



REQUIRED Cover Page

APPLICATION FOR PROFESSIONAL DEVELOPMENT GRANT

****All applicants please complete this cover page.**

Choose one: <input type="checkbox"/> Creative activity <input type="checkbox"/> Research activity <input checked="" type="checkbox"/> Professional Enhancement activity	Date of Last PDG Award (Semester and Year awarded): None awarded Date of ATU Faculty Appointment (Semester and Year): Summer 2006
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1. Project Title: Wetland Delineation Certification

2. Name of Principal Investigator/Project Director: Elisabeth Brennan

3. School (abbrev): PLS

Department: Biological Sciences

5. Campus Mail Address: 1701 N. Boulder Ave

6. PI/PD Campus Phone: 356-2018

7. Amount Requested: \$1600.00

8. Total Cost of Project: \$1600.00

9. Does this project involve:

10. Duration of Project: 19 May – 1 June, 2007

Yes No

- ☐ ☒ human subjects?
- ☐ ☒ animals/animal care facility?
- ☐ ☒ radioactive materials?
- ☐ ☒ hazardous materials?
- ☐ ☒ biological agents or toxins restricted by the USA Patriot Act?
- ☐ ☒ copyright or patent potential?
- ☐ ☒ utilization of space **not** currently available to the PI/PD?
- ☐ ☒ the purchase of equipment/instrumentation/software currently **available** to the PI/PD?

NOTE: If the answer is "yes" to any of the above questions, the investigator must attach appropriate documentation of approval or justification for use/purchase.

SIGNATURES

Charles Dayn 2/27/07
Department Head Date

Al Johnson 2/27/07
Dean Date

This Section to be completed by the Office of Academic Affairs

PDC Committee Award Recommendation: Yes ☒ No ☐
PDC Committee Proposal Rank: 4 of 10 Total Proposals.
Recommendation of VPAA: Yes ☒ No ☐
Recommendation of President: Yes ☐ No ☐
Award Date: 4/3/07

B. ABSTRACT

Wetland delineation establishes the existence (location) and physical limits (size) of a wetland for the purposes of federal, state, and local regulations. Current federal regulations require a wetland delineation to be performed before a wetland can be legally modified. Therefore, wetland delineation is a highly marketable skill in today's competitive environmental job market and students who have training and experience performing wetland delineations and assessments will be more likely to obtain a job upon graduation. The purpose of this proposal is to send the principal investigator to a course that will allow her to become certified in wetland delineation and instruct ATU students in wetland delineation

C. PURPOSE / OBJECTIVES

The objective of this professional enhancement course is to learn the technical guidelines for wetland delineations, field indicators of hydrophytic vegetation, hydric soils, and wetland hydrology, methods for making jurisdictional determinations, methods to apply in disturbed areas, and recognition of problem wetlands. Knowledge and skills gained in this course will be used to teach wetland delineation to students in the "Wetland Ecology and Management" course at ATU.

D. SIGNIFICANCE / NEED

Wetland delineation is a highly marketable job skill for ATU students. Many job postings with environmental consulting firms list wetland delineation skill and experience as a necessary or desired qualification. Arkansas Tech is one of the few universities in the state to offer a course in Wetland Ecology, and being able to include wetland delineation experience to students in this course will be highly beneficial to their understanding of wetland ecosystems and future employment potential.

In addition, this course will provide principal investigator with approximately 2.6 credit hours of specific wetland coursework toward the Society of Wetland Scientists' Professional Wetland Scientist certification, satisfy most state Department of Transportation wetland training requirements, and prepare her for the tests for Army Corps of Engineers (ACOE) certification.

E. PROCESS FOR ATTAINMENT OF OBJECTIVES / GOALS

This 4 day, 38 hour course, developed by the ACOE for the Wetland Delineator Certification Program (WDCP) and expanded by Richard Chinn Environmental Training, Inc., covers the wetland delineation protocol mandated by the ACOE. Specifics are presented on the science and application of hydrology, hydrophytic vegetation, hydric soils, and historical incidents. The course will be offered 29 May – 1 June, 2007 in Austin, TX.

F. DISSEMINATION OF RESULTS

The results of this course will be used in the classroom. Specifically, the lab component of "Wetland Ecology and Management" will focus on teaching students to perform wetland delineations throughout the semester in a variety of different Arkansas wetlands. This class will benefit students majoring in Fisheries and Wildlife, as well as Environmental Studies.

G. REPEATED REQUESTS

This proposal is not a repeat request.

H. BUDGET

PROPOSED BUDGET FACULTY RESEARCH GRANT (include budget categories as appropriate)	
1. Non-work study stipend	0.00
Fringe benefits @ .4% (4/10 percent) of non-work study stipend	
2. Supplies (please list items to be purchased and estimated price per item including taxes and shipping, if appropriate):	
Course Fee	900.00
Total estimated supplies \$	900.00
3. Travel (please list travel expenditures by date and estimated costs):	
Roundtrip flight from Little Rock to Austin, TX	300.00
Transportation (bus, personal vehicle, etc)	100.00
Meals for five days	200.00
Total estimated travel \$	700.00
TOTAL PROPOSED BUDGET \$	1600.00

I. BIBLIOGRAPHY: Provide standard citations for material referenced.

J. APPLICATION VITA (maximum: 3 pages)

ELISABETH BRENNAN

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Russellville, AR 72802

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EDUCATION

TEXAS TECH UNIVERSITY
Ph.D. Wildlife Science (Wetland Ecology)

Lubbock, TX
August 2006

SOUTHERN ILLINOIS UNIVERSITY - CARBONDALE
M. S. Zoology (Wildlife)

Carbondale, IL
May 2002

WASHINGTON AND LEE UNIVERSITY
B. A. Biology

Lexington, VA
May 1999

EXPERIENCE

Assistant Professor of Wildlife Biology

Arkansas Tech University, Department of Biological Science, Russellville, AR, 7/2006 – present, Department Head: Professor Charlie Gagen

Teaching Activities

- Upper division courses taught: Wetland Ecology and Management, Wildlife Management, Principles of Ecology, Waterfowl Ecology and Management, Senior Seminar
- Graduate level courses taught: Research Methods II, Wetland Ecology and Management
- Averaged 4.43 out of 5.00 from 2006 on all course student evaluations compared to the department average of 4.34 over the same year.

Research Activities

Publications

- Brennan, E.K., L.M. Smith, D.A. Haukos, and T.G. LaGrange. 2005. **Short-term Response of Wetland Birds to Prescribed Burning in Rainwater Basin Wetlands.** Wetlands 25:667-674.

Assistant Professor of Wildlife Biology continued

Grants and Awards

- Principal Investigator on funded Arkansas Tech University Undergraduate Research Council proposal title, "Evaluation of Moist-Soil Seed Production on Wetland Reserve Program Wetlands in the Mississippi Alluvial Valley of Arkansas" worth \$2,600 (2006). This project includes funding to support one undergraduate student.
- 2004 Environmental Protection Agency – State, Tribal, and Local Government Wetland Protection Grant Program
- Nebraska Chapter of the Nature Conservancy J.E. Weaver Competitive Grant
- American Ornithologists' Union Student Membership Award

Presentations at Professional Meetings

- Brennan, E.K., L.M. Smith, M. Vrtiska, and T.G. LaGrange. **Local and Landscape Variables Influencing Migratory Bird Habitat Use and Behavior in Rainwater Basin Wetlands.** Presented at the Annual Mid-West Fish and Wildlife Conference, Omaha, Nebraska, December 2006.
- Brennan, E.K., L.M. Smith, and N.E. McIntyre. **Assessing Species Co-occurrence Patterns of migratory Wetland Birds at Multiple Temporal Scales.** Presented at the 90th Ecological Society of America Conference, Montreal, Canada, August 2005.
- Brennan, E.K., M. Vrtiska, T. G. LaGrange, and L.M. Smith. **Temporal Changes in Local and Regional Variables Predicting Migratory Bird Habitat Use in Nebraska's Rainwater Basin Wetlands.** Presented at the 12th Annual Wildlife Society Conference, Madison, WI, September, 2005.
- Brennan, E.K., M. Vrtiska, T. G. LaGrange, and L.M. Smith. **Evaluating Migratory Bird Habitat Use in Nebraska's Rainwater Basin Wetlands: A Multi-Scale Approach.** Presented at the Wetlands and Migratory Birds: Protecting and Restoring Wetlands of International Significance, Kansas City, MO, October 2004.

Service Activities

- Advisor for ATU Chapter Fisheries and Wildlife Society
- Advisor for ATU Ducks Unlimited Chapter

Arkansas Tech University
School of Physical and Life Sciences

MEMO

To: Professional Development Grant Committee

From: R. R. Cohoon, Dean



Subject: Request from Dr. Elisabeth Brennan, Assistant Professor of Wildlife Biology

Date: February 27, 2007

I fully support Dr. Brennan's request for a Professional Development Grant for the purpose of obtaining a *Wetland Delineator Certification*, as offered by the Society of Wetland Scientists. This training and certification will prepare Dr. Brennan for the certification test administered by the U.S. Army Corps of Engineers.

Dr. Brennan plans to use the information, obtained during the short-course, in the Wetland Ecology and Management course, especially in the laboratory portion of the course. The knowledge acquired by Dr. Brennan will also benefit students in various environmental studies courses and independent studies. As Dr. Gagen points out in his supporting memo, Dr. Brennan will be in a position, after this training, to lead an expanding program of Arkansas wetlands ecologic studies and waterfowl management.

Attachments

ARKANSAS TECH UNIVERSITY
INTER-OFFICE MEMO

TO: Dr. Cohoon

DATE: February 27, 2007

FROM: Dr. Gagen



SUBJECT: Attached grant application

This memo is to express my enthusiastic support for the attached application for a TECH Professional Development Grant initiated by one of our department's newest faculty members, Dr. Lisa Brennan. In my view, this type of activity embodies the ideal use of such grants and the timing could not be better as the Fisheries and Wildlife Science Program at TECH is following through on a planned expansion of scope into the area of wetlands ecology and associated waterfowl management.

Nationally, these two related areas of interest continue to figure prominently in conservation initiatives and environmental policy challenges. In Arkansas, the need for professionals educated in the technical details of these fields is particularly acute. Please consider that more mallards are harvested in Arkansas every year than in any other state and that this state also contains the largest remaining track of forested floodplain wetlands in the nation. Also noteworthy is the fact that Dr. Brennan is the only Ph.D. waterfowl biologist in the state. Thus, I consider it imperative that she gain this technical certification which will immediately and directly benefit TECH's graduate and undergraduate F&W students in particular. Certification should also open doors to future funding opportunities with resource agencies charged with managing wetlands.

Thank you for carefully considering this opportunity.

x.c. Drs. Brennan and Stoeckel