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A Monthly Insight into the USDA's Food and Agricultural Education Information System

# FAEIS News

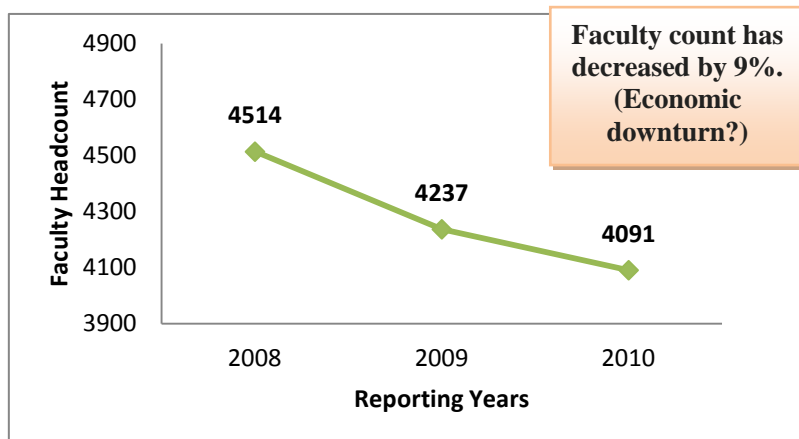
## The USDA-NIFA Societal Challenge Area: Climate Change Exploring the Educational Pipeline at Land-Grant Institutions

The USDA National Institute of Food and Agriculture (NIFA), has identified [five societal challenge areas](#) within agriculture and the life sciences that have national, regional, and multi-state importance. This newsletter focuses on higher education programs focusing on the societal challenge area of Climate Change. We explored the educational pipeline for 1862 and 1890 institutions to determine how the number of faculty members and graduate students has changed over time.

The FAEIS academic areas that were included in this data analysis are listed on [Page 3](#). FAEIS institutions were included that provided data consistently for the years of 2008-2010. In total, 34 institutions were included in the analysis. [Figure 1](#) offers the faculty headcount for the reporting years. [Figure 2](#) offers the Master and Doctoral students for the reporting years. Review detailed reports of data in [Figure 1](#) and [Figure 2](#).

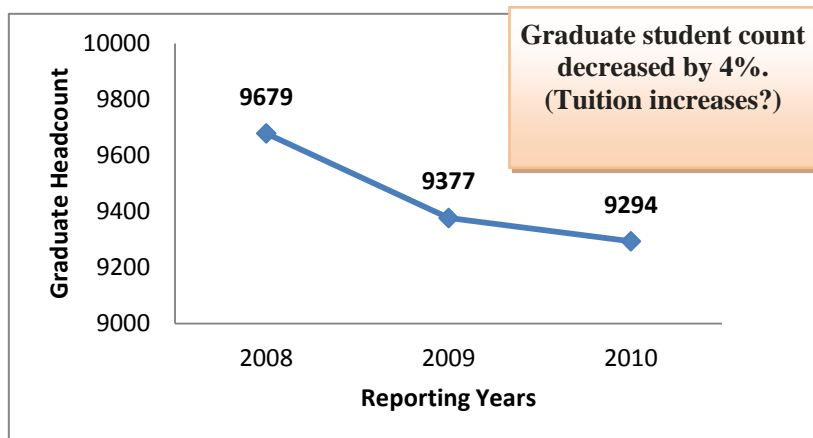
Based on the analysis, the number of faculty members in academic areas related to climate change has been declining over time. Enrollment of graduate students in academic areas related to climate change has also been declining but at a slower rate.

Figure 1. Faculty Count in Climate Change Academic Areas.



\* [34 institutions](#) were included in the analysis.

Figure 2. Graduate Students in Climate Change Academic Areas



\* [34 institutions](#) were included in the analysis.

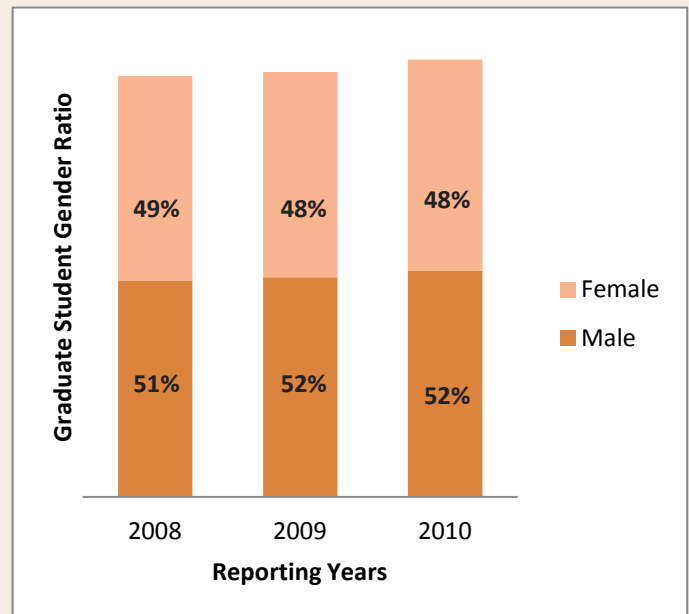
# Investigating Graduate Student Demographics

## Gender Comparisons among Graduate Students in the Climate Change Pipeline

The gender differences among graduate students (MS and PhD) were compared for 70 institutions that supplied gender data to FAEIS for the reporting years of 2008 – 2010 in academic areas related to climate change. See *Page 3* for a list of FAEIS academic areas included in this analysis.

To the right are the resulting enrollment numbers for male and female students. The data analysis showed that the ratio of male graduate students to female graduate students has stays roughly equivalent for the reporting years of 2008 – 2010. [Review the data in Figure 3.](#)

Figure 3. Gender Comparison for Graduate Students



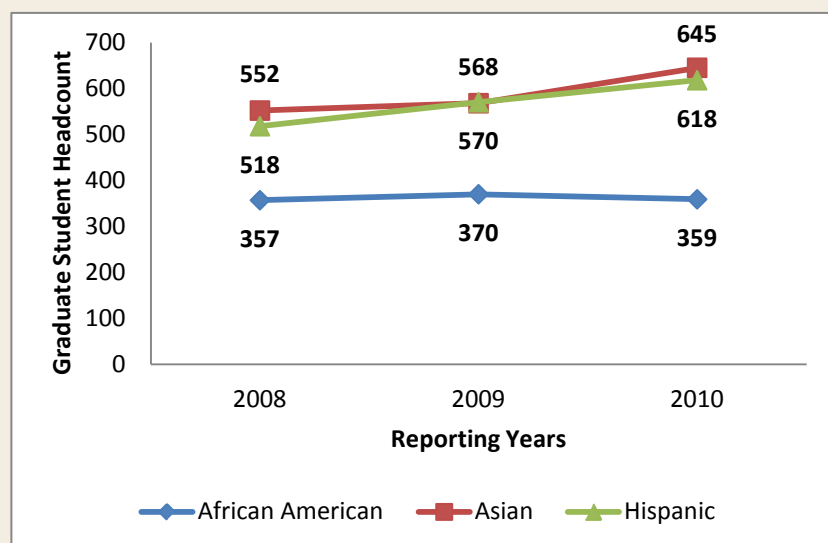
\* [70 institutions](#) were included in the analysis.

## Ethnicity Comparisons among Graduate Students in the Climate Change Pipeline

The difference in enrollment numbers for graduate students (MS and PhD) within the ethnic groups with the highest enrollment (African American, Asian, and Hispanic) were compared for the years of 2008-2010 in academic areas related to climate change. See *Page 3* for a list of FAEIS academic areas included in the analysis.

The data to the right represents 65 institutions. In general the enrollment for African American students has remained roughly static for the reporting years of 2008 - 2010, while the enrollment for Asian and Hispanic students has risen slightly. [Review the data in Figure 4.](#)

Figure 4. Comparison of Ethnic Groups of Graduate Students



\* [65 institutions](#) were included in the analysis.

# Exploring the Societal Challenge of Climate Change

The FAEIS funding organization, the USDA National Institute of Food and Agriculture (NIFA), has identified five societal challenge areas: 1) Childhood Obesity Prevention, 2) Climate Change, 3) Food Safety, 4) Global Food Security, and 5) Sustainable Energy.



*Photo courtesy of Jim Stroup*

The societal challenge areas are multidisciplinary in nature and include both social science and bench science academic areas. To better understand these societal challenge areas, we have explored FAEIS academic areas that include both social and bench science areas of study.



*Photo courtesy of John McCormick*

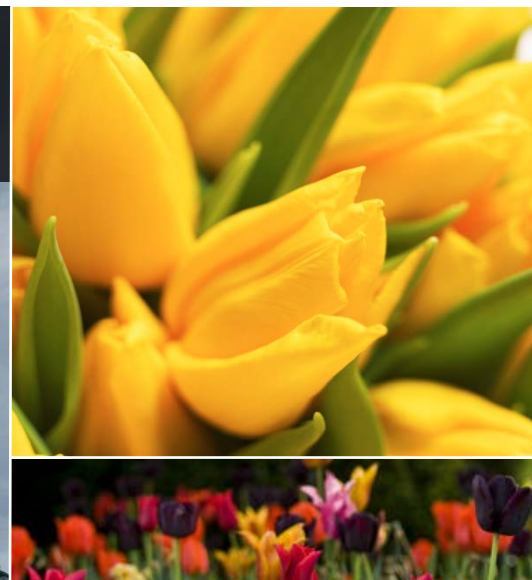


*Photo courtesy of Kelsey Kradel*

The comparison studies conducted for this newsletter included the following FAEIS academic areas:

- Agricultural Business and Management;
- Agricultural Public Services;
- Animal Sciences;
- Applied Horticulture/Horticultural Business Services;
- Atmospheric Sciences and Meteorology;
- Biotechnology;
- Ecology, Evolution, Systematics and Population Biology;
- Fishing and Fisheries Sciences and Management;
- Forestry;
- Geography and Cartography;
- Geological and Earth Sciences/Geosciences;
- Natural Resources Conservation and Research;
- Natural Resources Management and Policy;
- Natural Resources and Conservation, Other;
- Physiology, Pathology and Related Sciences;
- Plant Sciences;
- Soil Sciences; and
- Wildlife and Wildlands Sciences and Management.

# FAEIS Update



*Fall greetings from the FAEIS Team.*

Starting this fall, FAEIS begins its 10<sup>th</sup> year at Virginia Tech. Stay up to date with the innovations and upcoming events at FAEIS.

- ❖ FAEIS 2011 Surveys open October 1<sup>st</sup>.
- ❖ FAEIS survey data is now available to view without a FAEIS username and password. [View FAEIS data online.](#)
- ❖ FAEIS reports are also available to view without a FAEIS username and password. [View FAEIS reports online.](#)
- ❖ The FAEIS Statistics Expert Panel met in April, providing the FAEIS team with recommendations on how to improve the project in the future. [View FAEIS Statistics Expert Panel agenda and materials.](#)
- ❖ Review the [FAEIS International Projects Database.](#)

**faeis** Food and Agricultural Education  
Information System

Virginia Tech, Mail Code: 0198

400 Turner Street, Suite 102

Blacksburg, VA 24060

<http://faeis.usda.gov>

FAEIS Help Desk available at 540.231.4941 or [faeis@vt.edu](mailto:faeis@vt.edu).

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## Issue Contributors >>>

### *Editors*

*Dr. Mary A. Marchant*

*Bill Richardson*

*Dr. Eric Smith*

*Dr. Eric Vance*

*Dr. Timothy P. Mack*

### *Data Analyst & Graphic Design*

*Katie Griffin*

*Lisa Hightower*

### *Photos courtesy of*

*John McCormick*

*Michael Kiernan*

*Jim Stroup*

*Kim Peterson*

*Marie De Jesus*

*Kelsey Kradel*

*VT Public Relations*

### *The FAEIS Team*

*Dr. Mary A. Marchant*

*Bill Richardson*

*Dr. Eric Smith*

*Dr. Eric Vance*

*Dr. Timothy P. Mack*

*Katie Griffin*

*Michael Albanese*

*Anupa Sharma*

*Lisa Hightower*