



REMINDERS & DEADLINES

• The Fall 2019 detailed student survey deadline was March 1st. It asked for various student headcounts broken down by program, degree, gender, and race/ethnicity.

• The Faculty Survey deadline was June 1st. We make nonindividually identifying faculty data available upon request.

HELLO FROM THE FAEIS OFFICE!

The Fall 2019 detailed student survey opened on November 15th and officially ended on March 1st. The survey contained multiple forms: undergraduate and graduate enrollment, degrees awarded, transfer, and placement. The enrollment forms are a snapshot of student enrollment during the Fall 2019 semester after your institution's census date. The degrees awarded form counts the number of graduates from your programs during the Fall 2018, Spring 2019, and Summer 2019 semesters. The transfer form counts the number of individuals that transferred from a 2-year institution to a 4-year institution in Fall 2019. These three forms are broken down by program, degree, gender, and race/ethnicity. Finally, the placement form is used to track which fields the degrees awarded graduates are employed in after graduation.

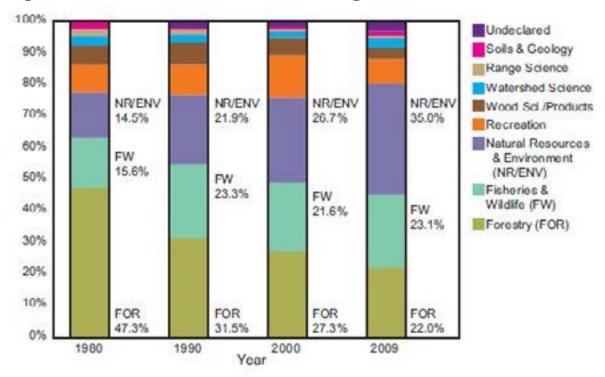
If your institution has not completed the survey, please contact us. We are working with individual institutions to develop data submission plans due to the current public health crisis. For more information or if you have any questions, please contact the FAEIS helpdesk by emailing <u>faeis@vt.edu</u>.

DESCRIPTION AND PURPOSE OF FAEIS

The Food and Agricultural Education Information Systems (FAEIS) is a national web-based database of student and faculty data. FAEIS provides empirical information for use in planning and coordinating efforts, directed towards supporting higher education in food science, agriculture, life and human sciences, and natural resources. If you need enrollment or degrees awarded data in those areas, email faeis@vt.edu your request.

FAEIS Data Use: Exploring Enrollment Trends

In this newsletter, we highlight Dr. Terry Sharik's collaboration with FAEIS. Dr. Sharik, retired Dean of the School of Forest Resources and Environmental Science at Michigan Technological University, has historically collaborated with FAEIS for his data needs. In Sharik et al.'s 2015 article: "Undergraduate Enrollment in Natural Resource Programs in the United States: Trends, Drivers, and Implications for the Future of Natural Resource Professions," FAEIS data is used to analyze undergraduate enrollment trends of institutions that are part of the National Association of University Forest Resources Programs (NAUFRP). The authors, one of whom was the late Bill Richardson, FAEIS statistician, found that the natural resources profession has greatly evolved over the last century, responding to new and emerging trends. We highlight two of their findings below.



Proportion of Natural Resources Undergraduates Enrolled in Various Academic Areas

NAUFRP data confirms that distribution of student enrollments within the natural resources field has shifted over time. In the 1980s, students were enrolled in traditional natural resources fields such as forestry and range science. More recently, students enroll in more ecosystem-based programs such as natural resources conservation and management and environmental science and management. The authors believe emerging trends for sustainable development and improving forest stewardship to moderate climate change may be the next drivers of enrollments. They note that achieving a sustainable path for human development will depend, in part, on the ability of the natural resources profession to produce skilled professionals able to manage our natural resources.

Undergraduate Enrollment in Natural Resources Programs by Gender

Another result discussed in the paper is the rise of females in the field of natural resources. The FAEIS data show an increase in female enrollment composition from 34.5% in 2005 to 40.8% in 2012, an increase from 5,842 to 10,014 students. Female enrollment percentages differ based on academic area. The field of forestry, which is shown below, has historically experienced low female enrollments, making up 17.9% of the students. In contrast, females make up 53.8% of the undergraduate enrollment in Environmental Science and Studies, which coincides with changing societal values towards the environment.

Areas	Male	Female	Total	% Female
Environmental Science and Studies	2,161	2,512	4,673	53.8
Natural Resources Conservation and	2,507	2,243	4,750	47.2
Management				
Fisheries and Wildlife	4,043	3,259	7,302	44.6
Watershed Science and Management	98	66	164	40.2
Natural Resources Recreation	1,808	983	2,791	35.2
Range Science and Management	244	124	368	33.7
Wood Science/Products	487	131	618	21.2

696

10,014

3,885

24,551

Table 5. Undergraduate enrollment in NR programs at 67 NAUFRP institutions by academic area and gender, 2012, excluding unknown gender.

Data from FAEIS database, Mar. 9, 2015.

Forestry

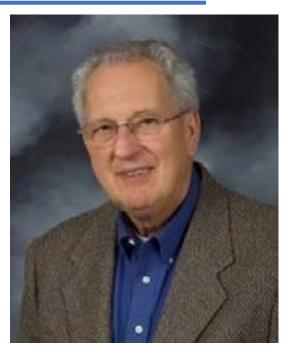
Totals

DR. TERRY SHARIK'S BIOGRAPHY

3,189

14,537

Terry Sharik retired as the Dean of the School of Forest Resources and Environmental Science at Michigan Tech in 2018. Within his career, he has made an extensive effort toward research, teaching, and outreach within the natural resources field on both national and international levels. He served as the Education Chair for the National Association of University Forest Resources Programs (NAUFRP). With this organization he co-authored a strategic plan for enhancement in undergraduate education in forestry and related areas of natural resources and continues to analyze enrollment trends in these fields dating back to 1980. He holds a B.S. degree in Forestry and Wildlife Management from West Virginia University and M.F. and Ph.D. degrees in Forest Recreation and Forest Botany, respectively, from the University of Michigan.



17.9

40.8



Q&A WITH DR. SHARIK

Q: How did you first learn of FAEIS?

A: Through the National Association of University Forest Resources Programs (NAUFRP).

Q: In addition into the research highlighted in this newsletter are there other ways you use FAEIS data?

A: I also utilize it to analyze national trends in race/ethnicity among various natural resources (NR) disciplines, which is a critical issue given the underrepresentation of people of color in the natural resources workforce.

Q: What is something you would like to see more of in FAEIS data, information, and services provided?

A: I would like to see more complete demographics data for faculty in NR academic programs, especially regarding gender and race/ethnicity, for comparison with such data for students. I would also like to see the participating institutions submit their enrollment data by degree program and options within degree programs and have FAEIS assign the CIP codes to them rather than receiving only the CIP codes from these institutions for their degree programs.

Q: What words of advice would you have for other researchers interested in enrollment and graduate trends?

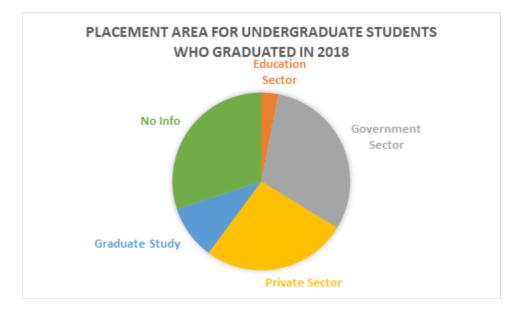
A: Consider data on these trends as a starting point for hypothesizing what factors may explain the observed trends and establish research projects to test these hypotheses.

Q: Is there anything you would like to express to institutions that provide data to the FAEIS system?

A: Please strive to submit these data as they are unique in allowing us to examine long-term enrollment trends in natural resources that have proven helpful to institutions for placing these trends in their programs in a national context, and for planning purposes more generally.

SPOTLIGHT: UNIVERSITY OF WASHINGTON-SEATTLE

The School of Environmental and Forest Sciences within the College of the Environment at the University of Washington-Seattle offers various undergraduate and graduate degrees. Their undergraduate degree programs include Environmental Science and Terrestrial Resource Management (ERSM) and Bioresource Science and Engineering (BSE). Their undergraduate program consistently enrolls between 400-450 students. Their graduate program enrolls between 130-175 students. In the graphic below, we look at the placement areas for their school's 2018 graduates. The government sector attracted the greatest number of graduates (31%), followed closely by the private sector (26%). Ten percent of the graduates will pursue graduate study.



A SPOTLIGHT ON YOUR INSTITUTION

FAEIS would not exist without all of you so we want to make sure we show our appreciation! If there is something at your college that is happening that you'd like to share or advertise, please feel free to send us the information and any other relevant materials.

Contact us via phone (540-231-4941) or faeis@vt.edu!

Submissions accepted through August 15th, 2020.



United States Department of Agriculture National Institute of Food and Agriculture



COLLEGE OF AGRICULTURE AND LIFE SCIENCES VIRGINIA TECH.