

WHO FILLS THE SEAT:

**THE DEMOGRAPHICS,
PERCEPTIONS, AND KNOWLEDGE
BASE OF STUDENTS ENROLLED IN
THE INTRODUCTION TO ANIMAL
SCIENCE COURSE AT OKLAHOMA
STATE UNIVERSITY**

**Samantha
Lowman**

STATEMENT OF THE PROBLEM

- Questions arise about demographic profiles of students who fill the seats of agricultural classrooms
- Agricultural educators are challenged to provide literacy to as many as 60 to 70% of non-traditional agricultural students, who lack farm knowledge and hands-on experience (Hasslen, 1983)
 - *Previous assumption:* students enrolled have a rural background with farming/ranching experience
 - *Reality:* most students are three generations removed from the farm with no farming/ranching experience
- Animal Science departments are aware of new enrollment trends; however, uncertainty of how to make curriculum changes in the classroom still remains at the forefront of concern (Buchanan, 2008)

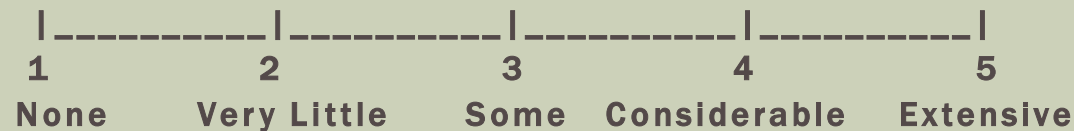
OBJECTIVES

1. To determine the demographic profile of students enrolled in the Introduction to Animal Science course at Oklahoma State University
2. To determine the student's perceived knowledge about animal science disciplines, species, and husbandry practices using pre-course and post-course surveys
3. To assess the change in pre-course and post-course student perception of animal management and husbandry practices
4. To measure student curriculum learned throughout the course based on pre-test and post-test assessment scores
5. To measure the relationship between selected demographic variables and measured knowledge using pre-test and post-test assessment scores

MATERIALS AND METHODS

- **Demographic Survey**
 - 34 questions
 - Responses recorded via TopHat response system
 - Voluntary

- **Pre-Course and Post-Course Perception Survey of Perceived Knowledge**
 - 17 questions
 - Responses recorded via TopHat response system and ZipGrade scantron system
 - Voluntary
 - Likert-Type Scale

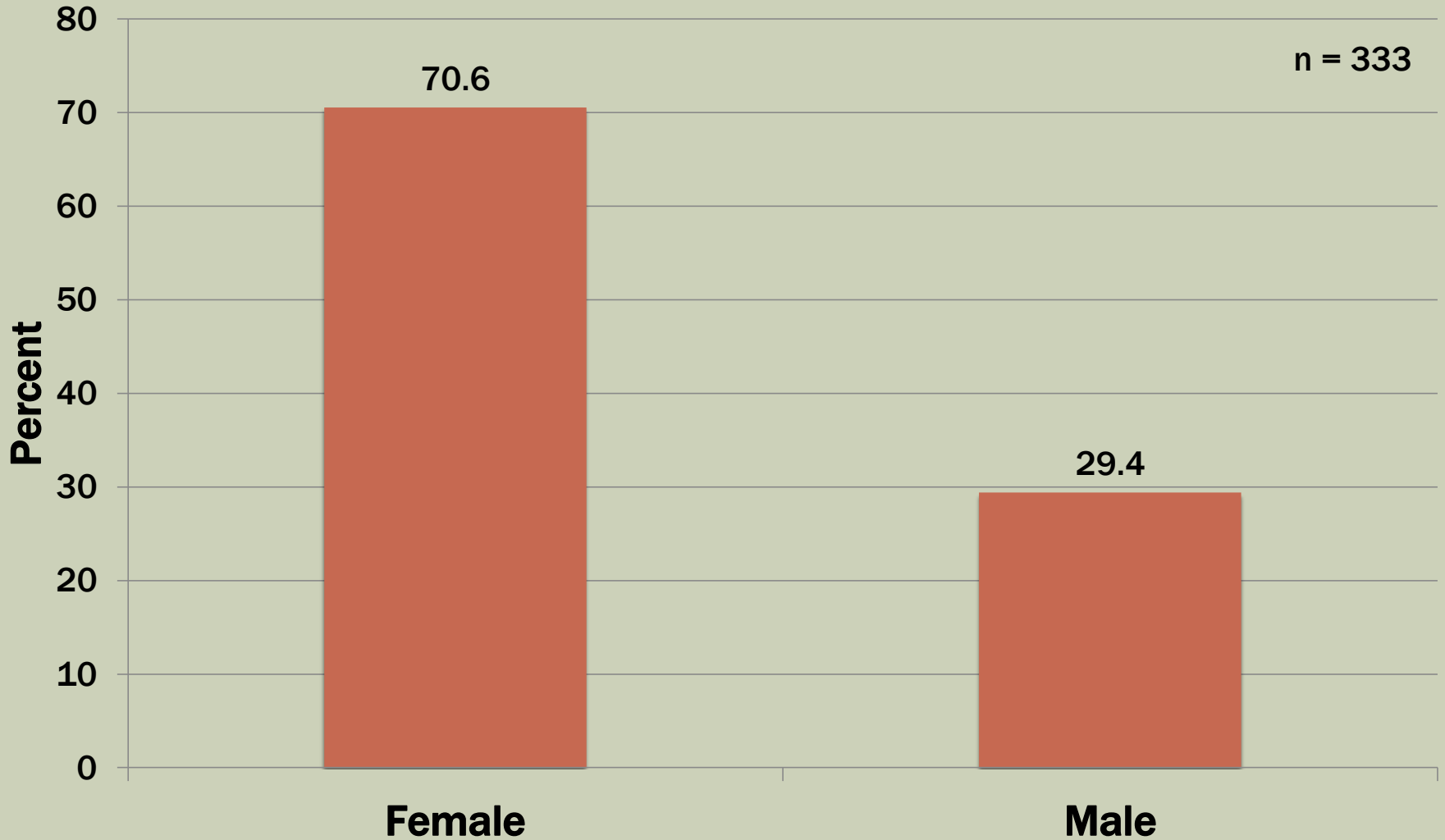


MATERIALS AND METHODS

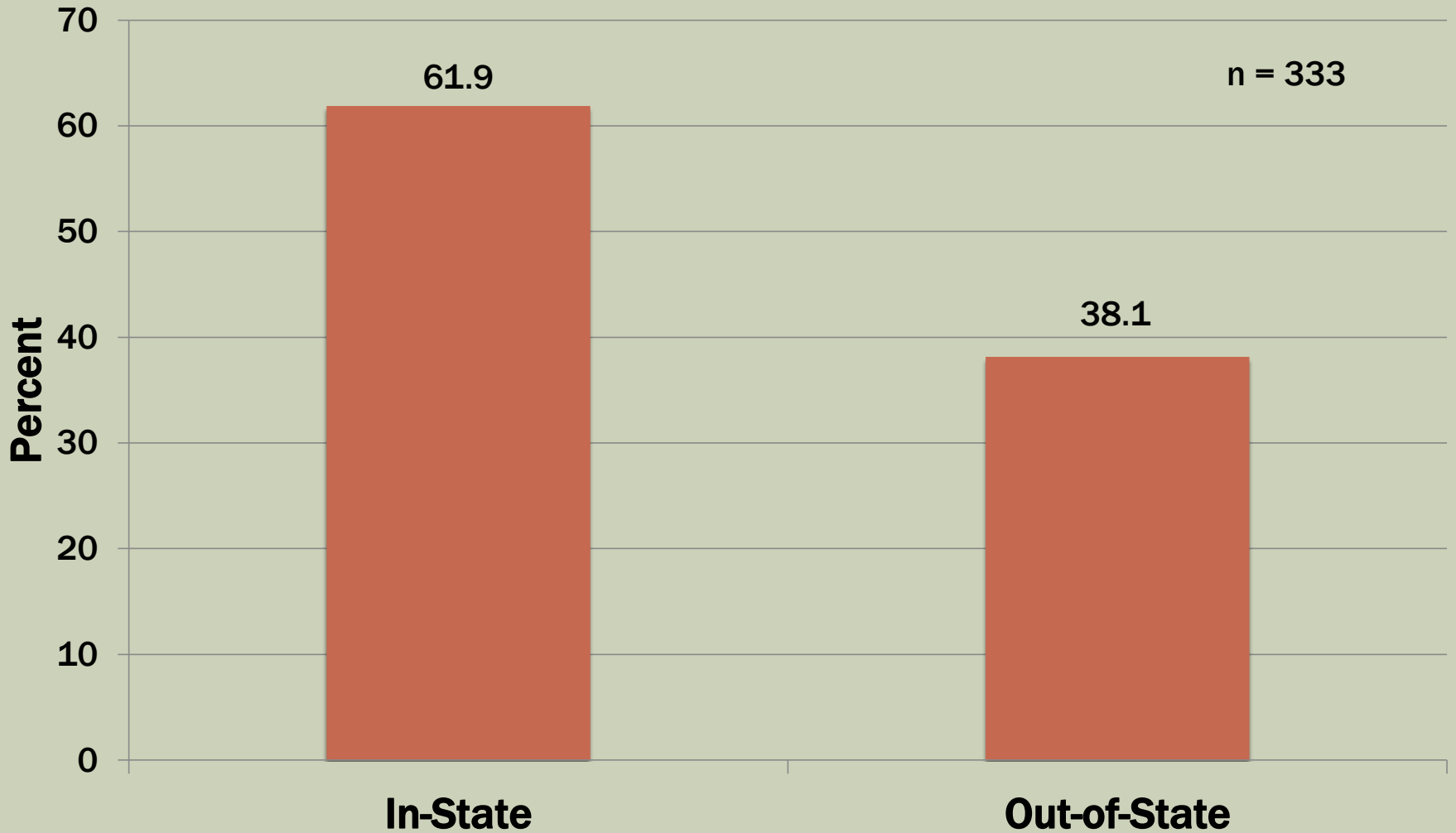
- **Pre-Test Assessment**
 - Number of questions varied between 15-20
 - Administered prior to lecture material being taught
 - Responses recorded via ZipGrade scantron system
- **Post-Test Assessment**
 - Questions varied in number
 - Administered in conjunction with unit and midterm exams
- Descriptive statistics were used to determine the frequency of demographic information and self-perceived knowledge
- A paired t-test was used to compare means, pre-test and post-test
- Data analysis utilized StatCrunch, a web-based statistical software

DEMOGRAPHIC RESULTS

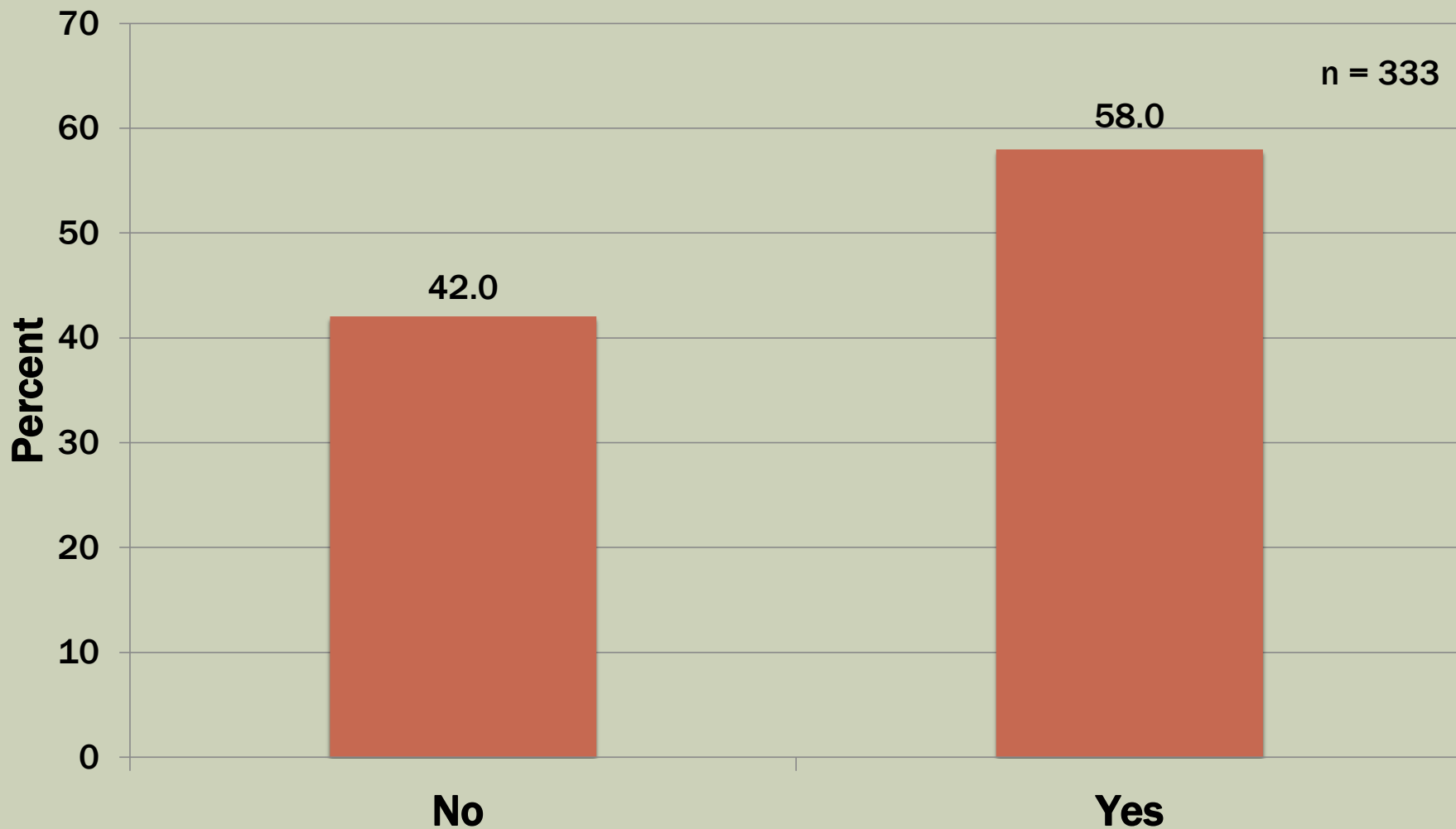
GENDER



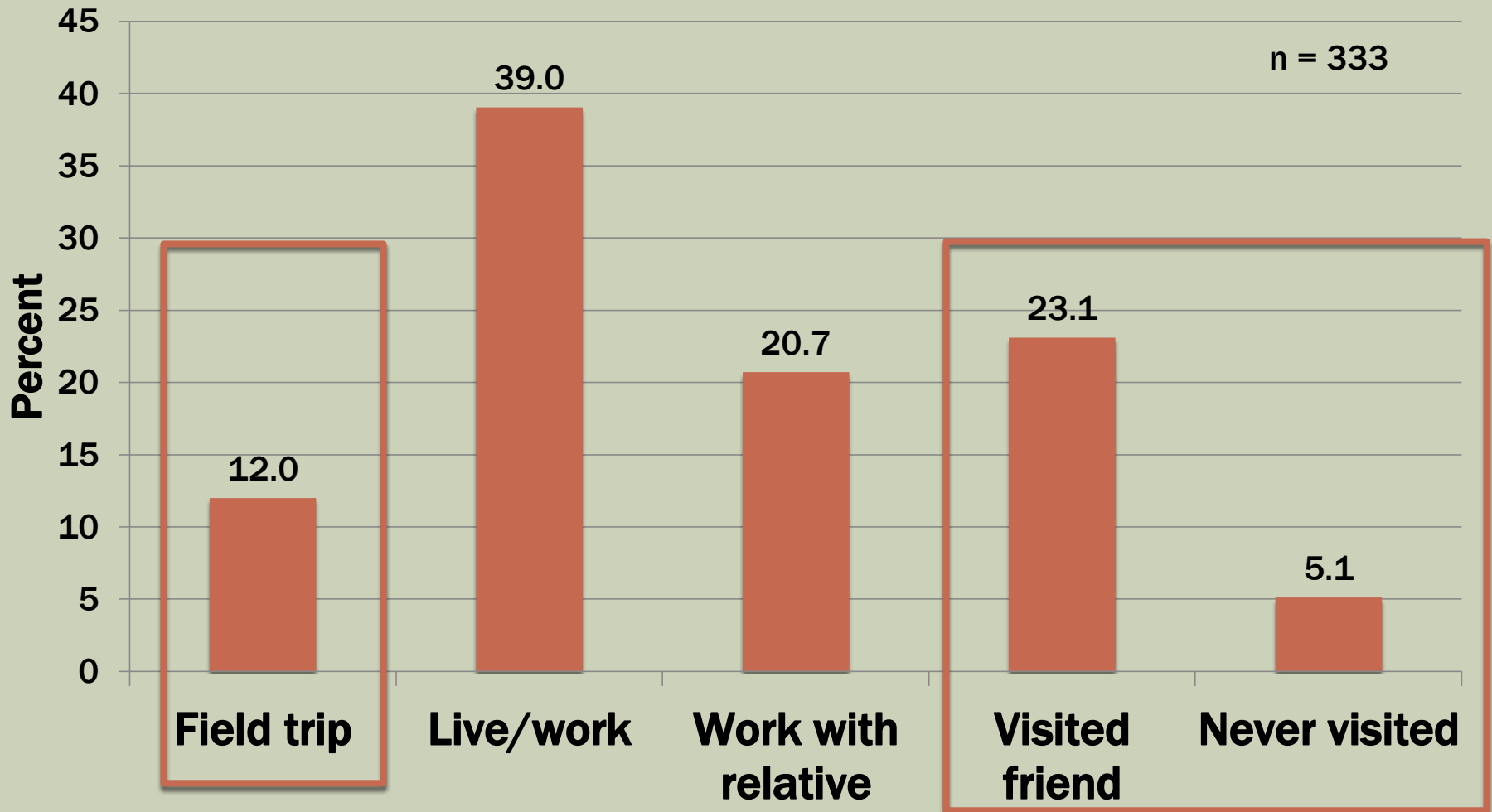
IN-STATE VS. OUT-OF-STATE RESIDENCE



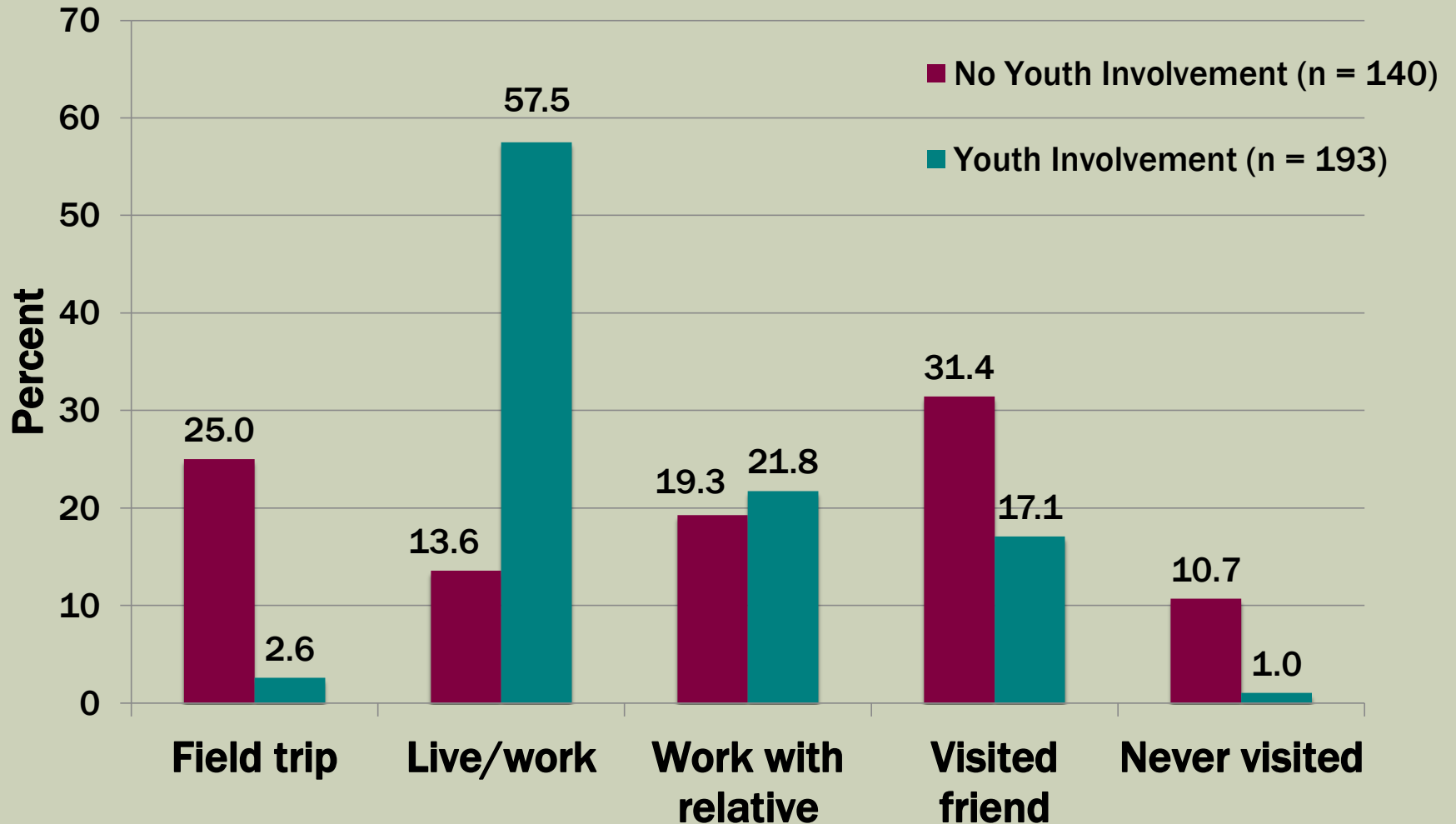
YOUTH AGRICULTURAL ORGANIZATION INVOLVEMENT



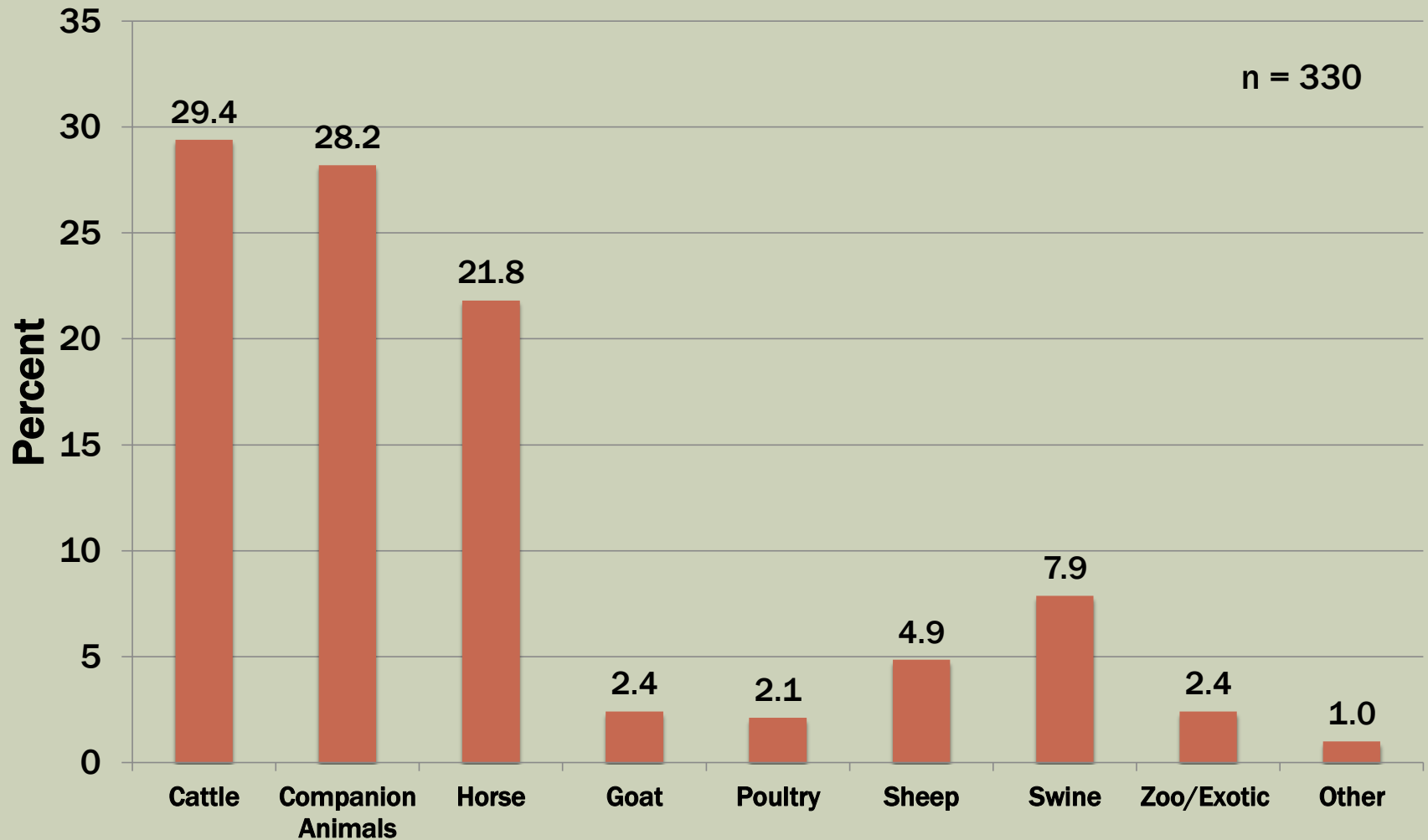
PREVIOUS AGRICULTURAL EXPOSURE



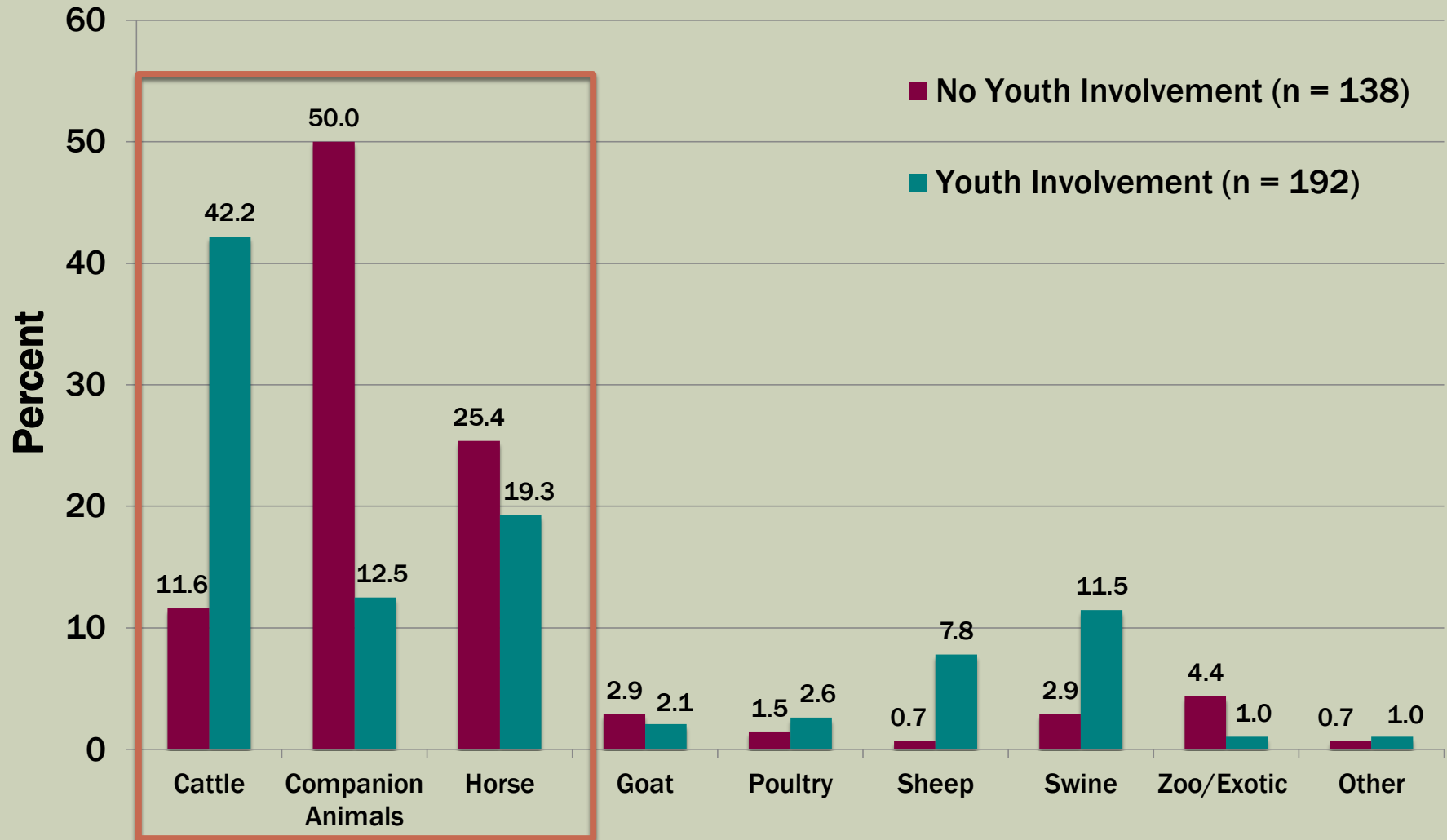
PREVIOUS AGRICULTURAL EXPOSURE



SPECIES OF INTEREST

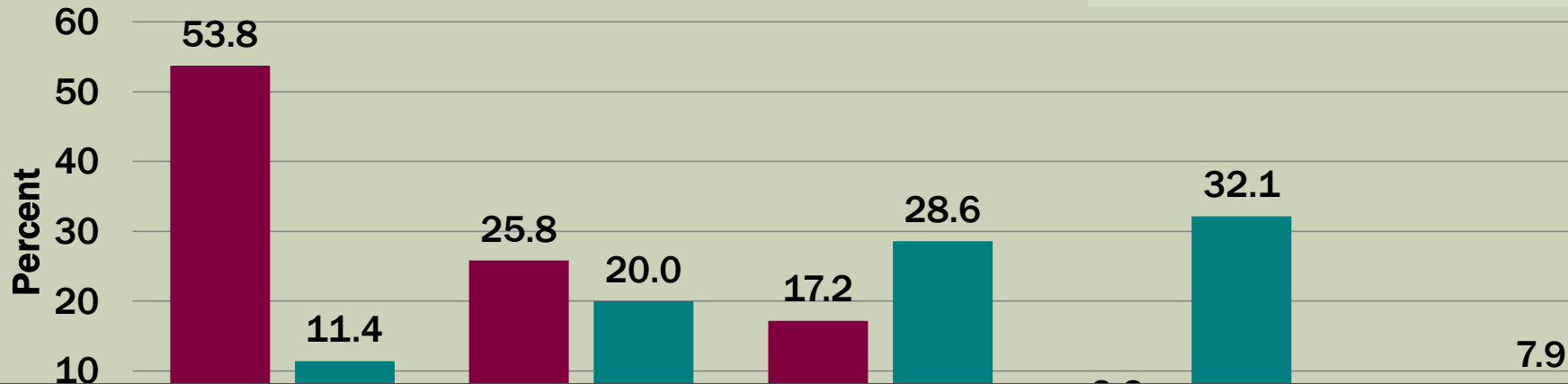
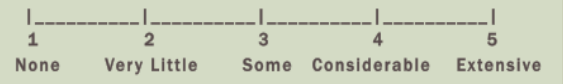


SPECIES OF INTEREST

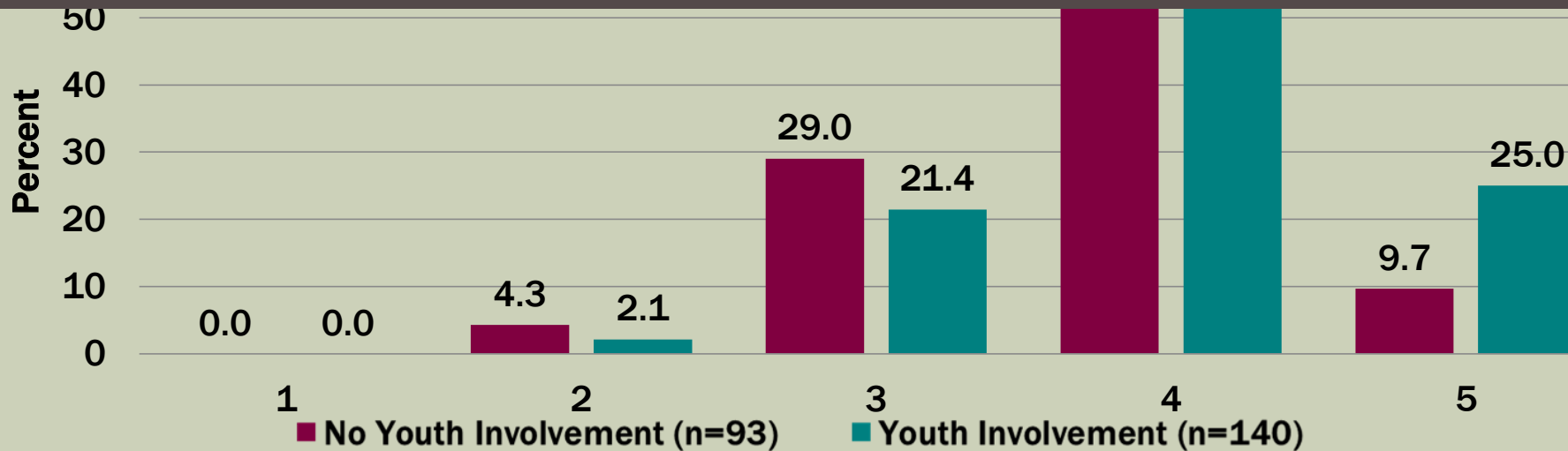


**PRE- AND POST-COURSE
PERCEPTION OF
PERCEIVED KNOWLEDGE**

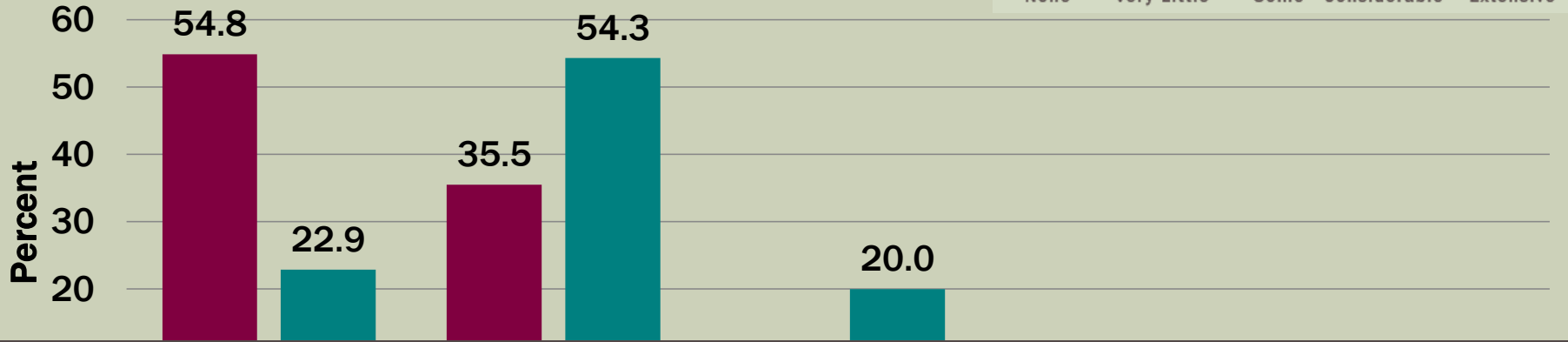
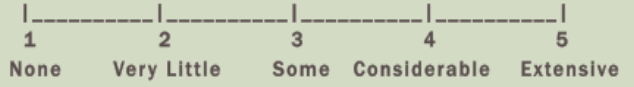
Pre-Course Perceptions



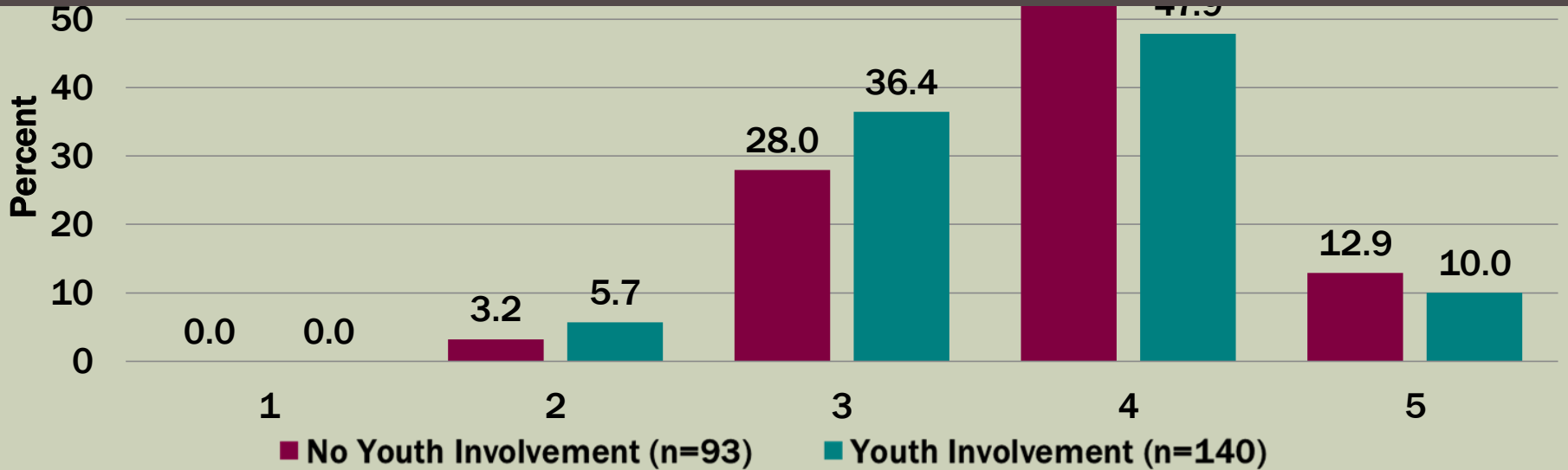
BEEF CATTLE



Pre-Course Perceptions

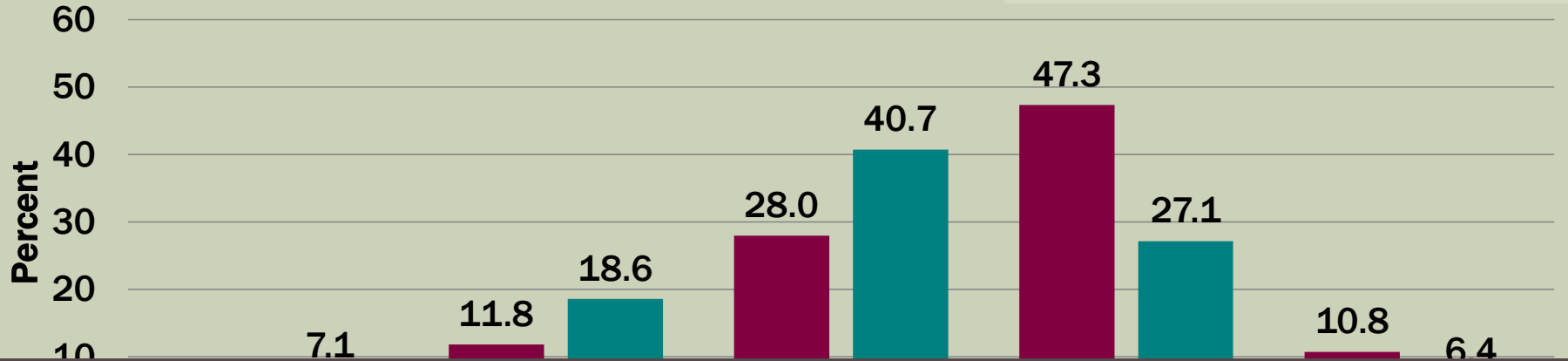


DAIRY CATTLE

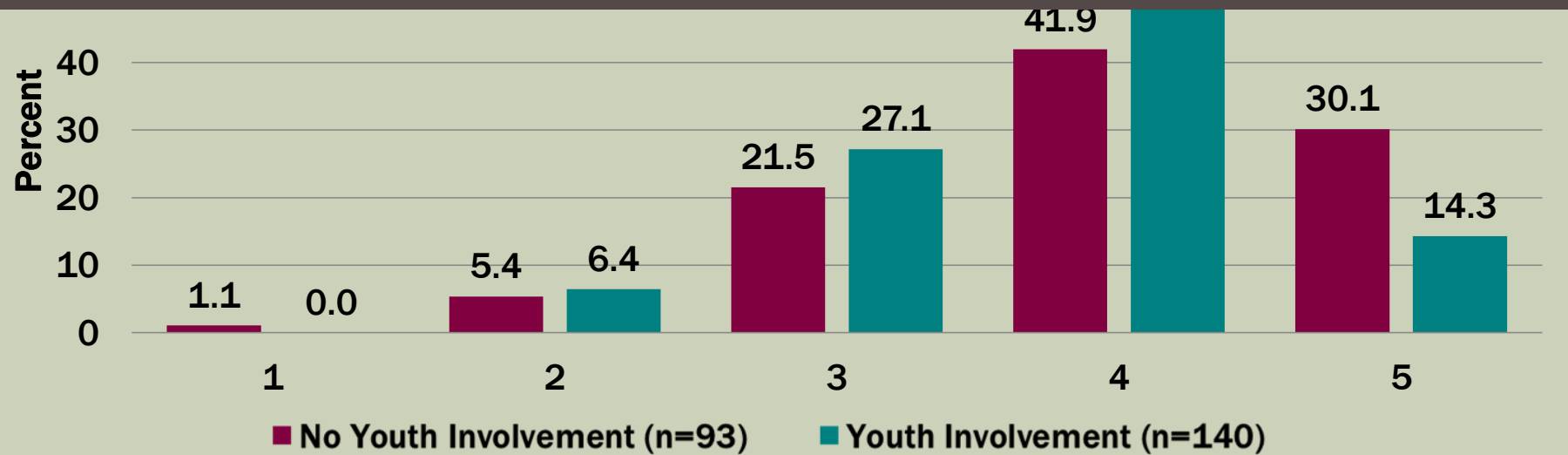


Pre-Course Perceptions

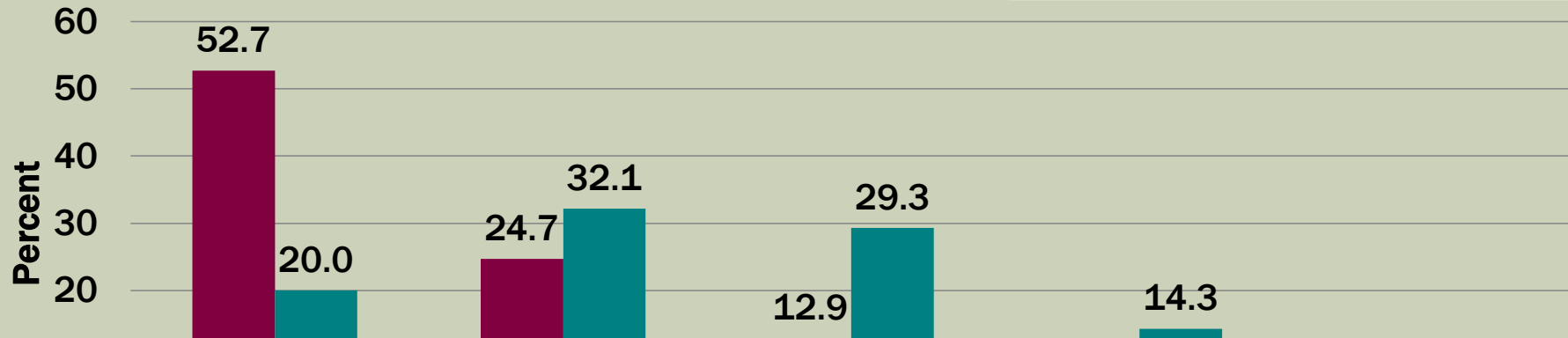
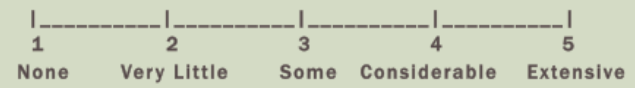
1 2 3 4 5
None Very Little Some Considerable Extensive



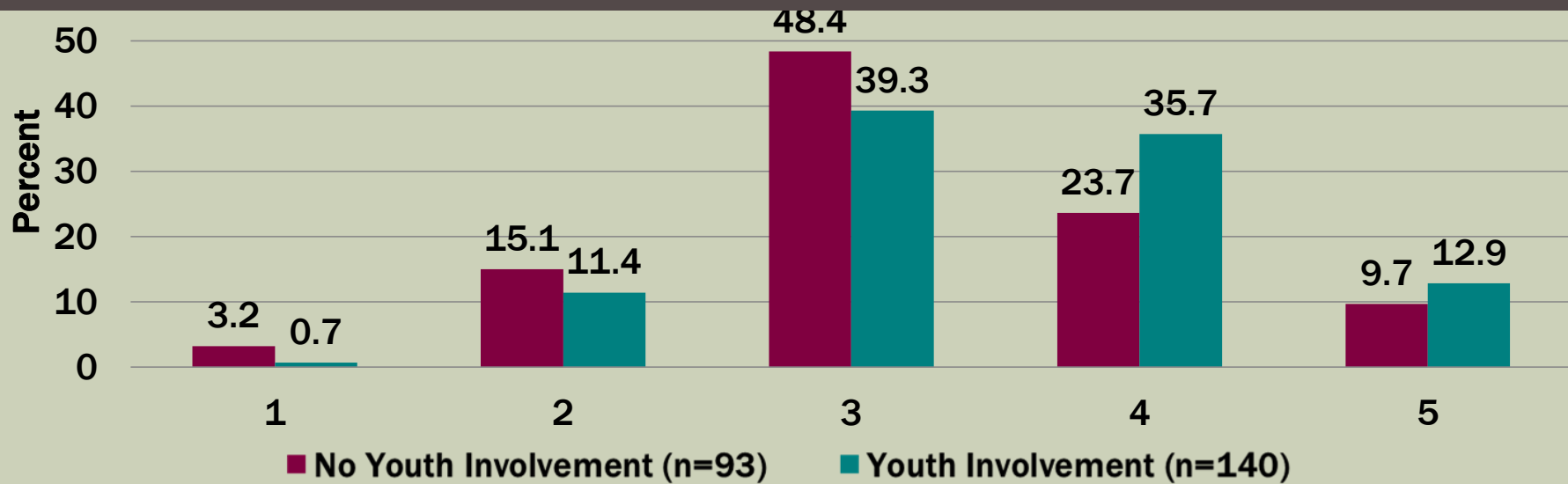
COMPANION ANIMALS



Pre-Course Perceptions

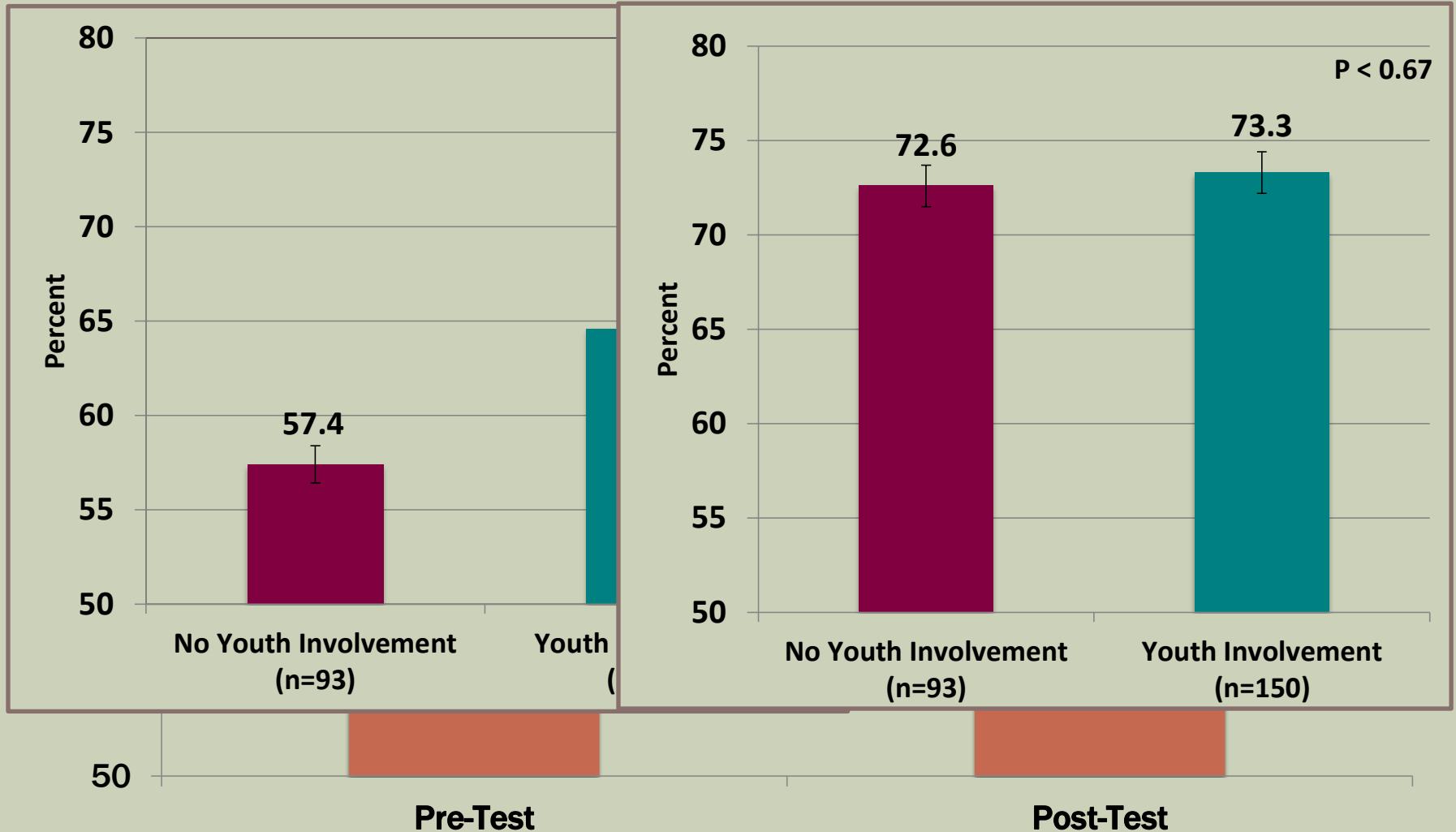


HORSE

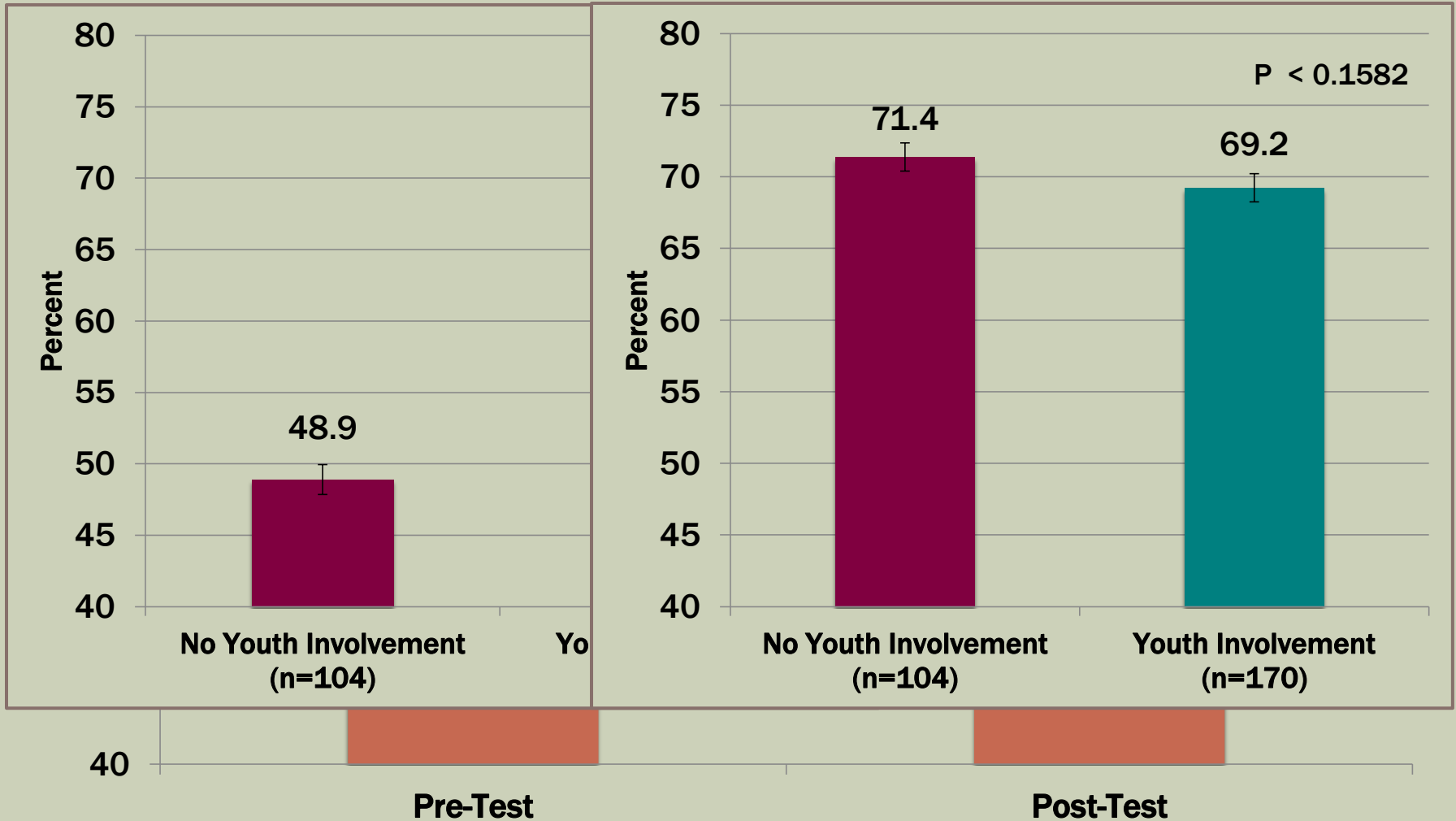


PRE- AND POST-TEST ASSESSMENT

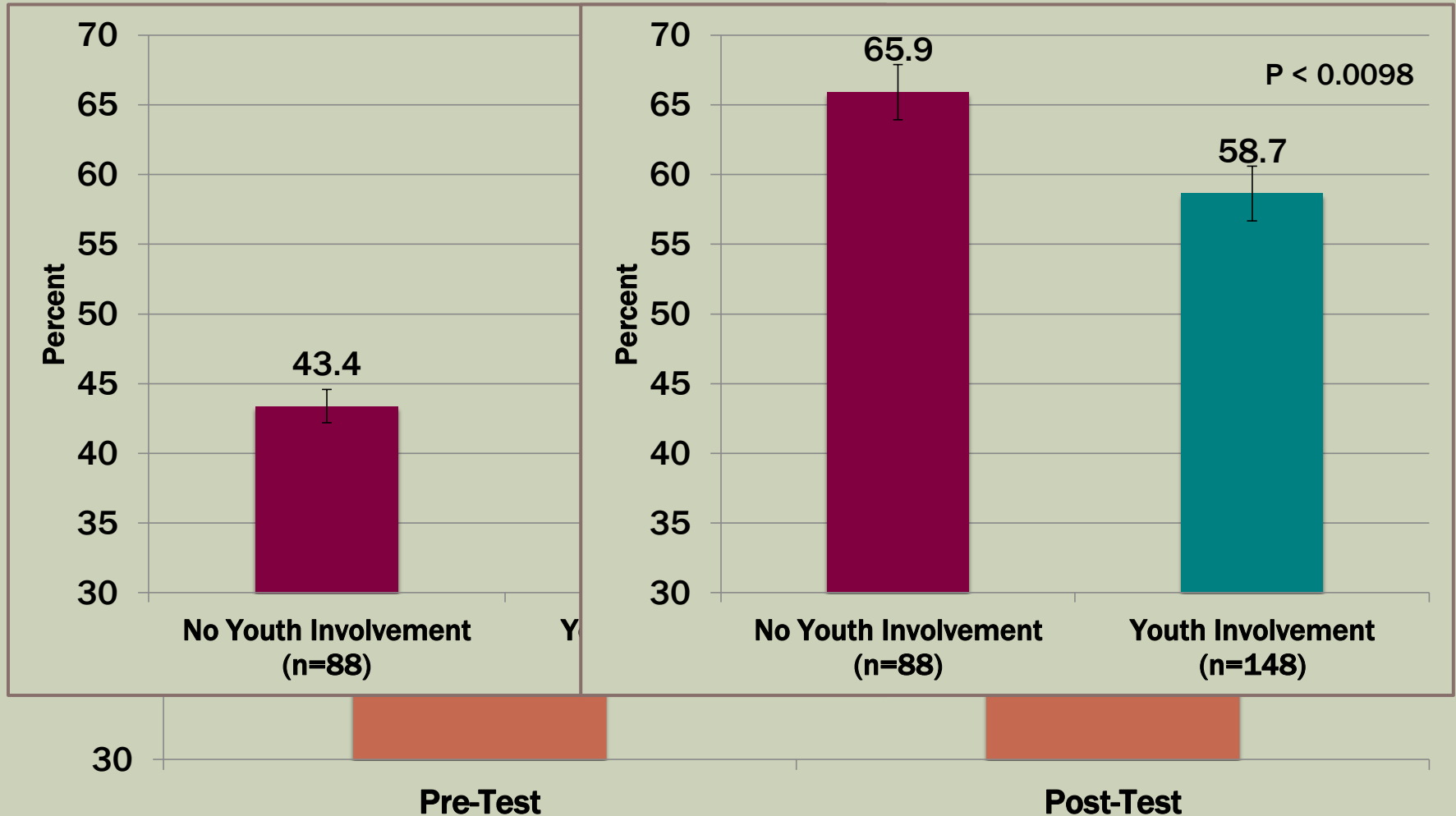
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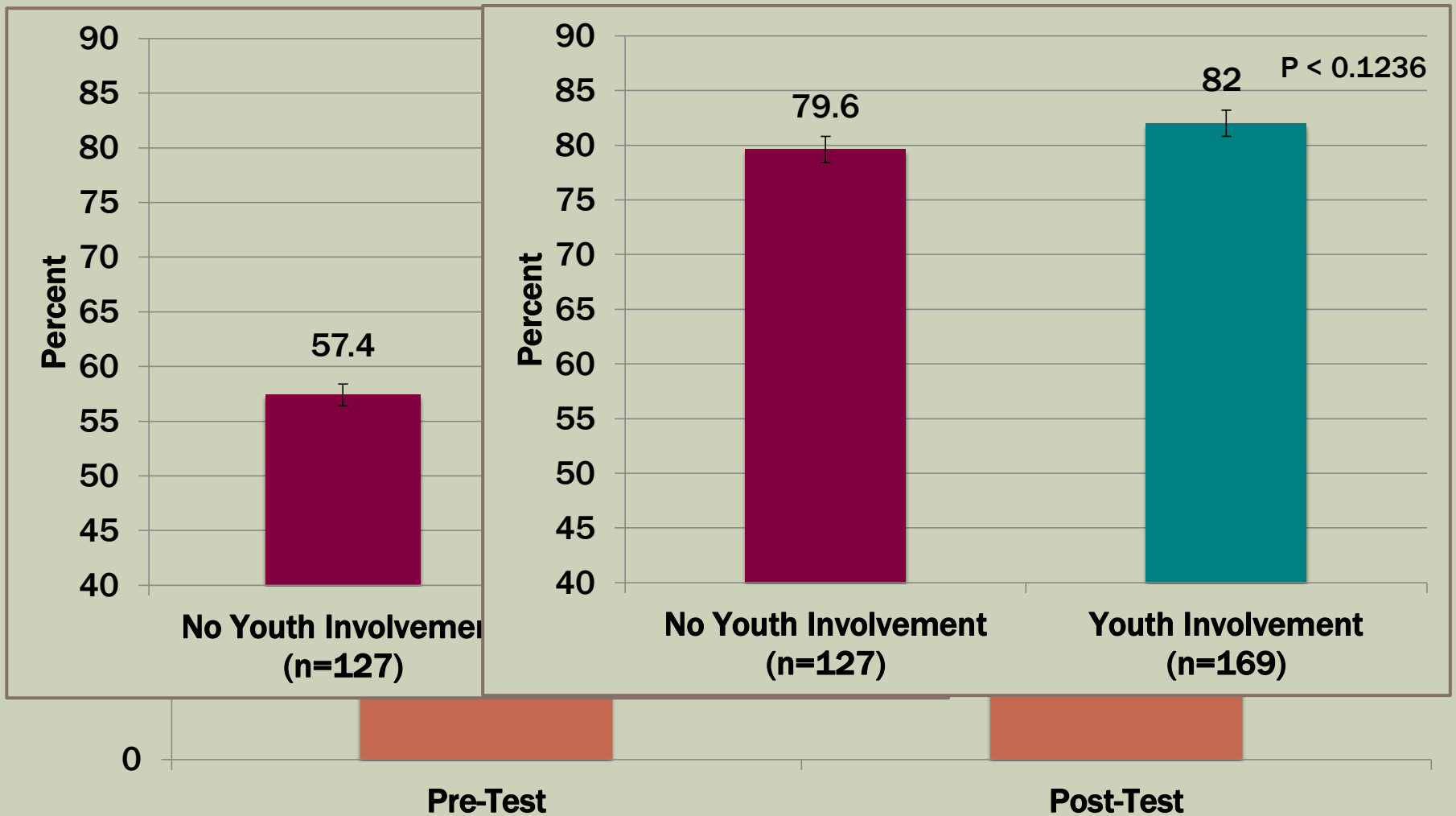
DAIRY CATTLE



COMPANION ANIMALS



HORSE



SUMMARY

- Females > Males
- Nearly 60% of enrolled students were previously involved in a youth agricultural organization
- 40% of enrolled students' previous agricultural exposure included an educational field trip, visited a friend, or never been on a farm
 - 65% no youth agricultural involvement
 - 20% youth agricultural involvement
- Top 3 species of interest did not vary among students
 - Order was reversed based on youth agricultural involvement* or no youth agricultural involvement**
 - *Cattle, horses, and companion animals
 - **Companion animals, horses, and cattle

SUMMARY

- Generally speaking, a shift from *none and very little perceived knowledge* to *some and considerable perceived knowledge* was seen for all species looked at thus far in the study
- Youth Agricultural Involvement vs. No Youth Agricultural Involvement
 - A significant difference was seen in pre-test assessment scores of those students involved in a youth agricultural organization, *except companion animals*
 - No significant difference was seen in post-test assessment scores between the two groups, *except companion animals*

WHAT IS NEXT FOR INTRODUCTION TO ANIMAL SCIENCE?

- Our student profile will continue to change over the next decade as a reflection of cultural background and interests
 - How do we respond to the change in the demographic profile of students enrolling in the agricultural sciences
 - What curriculum revisions are needed, if any
 - Is there a need to expand academic offerings
 - With any changes, we must consider agricultural society and industry needs



QUESTIONS?

SAMANTHA LOWMAN
GRADUATE TEACHING ASSISTANT
OKLAHOMA STATE UNIVERSITY
SAMANTHA.LOWMAN@OKSTATE.EDU

People's Pic