Students to Empowered Professionals (STEP) Mentoring Program: A Case Study

“One of the most beneficial assignments I have done in my three years at SDSU!”
(2010 Student)

Susan P. Rupp, PhD
Dept. of Natural Resource Management
South Dakota State University
“Dinosaur Ramblings” (Scalet 2007)

- Changes in the way financial resources are secured and utilized,
- Changes in demographics
- Political shifts
- Multitude of other factors

“Dinosaur Evolution” (Parker et al. 2008)

Source: Rupp, S. P. (2012, in review)

TWS Blue Ribbon Panel (2011)
EXPERIENTIAL LEARNING

Broaden the intellectual content of instruction by:

• Integrating theory and practice
• Increasing student motivation through applied knowledge
• Encouraging students to develop skills as independent scholars.

EXAMPLES:

Internships
Conservation Leaders for Tomorrow/BOW
Independent Research Projects/Field Stations
Mentoring
Formalized mentoring can provide (Wells et al. 2005):

- Career development
- Psychosocial skills
- Recruitment opportunities
- Information and cultural transfer
- Personal satisfaction for both the mentor and mentee
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Be a Hero to Someone!
MENTOR A STUDENT!

WL400 – Applied Habitat Management

- Answer questions about wildlife professions
- Field limited emails/phone calls
- Guide students in management planning
- Aid students in the field or with assignments
OBJECTIVES

• Provide students with additional expertise and professional resources for development of wildlife habitat management plans
• Mitigate potential problems related to “practical dissonance”
• Develop student professional communication and social skills
• Expose students to various branches and professionals in the field of natural resource management
• Provide opportunities for professional networking, exposure, and potential job placement
• Encourage professionals to “give back to their profession” by mentoring a student
• Provide these opportunities in a “fun and exciting” environment
PEDAGOGICAL APPROACH

YEAR #1 (Spring 2008)

- Voluntary program
- Solicit participation by professionals from agencies/NGOs
- Conduct a survey of participating mentors to determine:
  1. Primary interests and/or areas of expertise
  2. Most convenient methods of communication
- Assign students to mentors based on interests
- Conduct a follow-up survey
PEDAGOGICAL APPROACH

YEAR #2 (Spring 2010)

- Extra Credit Incentive
- Basic questions AND one of three additional exercises:
  1. Interview their mentor using Wildlife Society “COWCH” program guidelines
  2. Spend a day in the field with their mentor
  3. Complete an assignment on “Leadership in Natural Resources” with the mentor

Conduct a follow-up survey

Year #3 (Spring 2011) – No significant changes
## RESULTS (Student Surveys)

Summary of 2 years (Spring 2010 and Spring 2011) based on a scale from 1 (not satisfied) to 5 (completely satisfied). Total participants = 50

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>How happy were you with the mentor that was selected for you</td>
<td>4.135</td>
</tr>
<tr>
<td>Was your mentor professional in his/her interactions with you</td>
<td>4.580</td>
</tr>
<tr>
<td>Was your mentor knowledgeable about his/her field of interest</td>
<td>4.735</td>
</tr>
<tr>
<td>Did your mentor respond to emails or phone calls in a reasonable time</td>
<td>4.040</td>
</tr>
<tr>
<td>Did your mentor provide valuable insight or advice about jobs</td>
<td>4.230</td>
</tr>
<tr>
<td>Did your mentor provide valuable insight about your management plan</td>
<td>3.545</td>
</tr>
<tr>
<td>Did your mentor provide valuable “life experiences” for you to learn from?</td>
<td>4.105</td>
</tr>
<tr>
<td>How would you rate the overall interaction with your mentor</td>
<td>4.160</td>
</tr>
</tbody>
</table>
Student/Mentor Interaction (2010 – 2011)

Number of Responses

Total Contacts Per Semester

- 1 to 3
- 4 to 6
- 7 to 10
- >10

Students (n = 51)

Mentors (n = 29)
Percent of Students To Have Face-to-Face Contact (n = 48)

- Visited: 58% (n = 28)
- Didn’t Visit: 42% (n = 20)

Modes of Communication (Normalized, n = 29)

- Email: 22% (n = 12)
- Phone: 27% (n = 15)
- Face to Face: 51% (n = 28)

Mentor Satisfaction With Student Interaction (n = 29)

- Strongly Agree: 10%
- Agree: 28%
- Neutral: 31%
- Disagree: 28%
- Strongly Disagree: 10%

Questions and Responses:

Do you think the mentoring program is beneficial to professionals?
Yes (n = 27)   No (n = 3)

Do you think the mentoring program is beneficial to students?
Yes (n = 29)   No (n = 1)

Do you think the mentoring program has the potential to increase recruitment into the wildlife and fisheries professions?
Yes (n = 25)   No (n = 4)
COMMENTS FROM STUDENTS

• Gives a broad perspective of all views of wildlife and habitat planning
• Outstanding experience for students!
• A lot of fun, good to meet somebody in professional position and talk with him about his life choices.
• Just do it. If you spend the time it will be well worth it.
• Great way to get to know faces and people.
• This is a great way to work hands on with professionals in your field.
• Stop being a lazy a** and get on the phone (RUPP’ S NOTE: Some students are obviously passionate about this!)
• Field experience with a CO
• Interaction/He helped me decide on a job

If you want a foot in the door, get a men…..tor!
COMMENTS FROM MENTORS

- Keeps us in touch with what skills undergraduates are learning.
- A great reminder about why we’re in the business.
- It is a good change of pace from normal duties, "Invigorating."
- Spending time with mentee gets me out of my workday world.
- The program helps us to become aware of student's interests and concerns of working in this field.
- If it is the right person, may be potential for seasonal employment.
- Gives us a chance to interact with students and keeps lines of communication open.
- It provides the mentor with a sense of "giving back”
- Exposes students to the "real world" of wildlife management.
- These are the future wildlife and biology professionals.....important to be exposed to their attitudes and questions.
Number of Students/Mentors Desiring to Keep the STEP Program

<table>
<thead>
<tr>
<th>Total Number</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentors (n = 29)</td>
<td>29</td>
<td>0</td>
</tr>
<tr>
<td>Students (n = 50)</td>
<td>47</td>
<td>3</td>
</tr>
</tbody>
</table>
AREAS FOR IMPROVEMENT
(Students)

- More pressure to contact
- Provide a class period specifically for meeting with a mentor.
- Have mentors closer to home
- Try to get more in field time with them
- Make sure mentor will be able to check email at least once a week.
- It is set up very well. No improvements.
- No….it was pretty organized.
- It is great; Keep it up; Very good program
- Make it a requirement
AREAS FOR IMPROVEMENT

(Mentors)

• Require students to meet with their mentors at least once in person.
• Presently I do not remember what my student's project was or if there was an opportunity to review it (Management Plans)
• I had one student that seemed to just go through the motions.
• Require more interaction with assigned mentor.
• More opportunity to spend with student/More interaction
• Get students more proactive.
• Students need to work harder to make a real connection. Last minute contact doesn't create a relationship.
• Distance is a problem/Have day where mentors travel to SDSU

MORE INTERACTION! (And opportunities to do that)
Welcome to
Habitat Conservation and Restoration

<Select Management Area>

Spring 2012

Darlys Hofer  Mentor Profiles
Jim Shaeffer  Student Profiles
Alan Armstrong  Dr. Susan Rupp
Jim Cooper  T.A. Alex Solem

SOUTH DAKOTA STATE UNIVERSITY
Mentor Profiles

Brandon Gust

Hometown: Rapid City, SD
Interests: Hunting, fishing, boating and playing sports of any kind.
Education: BS Wildlife and Fisheries Management SDSU
Related experiences in field: Graduated from state in 2014, WIPO in Baraboo (04-06) and Madison (05-06). Became a LE specialist in 2010. SLI based out of Madison.
Email: Brandon.Gust@state.sd.us

Student Profiles

Lucas Dreckman

Hometown: Marcus, IA
Interests: I like to golf, hunt, fish, pretty much anything outdoors. I enjoy playing and watching all sports. I would love to become a conservation officer post graduating.
Related experiences in field: The summer of 2009 I worked for the Iowa DNR in the parks at Full Point campground. I worked for the South Dakota DFP in 2011 as a wildlife stocking technician. Throughout my education I have gone on ride alongs with county conservation officers as well. In 2008 I also volunteered with the NAHS in Cherokee Iowa. In 2009 I graduated from Iowa Lakes Community College with my Associates degree in Environmental Sciences.
Email: lucas.dreckman@iowa lakes.edu
Habitat Conservation and Restoration
Jim Shaeffer Wiki Page

- Comments
- Uploading/Downloading files
- Instant Messaging/Chat
- Webcam???
- Access Controlled

General Landowner Documents, Map, and Plat Map

<Select Group Files>
Group A  Group B  Group C  Group D
GLOBAL GROWTH CREATES AGBIOSCIENCE OPPORTUNITIES
NEW PROGRAMS; NEW DELIVERY
SDSU EXTENSION ENTERS NEW ERA
SPOTLIGHT ON STUDENTS
GAINING INSIGHT & GIVING BACK

RECOGNITION

CREATIVE COLLABORATION
Students, Landowners & Industry Professionals Pair Up For A Positive Experience

How can students gain practical experience in wildlife and fisheries habitat management? That was the challenge presented to wildlife ecologist Sean Rupp when he joined the SDSU faculty six years ago and was asked to create a course that addressed that need.

Rupp collaborated with the South Dakota Game, Fish & Parks, other natural resource agencies and nonprofit conservation organizations and the "Habitat Conservation and Restoration" course — offered in the Department of Natural Resources Management — evolved.

Rupp designed the course to provide "episodic learning," in which student teams are assigned a real landowner whom they communicate with and create a habitat management plan for. Additionally, students have the opportunity to be paired with a mentor from within the wildlife and fisheries industry to gain insight from during the course.

The spring-only course is being offered for the fourth time this semester, and Rupp reports that feedback from students, landowners and mentors has been overwhelmingly positive. So much so, that word is getting around. Presently, 64 students are on the roster for the class, and Rupp has been approached by landowners willing to have the students design a plan for them.

Benefit To All
Rupp believes the course's popularity is due to the real-world experience it provides. She says, "It gives students the experiences in planning how to manage the landscape with specific species in mind. Granting, management, grassland plantings, establishment of shelterbelts and wetland issues are examples of some of the topics addressed.

Landowners benefit because they are able to consider several planning options created to meet their management objectives.

And, the course provides a network opportunity for students and professionals. "Students can make career connections and learn more about their chosen field, and natural resource agency professionals are utilizing it as a way to scope out future employees," says Rupp.

Moreover, Rupp points out that with the numerous landowners and natural resource and non-profit partners involved, the feedback provided helps to bridge the potential disconnect between academia and the skills graduates need to have before they enter their career field.

As the course expands, Rupp is continuing to fine-tune the experience. This semester she has students, landowners and mentors using Wikispaces, a secure online site, to facilitate communication and interaction. Skype or webcams for face-to-face conversations via the Internet may also be used in the future.

Rupp concludes, "My motto for the course is Real, relevant and relational. By dynamically interacting with real landowners and professionals on relevant habitat management issues faced today, we can train our students how to be better wildlife managers tomorrow."

Editor's Note: During the semester, efforts are also made for students to attend the South Dakota Chapter of The Wildlife Society meeting in May before returning. For more information about the course, contact Sean.Rupp@sdstate.edu or call (605) 688-4779.

Above: Delta Waterfowl Biologist Rob Coe, MPEG Technologies & SDSU, student meeting on habitat conservation and restoration course.

STUDENT SHOWCASE IS APRIL 28
Student teams in the Habitat Conservation and Restoration course will present their management plans to landowners and the public at a "Student Showcase" on April 28. These presentations are the students' final exam for the course and provide an opportunity for them to share their work and amplify their recommendations.

The Student Showcase will be held in the Northern Plains Biogenesis Laboratory Room 103 from 9 a.m. to 4 p.m.

www.sdstate.edu/adsx
ACKNOWLEDGEMENTS

- SDSU College of ABS (small grant)
- Tony Arampatzis/Alex Solem
- All the mentors and their employers
- Our Students!

From Me to Them.....THANK YOU!!!