



# PREPARING UNDERGRADUATES TO ATTEND THEIR FIRST PROFESSIONAL CONFERENCE

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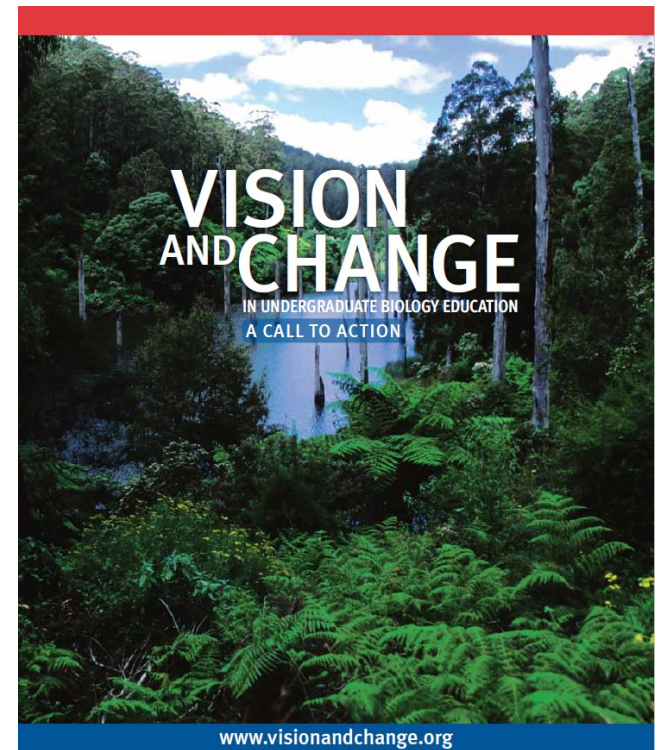
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# Needs in Undergraduate Education

## 2011 Vision and Change in Undergraduate Biology Education Report (AAAS)

- Professional skills
- Apply science
- Quantitative reasoning
- Modeling and simulation
- Interdisciplinary science
- Communicating science
- Understanding relationship between science and society



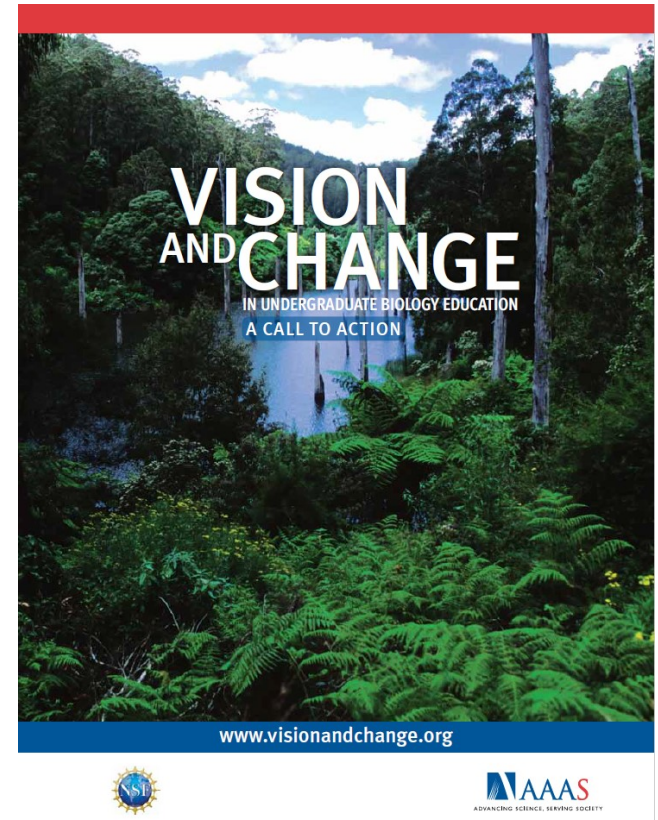
COLLEGE/DEPT. ARIAL REGULAR 12 POINT

**PURDUE**  
UNIVERSITY.

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# Preparing students for the workforce

- Professional behavior
- Working in teams
- Developing relationships
- Professional and ethical responsibilities
- Communicating science
- Life-long learning
- Knowledge of current issues



Photo courtesy of The Wildlife Society



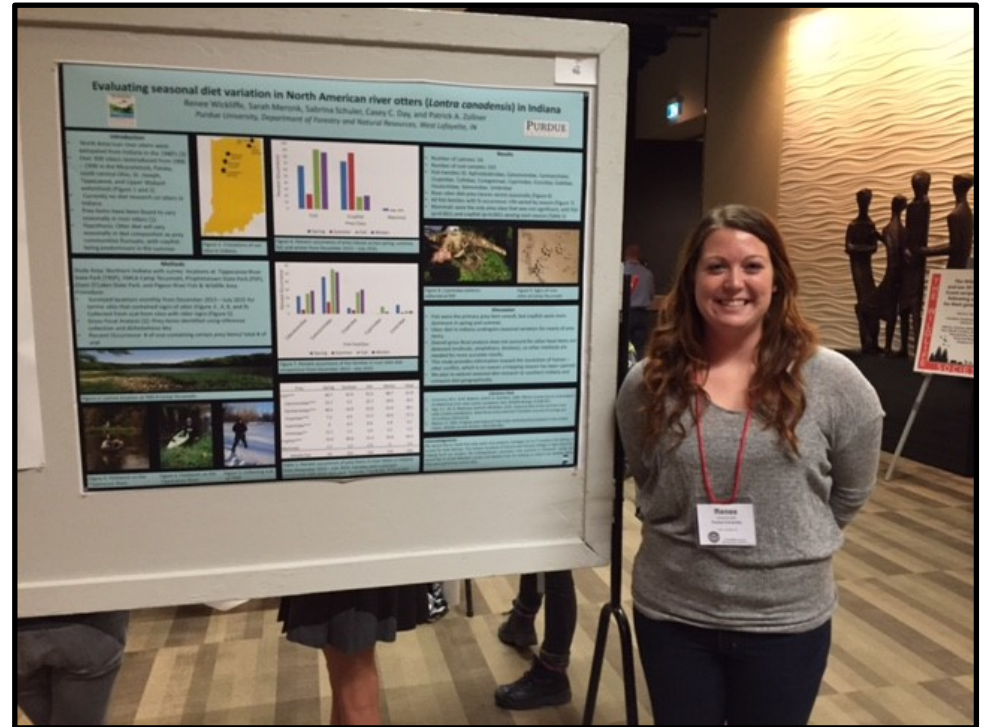
Photo courtesy of Mike Jenkins

COLLEGE OF AGRICULTURE –FORESTRY AND NATURAL RESOURCES

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# Social and Professional Interactions

- Benefits of social interactions
- Self efficacy
- Conference attendance
- Conference presentations
- Conference anxiety



# Course Objectives

- Formalize attendance of national meeting
- Introduce students to a variety of professionals
- Support students in develop of career goals
- Provide opportunity to develop informal communication skills.
- Explore career options and opportunities in our field.



# Course Format

- Pre-Conference Meetings
  - Pre-Survey
  - Discussion Topics
  - Assignments
- In-Conference Meetings
  - Assignments
  - Discussion
  - Guest Speakers/Mixed Institution Groups

- Post-Conference Meetings
  - Reflection
  - Post Survey



# Course Format

## ■ Pre-Conference Meetings

- Pre-Survey
- Discussion topics
- **Assignments**

## ■ In-Conference Meetings

- Assignments
- Discussion
- Guest speakers/Mixed Institution Groups

## ■ Post-Conference Meetings

- Reflection
- Post-Survey

- Create a personal schedule (conference app)
- Evaluate 3 conference abstracts
- Develop resume
- ID potential employers
- Summarize literature



# Course Format

- Pre-Conference Meetings
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- **In-Conference Meetings**
  - **Assignments**
  - Discussion
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**TWS Conference Tasks****NAME:**

Task	Description of Event	Time/Date	Signature of Witness
Meet another undergrad member from a different institution			
Meet a grad student from a difference institution			
Meet a nonacademic professional			
Meet a professor from another institution			
Ask a question of someone at a general research poster			
Ask a question of a student at a research in progress poster			
Ask a question at the end of a talk			
Meet alumni at the alumni social			
Attend another activity (vendors, panel discussion, plenary session, non-Purdue social, etc.)			
Attend a working group meeting			

# Course Format

- Pre-Conference Meetings
  - Pre-Survey
  - Discussion topics
  - Assignments
- Post-Conference Meetings
  - Reflection
  - Post-Survey
- **Post-Conference Meetings**
  - **Reflection**
  - **Post-Survey**



# Data Collection

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
I am planning to pursue a career in ...		<input checked="" type="checkbox"/>					
I would like to work for ...						<input checked="" type="checkbox"/>	
Grad school is important for career prep in ...	<input checked="" type="checkbox"/>						
Experience is important for career ...				<input checked="" type="checkbox"/>			



# Data Collection

## ■ Surveys

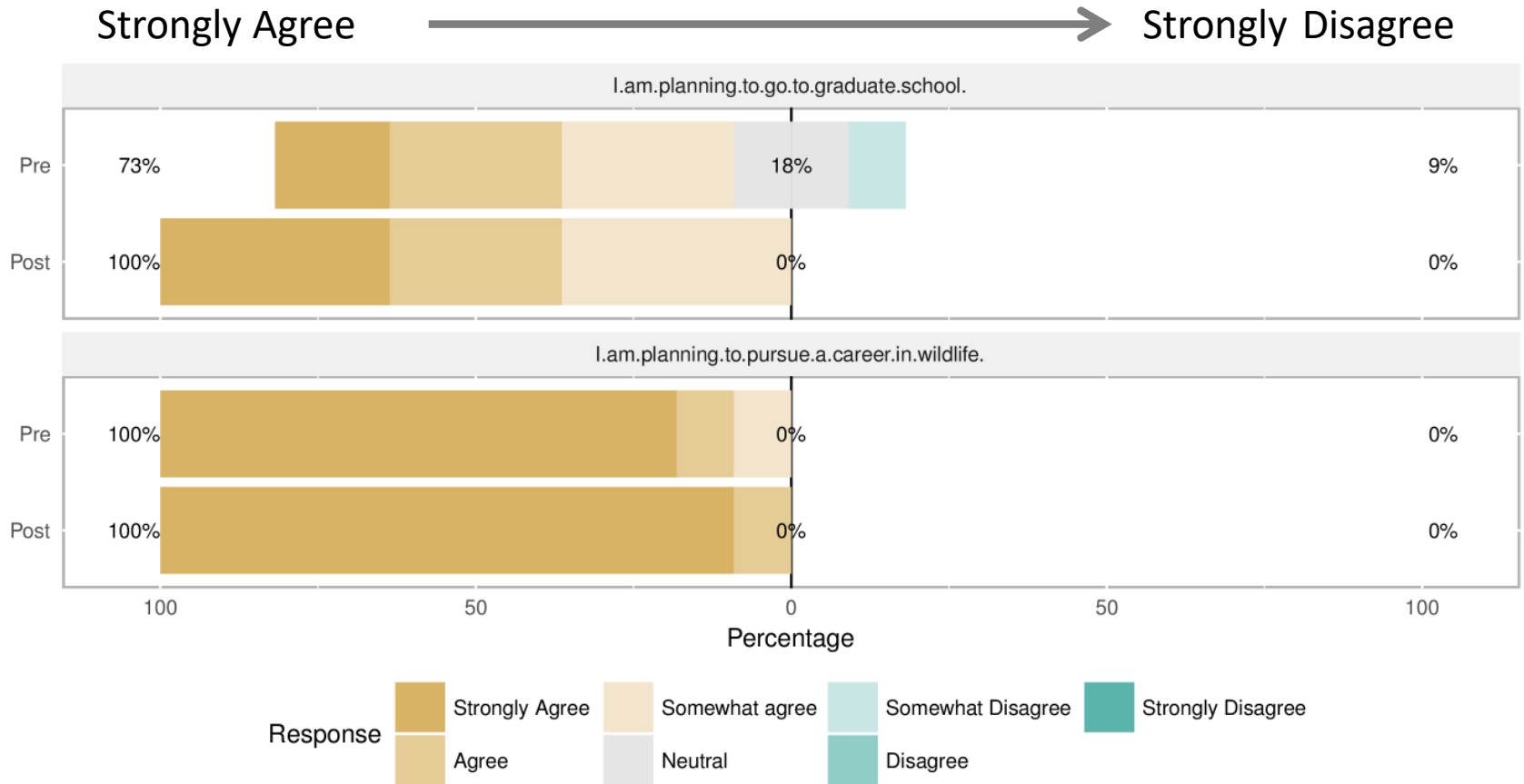
- Pre- and Post-conference surveys
- 6 Sections
  - Career goals
  - Preferred future employer
  - Perceptions of graduate school and career preparation
  - Perceptions of work experience and career preparation
  - Perceptions of graduate school and career advancement
  - Demographics and experience

## ■ Video Recordings

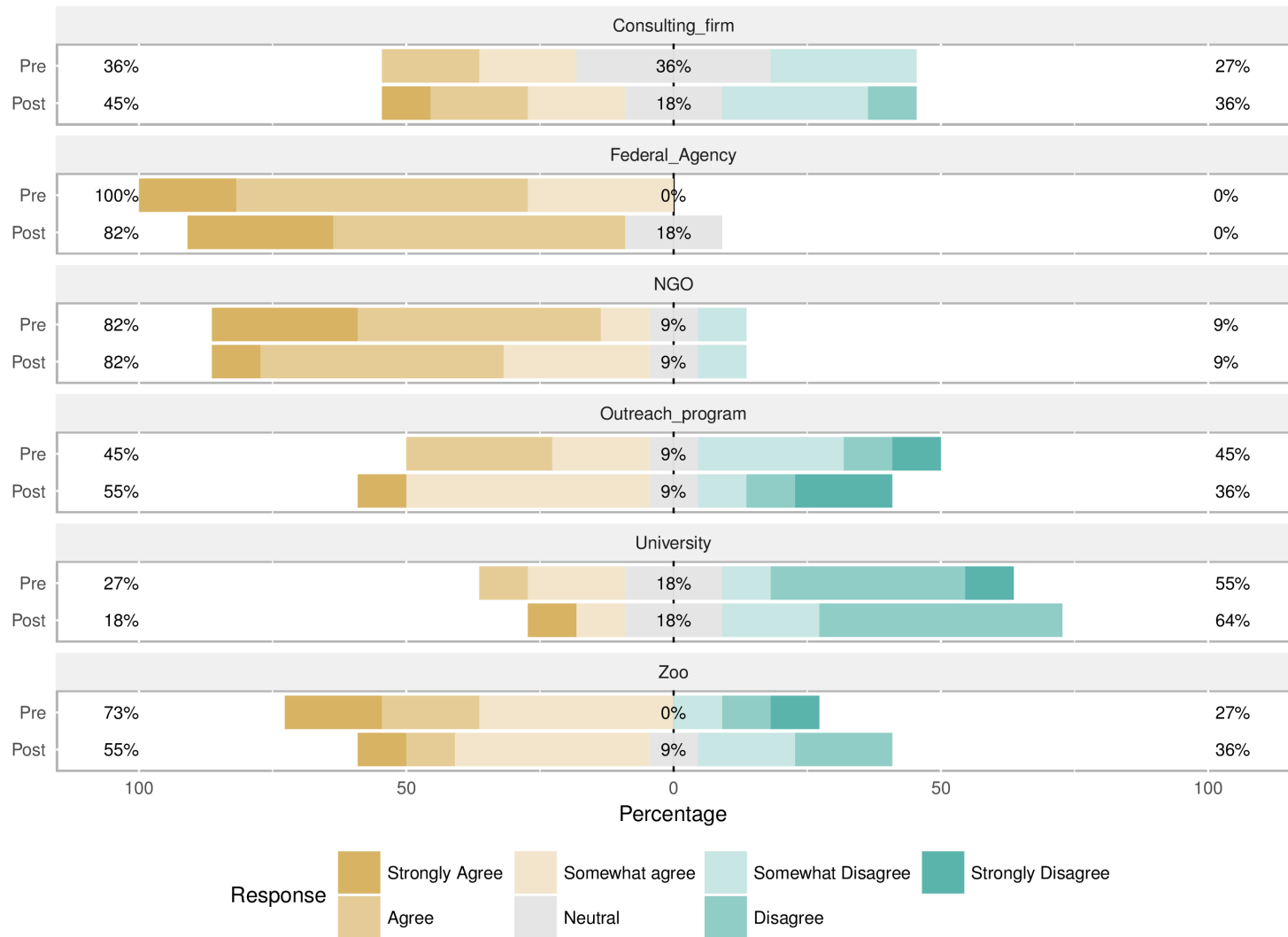
## ■ Reflection Essays



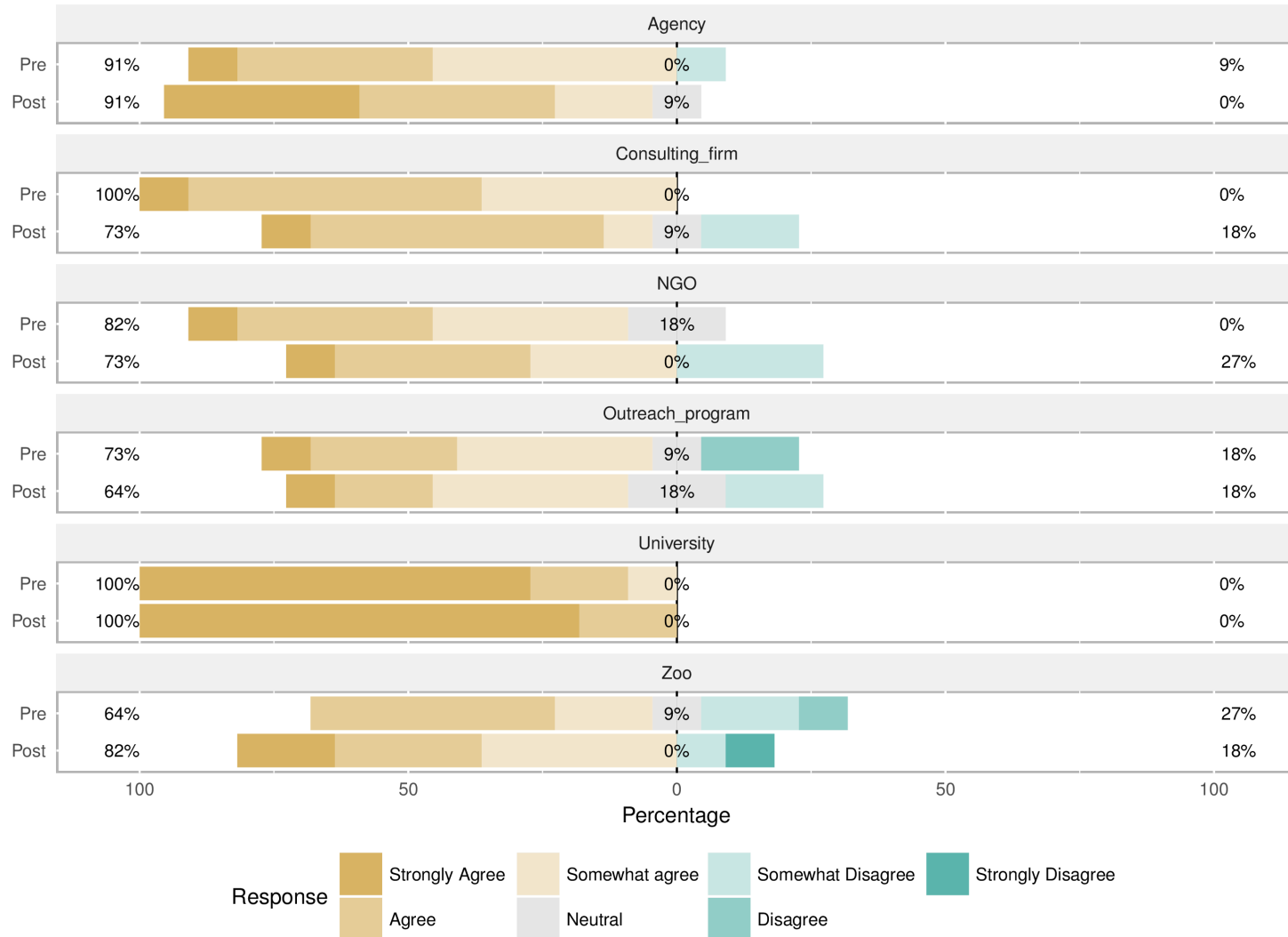
# Survey Results – I am planning to go to graduate school



# Survey Results – I would like to work for....

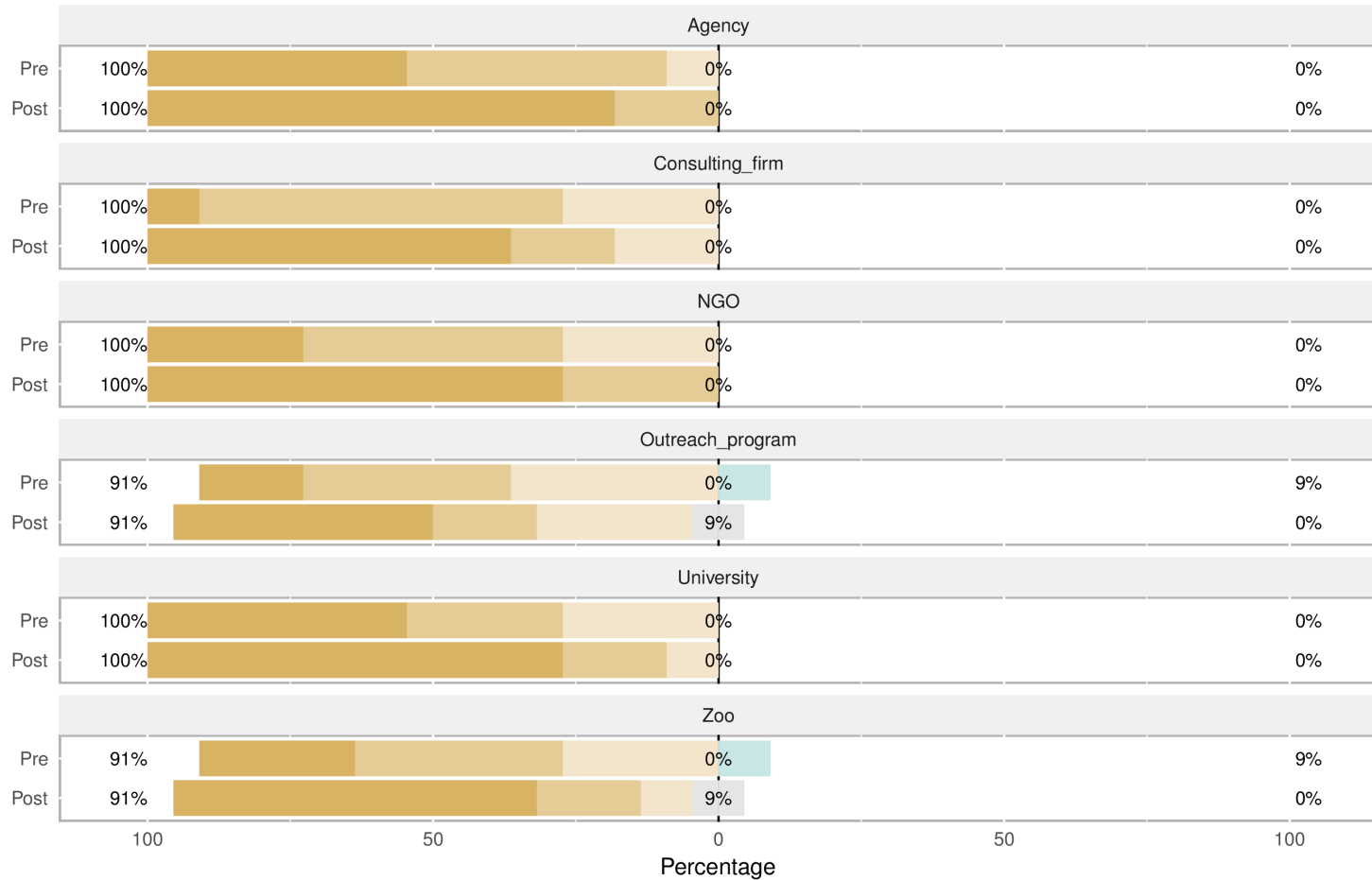


# Survey Results – Graduate school is an important part of preparation for a career in...





# Survey Results – Previous experience as a wildlife technician is an important part of preparation for a career in...

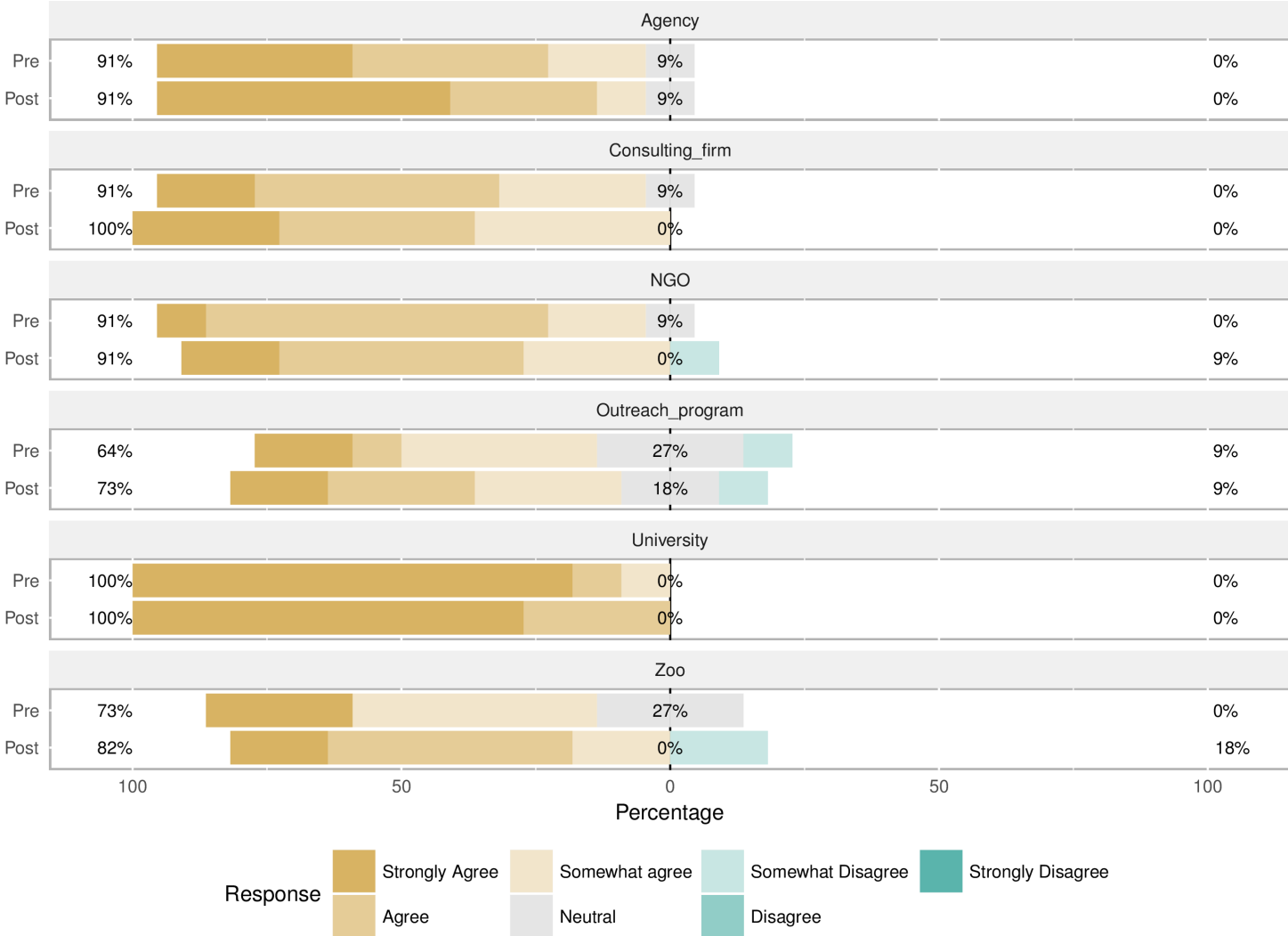


Response

- Strongly Agree
- Agree
- Somewhat agree
- Neutral
- Somewhat Disagree
- Disagree
- Strongly Disagree



# Survey Results – Graduate school is critical for career advancement in...



# Video Analysis Results

- Social Cognitive Career Theory  
Categorizations (Lent et al. 2002)
  - Self-efficacy beliefs
  - Vocational interest development
  - Outcome expectations



# Video Analysis Results

## Self Efficacy

- Self-confidence in completing assignments
- Interacting with others often “scary” or “nervous”
- Asking questions
- Sense of belonging
- Critiquing presentations
- Feeling “lost” or “overwhelmed”



Photo courtesy of The Wildlife Society

# Content Analysis of Reflection Essays

- Essays scored based on 3 rubrics
  - Academic
  - Career
  - Social
- Independently scored
- Scores assigned a numeric value based on septicity and depth of content

# Content Analysis of Reflection Essays

## Academic Gains

Theme – How required course activities impacted the meeting experience

“It was helpful to look at abstracts and judge them to be good, bad or mediocre. This changed the way I viewed the works at the conference. Where I would have previously gone in accepting all the research as fact, this helped me realize that these papers are capable of error and are not necessarily accurate.”

“Building an itinerary for the class was very useful. This made me more aware of the variety of talks being presented.”

# Content Analysis of Reflection Essays

## Career Benefits

Actions to pursue a wildlife career

“...furthering your education after undergrad is very important if a lifelong career is wanted in the wildlife profession.”

“I definitely have a larger list of people to contact when my graduation date comes close”; “I do feel that graduate school is much more appealing because of the conference.”

# Content Analysis of Reflection Essays

## Social Benefits

Becoming more social in the profession

“The mixer was definitely planned as a more informal event, and it was nice to meet professionals in a relaxed, friendly atmosphere”

“The biggest surprise to me was how relaxed everybody was and how open they were to talking to other people. After their presentation, most speakers welcomed students and professionals to talk with them and ask them questions. I was also kind of surprised at how willing some professionals were to talk to students. For example, Dr. X and Dr. Y initiated a conversation with [us] instead of the other way around.”



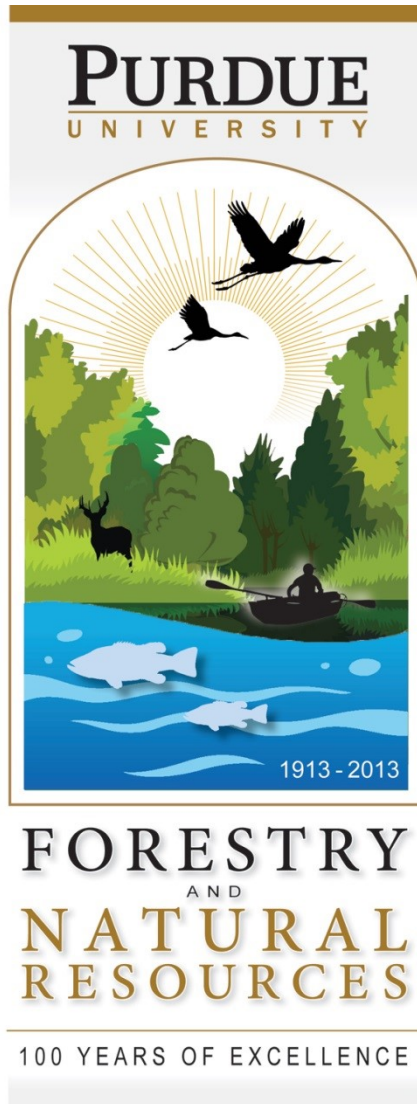
# Discussion

- Exposure to social and cultural norms of their field
- Daily meetings provided supportive environment
  - “Safe” environment for practicing professional social skills
- Challenges to teaching professional skills
- Social integration and sense of community/belonging
- Benefits of the structure and environment of the classroom
- Current and future courses and workshop



Photo from [www.hercampus.com](http://www.hercampus.com)

# Acknowledgements



- Purdue University
  - College of Agriculture
  - Student Organization Grant Authorization Board
  - Purdue Alumni Association
  - Department of Forestry and Natural Resources
  - Student Chapter of TWS
- Guest Speakers
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- The Wildlife Society



# QUESTIONS?

For additional course information, please feel free to contact me at [eflaher@purdue.edu](mailto:eflaher@purdue.edu).



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