOTAL	**$100,000**
PA Fish and Boat Commission	
Olivia Hodgson (rollover, saving for out years of MS support)	$20,000
Flathead catfish and brook trout research technicians	$30,000
Field supplies (brook trout/flathead catfish)	$5,000
Brook trout genetics/transcriptomics lab supplies	$5,000
Travel	$5,000
Operating expenses (travel, publications, etc.)	$10,000
PFBC TOTAL	**$75,000**
PSU Ecosystem Science and Management	
Administrative assistant (salary and benefits)	$58,513
SUBTOTAL	$58,513
Waived indirect	$1,455,303
PSU TOTAL	**$1,513,816**
Base Funding Total (includes waived indirect)	**$2,271,013**

Proposed Budget: July 1, 2023 to June 30, 2024

		Indirect costs		
	Amount	Rate	Paid	Waived
Gifts, Grants, Contracts				
Deer-Forest Study - Diefenbach - PGC project 47	$328,777	0.0%	$0	$200,554
Deer-Forest Study - Diefenbach - DCNR	$313,752	0.0%	$0	$191,389
Snowshoe hare - Diefenbach - PGC project 46	$198,406	0.0%	$0	$121,028
Wild Turkey - Buderman/Diefenbach - PGC project 45	$186,194	0.0%	$0	$113,578
Sampling rare species - Buderman - PGC project 48	$59,078	0.0%	$0	$36,038
Amphibian support - Miller - RWO 101 - USGS	$223,712	15.0%	$33,557	$102,908
Decision support for FWS Disease Mgt - Miller - RWO98 - USGS	$21,200	15.0%	$3,180	$9,752
Ches Bay project - Wagner - RWO 94 - USGS	$115,000	15.0%	$17,250	$52,900
Riverine food webs - Wagner - PA Sea Grant	$30,000	61.0%	$18,300	$0
NPS streams - Wagner - NPS	$79,122	17.5%	$13,846	$34,418
PFAS in aquatic systems - Wagner - USGS	$25,000	15.0%	$3,750	$11,500
Linking Genetics to Movements - Walter - RWO 96 - USGS	$65,316	15.0%	$9,797	$30,045
Agent-based models - Walter - PGC Project 49	$75,100	0.0%	$0	$45,811
Targeted surveillance SARS-CoV-2 - Walter - USDA	$953,523	10.0%	$95,352	$486,297
Assessment of movement of prions - Walter - USDA	$37,424	10.0%	$3,742	$19,086
Gifts, Grants, and Contracts Total	**$2,711,604**		**$198,775**	**$1,455,303**
Grand Total (less waived indirect)	**$3,527,314**			

Indirect rate =	0.61