



# Bridges Career Academy

## Advanced Agriculture, Food and Natural Resources

### Staples-Motley High School

Expand knowledge and skills while exploring careers in the fields of agriculture, foods and natural resources. Learn techniques for working with animals, identifying plants, and evaluating habitats.

### Academic Courses

- Fish and Wildlife Management II
- Geographic Information Systems
- Plant Science II
- Animal Science II
- Natural Resource Science II
- Agri-Science
- Outdoor Recreation
- Personal Leadership

### Career Experiences

- Learn from industry speakers
- Tour a local business
- Attend the Bridges Career Exploration Day or other regional career fairs
- Participate in FFA state and national leadership events

### Completion Standards

COMPLETE

**3 of the 8 courses**

GRADES **B** ↑

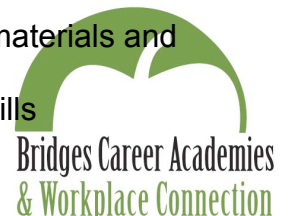
Earn a **certificate** and **green cord** at graduation



### Job Skills

In addition to having technical skills, employers expect workers in this industry to have these skills:

- Written communication skills
- Ability to work with other professionals
- Ability to manage materials and supplies
- Problem solving skills



[www.BridgesConnection.org/StaplesMotley](http://www.BridgesConnection.org/StaplesMotley)

**Explore types of careers**  
[www.careerwise.minnstate.edu/careers](http://www.careerwise.minnstate.edu/careers)

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Supported in part by Sourcewell (formerly NJPA)

# Advanced Agriculture, Food and Natural Resources Career Academy

## Staples-Motley High School

The Advanced Agricultural, Food and Natural Resources Academy provide students with an opportunity to expand their knowledge and skills as they explore careers in the fields of agriculture and natural resources. Hands-on projects and real-world experiences are an integral part of this academy. Learning techniques for working with animals, identifying plants, and evaluating habitats are just a few of the highlights for this academy. The Academy is designed for students interested in environmental studies and a hands-on career.

### ACADEMY COURSES

#### **Fish and Wildlife Management II** — .5 High School Credit

This course offers advanced studies in applied sciences in the areas of fisheries, wildlife and forest management. Students work in developing and managing the school forests and nature areas. Students will learn management techniques and then put them into practice. A custom rod building unit will be included along with fly and jig tying as the course emphasizes hands on learning.

#### **Geographic Information Systems** — .5 High School Credit

This is a computer-based and geo-reference based course designed for students with interest in natural resources, engineering, historical, and social systems. Students will be using Geographic Positioning Systems (GPS) in conjunction with Geographic Information Systems (GIS) to create and manipulate maps that can be applied to thousands of geo-spatial situations to make decisions. GIS software analyzes selected environmental, social, and economic issues through spatial analysis.

#### **Plant Science II** — .5 High School Credit

Students will study plant growth and development including plant anatomy, physiology, production, and reproduction. Students will have the opportunity to work in a greenhouse setting and implement the knowledge they have learned. Students will also learn to identify popular horticultural plants and gain an understanding of their growth needs.

#### **Animal Science II** — .5 High School Credit and/or College Credit

This is a University of Minnesota Introduction to Animal Science (ANSC 1101) course with emphasis on genetics, physiology and nutrition. The course includes a study of production systems relative to the horse, dairy, sheep, poultry, swine and beef industries. Additional topics include man's relationship to animals, current issues and future perspectives of animal agriculture. Students will experience laboratories at the University of Minnesota relating to Animal Science. Students will be concurrently enrolled at the University of Minnesota and upon successful completion of this class and will have four semesters to use the credit.

#### **Natural Resource Science II** — .5 High School Credit

This class is designed for students who want to specialize in special projects in natural resources or agriculture not already offered in the program or those who want to push themselves deeper in content then offered in class.

#### **Agra-Science** — .5 High School Credit

This course is designed for students who want to enhance leadership skills, personal growth and career success in their community. Students will explore such topics as biotechnology, horticulture, plant and animal science, wildlife, natural resources, commodity marketing and leadership skills.

#### **Outdoor Recreation** — .5 High School Credit

This class introduces students to hobbies commonly used in northern MN such as; canoeing, archery, geocaching, and disk golf as well learning about our edibles. Students will also get a chance to build wreathes, pine centerpieces, or an ice fishing pole.

#### **Personal Leadership** — .5 High School Credit

In this class students will learn how to effectively communicate, problem solve, and work together as a team. Students will gain experience in developing presentations, resumes and develop your own portfolio to promote yourself. Community projects will be an important part of the class.

-OVER-



# Advanced Agriculture, Food and Natural Resources Career Academy

## Staples-Motley High School

### COMPLETION STANDARD

Students wishing to receive a certification must complete three of the eight courses listed and earn a minimum of a 'B' grade in each course.

### CAREER EXPERIENCES

Students will explore and research careers with industry speakers, tours, and attend the Bridges Career Exploration Day event and other regional career fairs. In addition, students will attend FFA (Future Farmers of America) state and national leadership events.

### JOB SKILLS

In addition to having technical skills, employers expect their workers to have other skills such as:

- Written communication skills
- Ability to work with other professionals
- Ability to manage materials and supplies
- Problem solving skills

**CAREER OPTIONS:** [www.careerwise.minnstate.edu/careers](http://www.careerwise.minnstate.edu/careers)

**JOB OUTLOOK:** [www.careerwise.minnstate.edu/jobs](http://www.careerwise.minnstate.edu/jobs)

**POSTSECONDARY PROGRAMS:** [www.careerwise.minnstate.edu/education](http://www.careerwise.minnstate.edu/education)

