2018-2019 Annual Report

Iowa State University
Department of Natural Resource Ecology & Management
Undergraduate Student Services Center
Completed by Amanda Chung
This report includes Student Services Center activities and data for the fall 2018, spring 2019, and summer 2019 terms only (FY 2019 –July 1, 2018 to June 31, 2019).

Prospective students had an anticipated enrollment date of FY 2019. Any prospective student with an anticipated enrollment outside of FY 2019 will not be included in this year’s data and previous or future reports should be consulted.

A prospective student is any high school student, transfer student, or non-traditional student that showed interest in the two NREM majors, Animal Ecology or Forestry majors and met with an NREM representative. New enrollment refers to any student entering NREM either as a new Iowa State University (ISU) student or a student changing majors to Animal Ecology or Forestry from another ISU program.

Most student prospects provided complete profile information and were used as the basis of the statistics provided in this document.

Information in this report is based on data from the NREM Recruiting Database maintained by the Student Services Center and through the ISU Office of the Registrar.
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New Student Enrollment

Of the 151 prospective students who came in contact with an NREM recruiter, and anticipated a FY19 start date, 97% of them planned on beginning their academic career at ISU in the fall term (Chart 1).

A majority (146) of those 151 students stated an actual interest in Animal Ecology or Forestry. The remaining were exploring options, undecided, or part of a large group such as a class visit or group tour with little initial interest in NREM.

Of those 146 students with an interest in NREM, only 57% actually applied to ISU, whether for an NREM major or not (Chart 2).
Each semester, new students are comprised of freshmen, transfer students, major changes - students of any year adding or removing Animal Ecology or Forestry as a primary or secondary major.

Generally, NREM enrollments are split equally among new transfer students, entering freshmen, and ISU students changing majors. However, in the Fall 2018 semester, NREM had an inordinate number of new freshmen, therefore exceeding transfers and major changes (Chart 3).

You can also see in Chart 3 that the spring 2019 semester brought more students changing majors to NREM than new freshmen or transfer students, a relatively normal scenario.
Charts 4 and 5 reflect which majors students are moving to and from. This includes students adding a second major in NREM. Generally, NREM experiences a net gain in students changing majors. In Chart 5 you can see that a majority of students adding Animal Ecology are coming from Animal Science. This alludes to the regular challenge the department faces in increasing visibility of the animal ecology and forestry majors.
Chart 5
Majors and Numbers of Students Changing to NREM during FY19 terms

- Pre Business
- Engineering (variety)
- Environmental Science
- LAS Open Option
- Forestry
- Biology
- Animal Science
- Animal Ecology
- Ag Exploration
- Other

Legend:
- Left Animal Ecology
- Entered Animal Ecology
- Left Forestry
- Entered Forestry
Chart 6

Ratio of Animal Ecology to Forestry Students Changing Majors, Transferring to ISU, or Entering as New Freshmen for FY19 Entry Terms

Major Changes

- Forestry: 12, 17%
- Animal Ecology: 58, 83%

Incoming Freshmen

- Forestry: 33, 16%
- Animal Ecology: 176, 84%

All New Students

- Forestry: 33, 79%
- Animal Ecology: 213, 81%

Transfer Students

- Forestry: 9, 21%
- Animal Ecology: 85, 88%
The majority of new freshmen and transfer students who entered NREM in FY19 were from Iowa (Chart 7). The relative costs of tuition and fees as well as academic opportunities may influence students’ decisions to go to Iowa State University. Following Iowa, the majority of new NREM students this fiscal year are from Illinois, Minnesota, Nebraska, Puerto Rico, South Dakota, and Kansas.
Most students from Iowa came from an eastern or central Iowa county; Polk County followed by the eastern counties of Black Hawk, Johnson and Scott. (Chart 8).

The remaining Iowa students came from a variety of other Central and Eastern regions of the state with a handful from the Northeastern, Northwestern, Southeastern, and Southwestern regions.

The western part of Iowa in particular has traditionally produced fewer students choosing to pursue natural resources at Iowa State University. Proximity to Nebraska and South Dakota offers another recurring challenge to the NREM Department.
A majority of students transferring, did so from Des Moines Area Community College, followed by Kirkwood, with a few coming from several other Iowa community colleges (Chart 9). This year we saw 22% less students transferring to NREM than the previous year.

Other colleges students transferred from in FY19 include Central College, Central Community College, Community College of the Air Force, Cuyahoga Community College, Oregon State University, Santa Monica College, Simpson College, and University of Iowa.

South Dakota State University and Upper Iowa University are also top choices for students studying natural resources to transfer to due to affordability and transferability of classes. To be more competitive, the NREM Student Services Office continues to work towards strengthening connections with community college advisers and updating transfer plans.
The majority of new students enroll for the first time during the fall semesters of an academic year. This makes using the 10th day count for the fall semester a good indicator for assessing enrollment.

In the fall of 2018, NREM was the 3rd largest department in the College of Agriculture and Life Sciences (Chart 10). This was up from the 4th largest in 2017 and the 5th largest in 2016.

For a complete list of enrollment numbers, visit http://www.registrar.iastate.edu/enrollment/enrollment-by-major.
During a seven-year period, overall student enrollment in NREM has increased (Chart 11). Forestry and Graduate student enrollment has remained relatively steady. However, Animal Ecology enrollment has increased due to a larger numbers of new freshmen. This, along with decreased enrollment in other departments, contributed to the NREM department rising to the 3rd largest in the College of Agriculture and Life Sciences.
Chart 12
Options Declared for Animal Ecology and Forestry per Fall 2018 10-day count

Forestry
- Natural Resource Conservation and Restoration 41%
- Interpretation of Natural Resources 8%
- Urban and Community Forestry 9%
- Forest Ecosystem Management 42%

Animal Ecology
- Wildlife 35%
- Pre-Veterinary and Wildlife Care 44%
- Fisheries and Aquatic Sciences 12%
- Interpretation of Natural Resources 9%
As students reach their sophomore year, they select one or more specialization. The most popular Animal Ecology option is Pre-Vet and Wildlife Care. Among Forestry majors the majority select Forest Ecosystem Management, although Natural Resource Conservation and Restoration is a close second (Chart 12).

As of the 10th day of fall classes, women made up the majority of the Animal Ecology major at 60% and the minority of the Forestry major at 30% (Chart 13). These percentages have increased slightly over time. As a department, NREM is 55% female, which surpasses the University’s statistics of 42% female.
NREM’s overall U.S. minority student population for FY19 was at 11.3%. This number exceeds the 8.5% goal for universities set by the Iowa Board of Regents, but is lower than Iowa State University’s 14.7%.

Initial efforts to recruit and retain a more diverse student population include connecting with Middle and High School students through the Science Bound program on campus and across Iowa.
Recruitment

There are several opportunities for student recruitment including NREM student ambassadors, scheduled visits through admissions, Experience Iowa State days, CALS Junior Visit Day, the ISU major fair, Passport to Iowa State visits, and FFA events. Recruitment efforts have been successful, however, as demographics change, it is important for us to make sure our recruitment efforts are well targeted.

Doug Stokke, John Burnett, Emma Hashman, and Amanda Chung, personally met with 145 prospective students and families who planned for a FY19 entry (Chart 15). Of those who met with an NREM representative, including student ambassadors, 44% chose to enroll in Animal Ecology or Forestry (Chart 16).

Unfortunately, no student who had no initial interest in NREM chose to enroll within the department, unlike the previous year’s 19%.
Advisers play a major role not only in the retention of students, but also in career guidance.

Typically students begin their academic careers by being advised by Student Services professionals. As they identify career interests, they are assigned to an NREM faculty member.

During FY19 there were 18 established advisers. Chart 17 shows all of those advisers and the areas in which they advised. Chart 18 shows how many students each adviser advised.
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Advisors are critical in helping students who have academic or personal issues that affect their success. Proof of the value of NREM’s advisers, comes in looking at the statistics of students on Academic Probation (Chart 19). More than 30% of students were removed from probation or warning at the end of the semester.

Some students continued on probation into the following semester, while a small number were dismissed or withdrew from ISU.

During the spring 2019 semester, the College of Agriculture and Life Sciences started their S.M.A.R.T. Step program for students who were close to completing their degree but found themselves in danger of being dismissed. This highly structured opportunity offered weekly advising meetings, specific personal growth goals, free tutoring, and additional assistance as needed. NREM had 4 students participate in the program this first semester and all showed improvement during that time.
NREM hosts several *events* to encourage student engagement and interaction. The New Student Mini Camp held each fall, and the NREM 207 course, bring new freshmen and transfer students together to learn about the outdoors and to participate in hands-on activities. The NREM Department’s Welcome Picnic, Chili Cook-Off, and Recognition Banquet allows for great social activities as well as recognition of students, faculty and staff.

Student *clubs* offer students leadership and professional and experiential opportunities. Through social events like camping and hiking, students are able to interact beyond campus boundaries. Through professional events like the Society of American Foresters Conference and the Midwest Fish and Wildlife Conference, students connect with professionals and jobs. In addition, faculty offer skill development and certifications in first aid, wildfire trainings, chainsaw operation, and more.
Two Learning Communities provide students with opportunities to meet like-minded students their first semester at Iowa State University. Students in these communities may take courses together, hear from professional speakers and participate in fun activities like snow tubing, community service and behind-the-scenes tours of zoos. Freshmen participating in the Freshmen Learning Community live together in Willow Hall. Whether in the Freshmen Learning Community or the Transitions Learning Community for new transfer students and continuing sophomores, being in one has shown to retain a higher rate of first-year students and promote higher than average grade point averages.

Domestic and foreign travel is available through the CALS Study Abroad office; many trips led by NREM faculty. Short trip destinations include Madagascar, Tanzania, Antarctica, Uganda and Yellowstone National Park. Exchange programs to places like Australia, New Zealand and Ireland offer opportunities for students to enhance their academic experience.
NREM is working hard to improve its programs. Some of our recent efforts include:

- A 2-week field camp in Montana for wildlife students
- New classrooms
- An additional Student Services Specialist
- Changes to curriculum requirements

With great advisers, social activities, and a welcoming environment that includes spaces for students to study and work together, NREM does a great job making Science II feel like home.