

SOCIETY OF WETLAND SCIENTISTS
STUDENT GRANTS PROGRAM - *Report for 2002*
Prepared 8 May 2002

Introduction:

The 2002 Student Grants Committee consisted of Drs. Kel Wieder (Chair), Paul DuBowoy (U.S. Army Corps of Engineers), Diane DeSteven (U.S. Forest Service), Lee Foote (University of Alberta), Tom Mings (Minnesota Board of Water and Soil Resources), and Rebecca Schneider (Cornell University). Of the 32 proposals submitted, 13 were selected for funding (Table 1). Awards ranged from \$565 to \$1,500, with the top three proposals receiving full funding (Table 2). As was the case in the 2001 competition, funding success was independent of degree sought, gender, SWS membership, or online versus paper submission ($p > 0.05$, Chi-square contingency analyses; Appendix I).

The 2002 Review Process:

Online Submission:

Application forms and forms for letters of recommendation were made available online as both locked Microsoft Word forms and Adobe pdf forms. Actual proposals were submitted electronically as Word forms, allowing students to embed figures and preserving formatting of proposals. Student applicants and those writing letters of recommendation could submit proposals to an email account at Villanova University (SWS.Student-Grants@Villanova.edu). Upon submission of proposals or letters of recommendation, senders received an immediate automated response indicating that their material had been received. Submission of hard copy proposals and letters remained an option.

Proposal review:

For the second year, proposals were evaluated based on 6 clearly identified criteria, each scored by each reviewer on a numerical scale from 1 to 10. In addition, each reviewer provided brief written comments about each proposal, emphasizing both strengths and weaknesses. These written comments and the detailed numerical assessment were sent to all applicants along with the letter indicating whether or not their proposal was funded.

Each proposal was reviewed by exactly 4 individuals. We acknowledged that there is a possibility of unfairness if there are significant reviewer-to-reviewer differences in how proposals were evaluated. If one or more reviewers was “tough” and/or one or more reviewers was “easy,” the outcome could be influenced if a student happened to get a disproportionate number or “tough” or “easy” reviewers. Indeed, there were significant ($p < 0.0001$) differences between reviewers for each of the 6 criteria (six separate analyses of variance, randomized incomplete block design, performed on the raw scores for each of the 6 criteria). To “adjust” scores, for each reviewer, for each of the 6 criteria separately, raw scores were replaced with their ranks. Replacing the raw scores with their ranks adjusted for differences between “tough” and “easy” reviewers. The mean of the ranked raw scores for the six criteria for each proposal was used as the basis for making funding decisions.

Posting of abstracts for funded proposals on the web:

Abstracts of funded proposals for both 2001 and 2002 have been posted on the web, accessible via the Student Grant section of the SWS website.

Respectfully submitted,



Dr. R. Kelman Wieder
Chair, SWS Student Grants Committee

Table 1. Summary information for 2001 SWS Student Grant applications

Variable	Summary
Degree Sought	Bachelors, 0; Masters, 12; Ph.D., 18; M.S./Ph.D., 2
Gender	Females, 19; Males 13
SWS Membership	Yes, 15; No, 17
Prior SWS Student Grant	Yes, 0; No, 32
Online submission	Yes, 32; No, 1
Average project cost (mean " s.e.)	\$ 4,586 " 759 (range \$ 639 - \$17,524)
Average requested from SWS (mean " s.e.)	\$ 1,738 " 298 (range \$ 639 - \$10,807)

Table 2. Funded proposals.

Student, Institution, and Proposal Title	Award \$
Brian Benscoter, Villanova University, <i>Microtopographic Variation in Post-fire Vegetation Succession and Peat Accumulation in Boreal, Continental, Western Canadian Bog Peatlands</i>	900
Tara Bortoluzzi, University of Manitoba, <i>The Hydrological Influence of Lake Manitoba on the Nutrient Status of an Adjoining Coastal Freshwater Wetland, Delta Marsh, Manitoba</i>	565
Jason Demers, Cornell University, <i>Mercury Retention and Potential Long-term Methylation and Export from Wetlands of the Adirondack Region, New York</i>	1,500
Philip Garone, University of California-Davis, <i>The History and Ecology of the Wetlands of California's Great Central Valley: 1850 to the Present</i>	565
Hem Nalini Morzaria-Luna, University of Wisconsin, <i>Factors Influencing Plant Community Structure during Plant Reintroduction and Salt Marsh Restoration</i>	1,160
John Navaratnam, Villanova University, <i>Profiling Microbial Communities in a Boreal, Continental, Western Canadian Peatland Using Molecular Ecological Techniques</i>	1,500
Catherine Peacock, Cranfield University, <i>Estimating Evapotranspiration from a UK Reedbed for Creation of a Water Balance</i>	780
Oliver Pierson, Cornell University, <i>Spatial And Temporal Influences on Phosphorus Dynamics in a Large Cattail Wetland</i>	1,200
Andrew Ray, Idaho State University, <i>The Effect of Arbuscular Mycorrhizae on the Productivity and Chemistry of Typha latifolia in Experimental Mesocosms</i>	1,500
Heather Ray, Idaho State University, <i>Macroinvertebrate Colonization of Cattail and Bulrush Litter in a Newly Constructed Wetland</i>	565
Michael Rubbo, The Pennsylvania State University, <i>Linking Process and Pattern: The Influence of Urbanization on the Functioning and Structure of Wetlands</i>	1,200
Virginia Shervette, Texas A&M University, <i>Assessment of Fish Diversity in Ecuadorian Mangroves: Tools for Management and Conservation</i>	565
Peter Weishampel, Cornell University, <i>Investigating the Influence of Nutrients and Hydrology on the Interactions of Plants and Arbuscular Mycorrhizal Fungi in Calcareous Fens using a DNA Fingerprinting Approach</i>	565

APPENDIX I - Funding success is independent of several factors

Table A1. Degree sought vs. funding success

Degree	Funded	
	Yes	No
M.A./M.S.	4	8
M.S./Ph.D.	2	0
Ph.D.	7	11

Pearson's $X^2 = 3.210, p = 0.2009$

Table A3. SWS membership vs. funding success

SWS member	Funded	
	Yes	No
Yes	6	9
No	7	10

Pearson's $X^2 = 0.005, p = 0.9461$

Table A2. Gender vs. funding success

Gender	Funded	
	Yes	No
Female	6	13
Male	7	6

Pearson's $X^2 = 1.587, p = 0.2078$

Table A4. Online submission vs. funding success

Online submission	Funded	
	Yes	No
Yes	13	18
No	0	1

Pearson's $X^2 = 0.706; p = 0.4007$