

# Results of the NAUFWP distance education survey





Eric Hallerman  
Professor, Virginia Tech University  
President, National Association of University Fisheries and Wildlife Programs  
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Background. The National Association of University Fisheries and Wildlife Programs exists in order to serve its members and advance their interests. Our key mission being education of the next generation of fisheries and wildlife professionals, we strive to make our curricula as strong and broad as possible. Yet, our departments tend to be small- to medium-sized units, which limits our reach. We all would like to offer courses to our students that we do not have, and at the same time, we often have specialty courses that are excellent, but under-enrolled. Distance education approaches might be employed to enrich the education of our students at both the undergraduate and graduate levels. NAUFWP might play a proactive role regarding access to distance education for our students. First, NAUFWP might play an information-sharing role for students and their academic advisors by listing on its website distance-learning opportunities offered by its member programs. Students would interact directly with the academic program offering such courses, and likely would have to pay out-of-state tuition rates. This approach would be relatively straightforward to implement. A second approach would be development of a consortium of participating programs, which might offer open enrollment to students of participating programs, in-state tuition, and ready acceptance of credit by their own universities. This would require much more effort to launch and maintain.

Methods. During spring 2014, I conducted an online survey to determine what online education resources we offer as member programs and whether there is interest in any sort of NAUFWP distance education initiative.





Results. Representatives of 23 NAUFWP member institutions replied: Respondents represented Auburn University, University of Arkansas at Monticello, Cal Poly (San Luis Obispo), Colorado State University, University of Florida, University of Georgia, University of Idaho, Louisiana State University, Louisiana Tech University, UMass Amherst, Michigan State University, University of Minnesota, University of Missouri, North Carolina State University, Northern Arizona University, Oregon State University, Penn State, Purdue University, University of Tennessee, Tennessee Tech University, Texas A&M University, Virginia Tech, and West Virginia University. Here, on a question-by question basis, I summarize what I learned and the implications for future NAUFWP activities.

## **I see value in distance education coursework for fisheries and wildlife students at the undergraduate level.**

Strongly agree	<b>8</b> (35%)	
Agree	<b>12</b> (52%)	
Disagree	<b>1</b> (4%)	
Strongly disagree	<b>0</b> (0%)	
Comments:	<b>2</b> (9%)	
<i>no answer</i>	<b>0</b> (0%)	





## **I see value in distance education coursework for fisheries and wildlife**

**students at the graduate level.**

Strongly agree **9** (39%)   
Agree **12** (52%)   
Disagree **2** (9%)   
Strongly disagree **0** (0%)  
Comments: **5** (22%) 




Results from these first two questions indicate that the value of distance education is clear to respondents.

**I see value in NAUFWP providing distance education information on its website.**

Strongly agree **14** (61%)   
Agree **8** (35%)   
Disagree **1** (4%)   
Strongly disagree **0** (0%)  
Comments: **2** (9%) 



The strength of the positive response to this question is such I will go forward with creating a section of the NAUFWP website dedicated to this purpose.

**I see value in NAUFWP engaging in development of a consortium of interested programs or in joining an existing consortium.**

Strongly agree **10** (43%)   
Agree **12** (52%)   
Disagree **0** (0%)  
Strongly disagree **0** (0%)  
Comments: **5** (22%) 

While many respondents see value in NAUFWP develop or join a distance-learning consortium, comments offered and discussions with NAUFWP colleagues indicated the degree of effort and expense required to launch and maintain a consortium. Further, two NAUFWP member institutions, Oregon State University and North Carolina State University, have distance education programs carrying courses potentially of interest to our students. Hence, there is no value in duplicating effort. NAUFWP's information effort, then, might direct students not only to particular courses, but also to existing consortia.




**Does your program offer distance education coursework?**

Yes. **15** (65%)   
No. **8** (35%)   
*no answer* **0** (0%)

**If you answered "yes" to the previous question, what courses do you offer?**




Distance education courses offered by the fifteen programs answering “yes” are shown in Appendix 1. While some offered but a few, Oregon State University offers about 50 distance education courses at both the undergraduate and graduate levels.

**If you offer distance education courses in fisheries and wildlife, would you be willing to allow students at other NAUFWP member institutions to enroll?**

Yes **13** (57%)   
No **0** (0%)  
Comments: **3** (13%)   
*no answer* **7** (30%) 



Most programs offering distance education courses do allow students at other institutions to enroll; comments mostly addressed the point that this decision is made at the university levels, i.e., above the program level.

**Does your institution allow students from other institutions to enroll in online classes as a non-degree-seeking student (i.e., can an outside student take just one or a few classes?)**

Yes **16** (70%)   
No **2** (9%)   
Comments: **5** (22%)   
*no answer* **0** (0%)




Comments mostly made the point that the decision of whether to admit non-degree-seeking students varies among courses and instructors.

**Would your program/university be willing to accept transfer credit for distance education coursework in fisheries and wildlife that your students might take elsewhere?**


Yes **15** (65%)   
No **0** (0%)  
Comments: **8** (35%)   
*no answer* **0** (0%)

Comments addressed a number of points, that acceptance may depend on the specifics of the course, there would be restrictions regarding the total number of transfer-credit hours allowed, and that this was a decision to be made by deans and the provost of the university.

**To what sorts of courses would you want your students to gain access through distance learning? Mark all that apply**

Fundamentals of Fisheries and Wildlife Management **8** (35%)   
Population Dynamics **8** (35%)   
Conservation Genetics **15** (65%) 

Others, please list:


**12** (52%) 


Other courses of interest mentioned were the -ologies (ornithology, mammalogy, ichthyology, and herpetology), habitat ecology and management, wildlife ecology, human dimensions, quantitative methods, riparian ecology, wildlife policy, non-game management, waterfowl ecology and management, mark-recapture analysis, and writing skills, as well as advanced, specialized courses in general.

**Does your institution charge resident and non-resident students different rates for online classes?**

Yes **12** (52%) 

No **7** (30%) 

Comments: **2** (9%) 


*no answer* **2** (9%) 

**I know of an existing consortium that may serve as a host for distance-education courses in fisheries and wildlife:**

Oregon State University offers a large slate of distance-education courses in fisheries and wildlife. North Carolina State University, in collaboration with Texas A&M University, offers an online degree program for military personnel. The Natural Resources Distance Learning Consortium at Virginia Tech is no longer active.

**My program may prove interested in hosting such a consortium:**

Yes **6** (26%) 

No **13** (57%) 

*no answer* **4** (17%) 

The six programs expressing interest in hosting a distance education consortium were the University of Georgia, University of Massachusetts – Amherst, North Carolina State University, Oregon State University, Texas A&M University, and West Virginia University.

**I will be pleased for any other thoughtful comments you may have.**

11 responses were offered, many offering elaborations to responses to particular questions. Several comments were along the lines of "Taking a few online courses to round out a program of study is fine, though I remain skeptical of totally online programs." One response that built on that point and went on to sum up a shared point of view was that the respondent's university "seems to have a patchwork of distance education options that have been developed from the bottom up. Recently there has been a campus-wide push to develop distance education degree programs. Our program has been resistant because our coursework is very field/ laboratory orientated. We have some difficulty figuring out how to reproduce these experiences, we deem valuable, in a purely distance learning situation." On the other hand, a respondent from a university with an active distance education program commented that "It took our faculty quite a while to warm up to the idea of fisheries and wildlife online. While the initial motivation was financial, we have discovered two critical

things over the years: 1) online education provides opportunities for students to join our field who cannot commit to an on campus degree for very good reasons - family, career, physical impairment, military duty - enriching the diversity of our program, and 2) you can't do online well without considerable commitment from your faculty and institution - financial support, human resources, and strong IT staff." The response that brought a smile to my face was "Distance Learning sounds good until you have to do it."

## **Appendix 1**

### Distance education courses currently offered

#### Colorado State University:

##### Undergraduate:

- Wildlife Ecology and Conservation
- Hunter Education for Instructors
- Leopold's Ethic for Wildlife and Land
- Wildlife Habitat on the Great Plains

##### Graduate:

- Design of Fish and Wildlife Studies
- Wildlife Habitat Evaluation for Educators
- Wildlife Policy, Administration, and Law
- Leadership and Public Communications
- Natural Resources Policy and Biodiversity

#### University of Florida:

- Issues in a Changing World (non-majors)
- Biodiversity Conservation: Global Perspectives (non-majors)
- Wildlife Ecology and Management (majors)
- Wildlife Habitat Management (majors)
- Natural Resource Ecology (majors)

#### University of Idaho:

- Wetland Restoration (graduate level)

#### Louisiana Tech:

- Forest Trees of North America

#### University of Massachusetts:

- Introduction to GIS
- Watershed Science & Management
- Wetlands Assessment & Field Techniques (lecture on-line, with 5 field labs on campus)
- Sustainable Aquaculture

#### Michigan State University:

- Introduction to Fisheries and Wildlife
- Global Risks, Conservation and Criminology
- Corporate Environmental Crime and Risk
- R Essentials for Natural Resource Professionals (non-credit)
- Maximum Likelihood Estimation for Natural Resources and Ecology (non-credit)

#### University of Minnesota:

Ecological restoration; when students pass the online course, they are eligible to take a hands-on intensive field training session.

Northern Arizona University:

Introduction to Forestry  
Arizona Forests and Wildlife  
International Wildlife Issues

Oregon State University:

Approximately 50 undergraduate and graduate-level courses, a BSc in Fisheries and Wildlife Science, a Professional Science Master's degree in Fisheries and Wildlife Administration (requires 5 years of professional experience) and graduate Certificates (18 credits) in Fisheries Management and Wildlife Management (latter is forthcoming next term).

Purdue University:

Introduction to Environmental Conservation

University of Tennessee:

Recirculating Aquaculture  
Fish Physiology

Texas A&M University:

Urban Fish and Wildlife  
Wildlife Habitat Management  
Ecology and Society  
Ethology  
Wildlife Study Design and Analysis  
Vertebrate Ecology  
Behavioral Ecology  
Dynamics of Population  
Wetland Ecology and Pollution  
Wildlife Ecotoxicology  
Seminar  
Military Land Sustainability  
Geospatial Techniques in Military Land Sustainability  
Conservation and Ecology of Endangered Species  
Techniques in Wildlife Management

West Virginia University:

Conservation Ecology  
Restoration Ecology  
Invasive Species  
The Tradition of Hunting