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

FAEIS News

Gender breakdown for undergraduates in agricultural academic areas

This newsletter investigates the gender breakdown of undergraduate students enrolled in agriculture and agriculture-related programs at higher education institutions. We explored gender for baccalaureate students in 67 Land-Grant institutions in various academic areas for the reporting years of 2004 to 2011. We examined the gender breakdown of undergraduate students within the following agriculture programs: 1) agricultural economics, agricultural business and management, 2) agricultural mechanization and engineering, 3) animal science, 4) agricultural public services, 5) plant sciences, and 6) food science and technology.

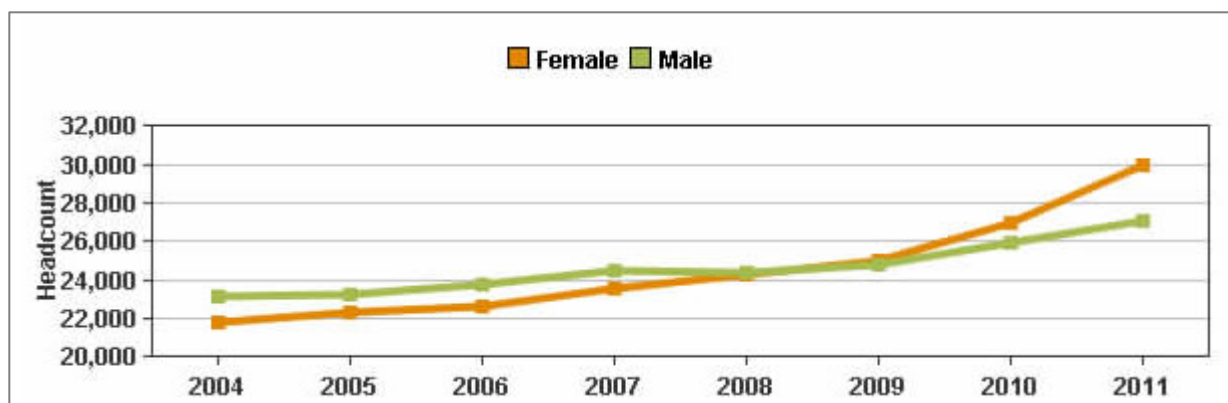
Overall trends in gender in agricultural academic areas

We first explored the overall gender trends for agriculture programs for the reporting years of 2004 to 2011 for Land-Grant institutions. Figure 1 offers the baccalaureate enrollment with respect to gender for [14 agriculture academic areas](#), including agricultural economics, agricultural mechanization and engineering, agricultural public services, general agriculture, plant science, and food science. [Review a detailed report of the academic areas included in Figure 1.](#)

Based on our analyses we found the following results.

- From 2004 to 2008, more undergraduate males were enrolled in agriculture programs than female undergraduate females. The enrollment of undergraduate males **increased by 5.0%** and the enrollment of undergraduate females **increased by 8.0%**.
- In 2008, the enrollment of male and female undergraduates was roughly equivalent at 24,357 males and 24,281 females.
- From 2009 to 2011, more undergraduate females were enrolled in agriculture programs than males. The enrollment of female undergraduates **increased by 19.9%** and the enrollment of male undergraduates increased by **9.1%**.

Figure 1. Baccalaureate Enrollment in Agriculture, Agriculture Operations, and Related Sciences at Land-Grant Institutions.



Male Undergraduate Enrollment Leads Female Undergraduate Enrollment

Within the different agricultural academic areas, there tended to be gender trends over time. Male undergraduate enrollment was consistently higher than female undergraduate enrollment in the three of the agricultural academic areas: agricultural economics, agricultural business and management (Figure 2); agricultural mechanization and engineering (Figure 3); and plant sciences (Figure 4).

In agricultural economics, agricultural business and management undergraduate programs from 2004 to 2011, male enrollment **increased by 27.0%** and female enrollment **increased by 27.8%**. In agricultural mechanization and engineering undergraduate programs, male enrollment **increased by 44.0%** and female enrollment **increased by 69.1%**. In plant science undergraduate programs, male enrollment **decreased by 9.2%** and female enrollment **increased by 0.1%**.

Figure 2. Baccalaureate Enrollment in *Agricultural Economics, Agricultural Business and Management* at Land-Grant Institutions.

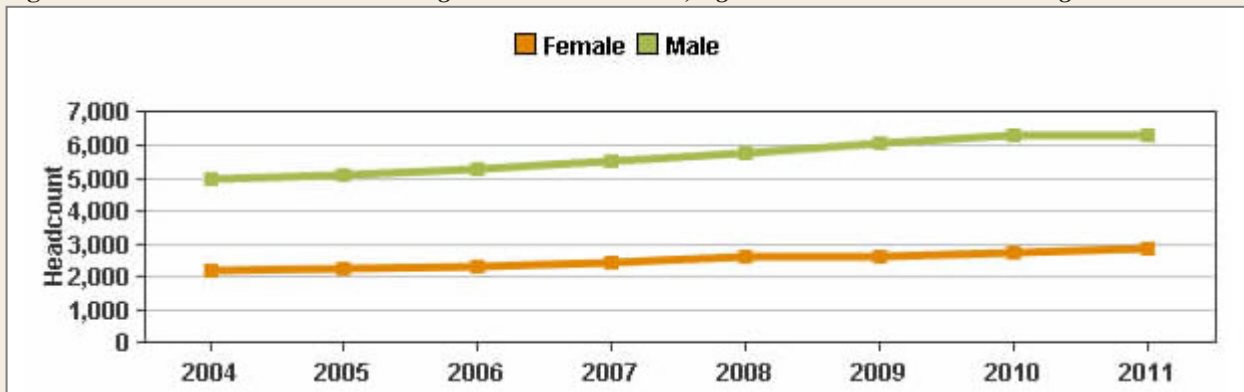


Figure 3. Baccalaureate Enrollment in *Agricultural Mechanization and Engineering* at Land-Grant Institutions.

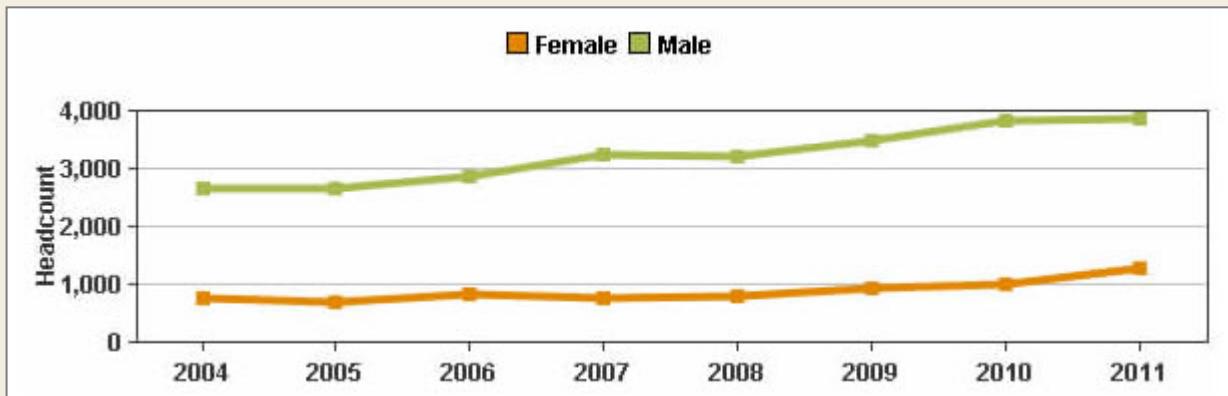
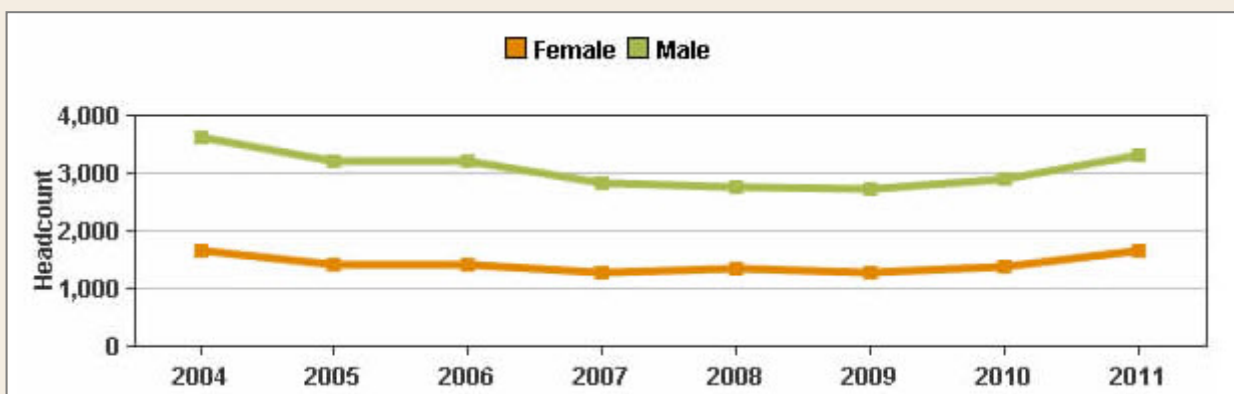


Figure 4. Baccalaureate Enrollment in *Plant Sciences* at Land-Grant Institutions.



Female Undergraduate Enrollment Leads Male Undergraduate Enrollment

Female undergraduate enrollment was consistently higher than male undergraduate enrollment in the three of the agricultural academic areas: agricultural public services (Figure 5); animal science (Figure 6); and food science and technology (Figure 7). In agricultural public services undergraduate programs from 2004 to 2011, female enrollment **increased by 11.4%** and male enrollment **decreased by 6.2%**. In animal sciences undergraduate programs, female enrollment **increased by 38.7%** and male enrollment **decreased by 4.6%**. In food science and technology undergraduate programs, female enrollment **increased by 156.2%** and male enrollment **increased by 132.5%**.

Figure 5. Baccalaureate Enrollment in *Agricultural Public Services* at Land-Grant Institutions.

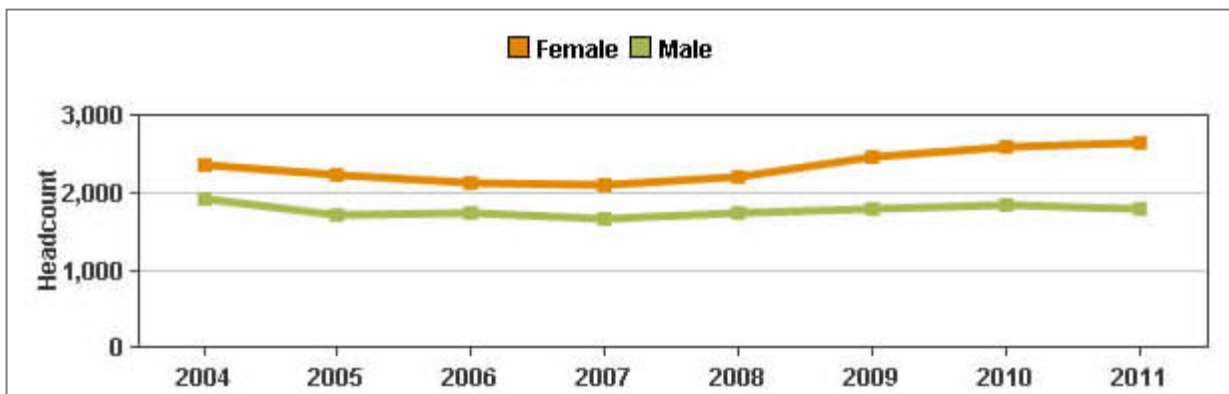


Figure 6. Baccalaureate Enrollment in *Animal Sciences* at Land-Grant Institutions.

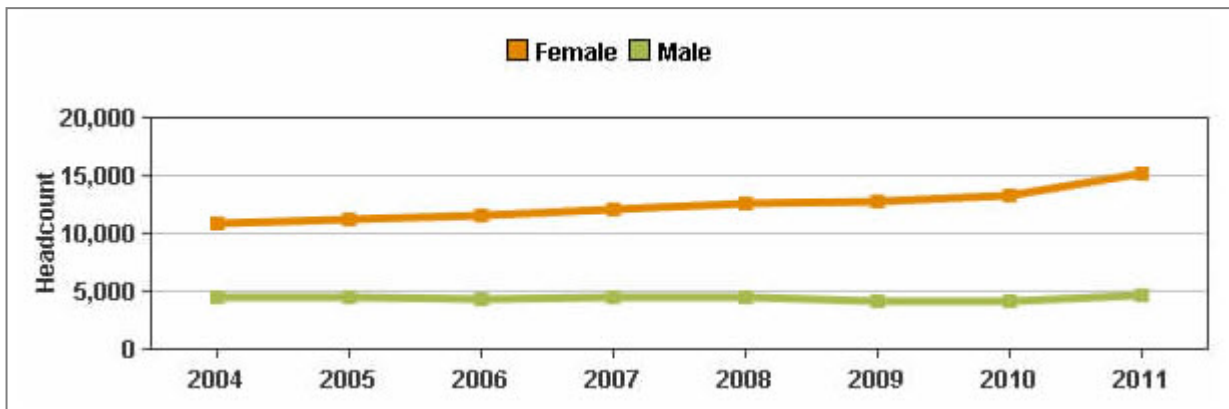
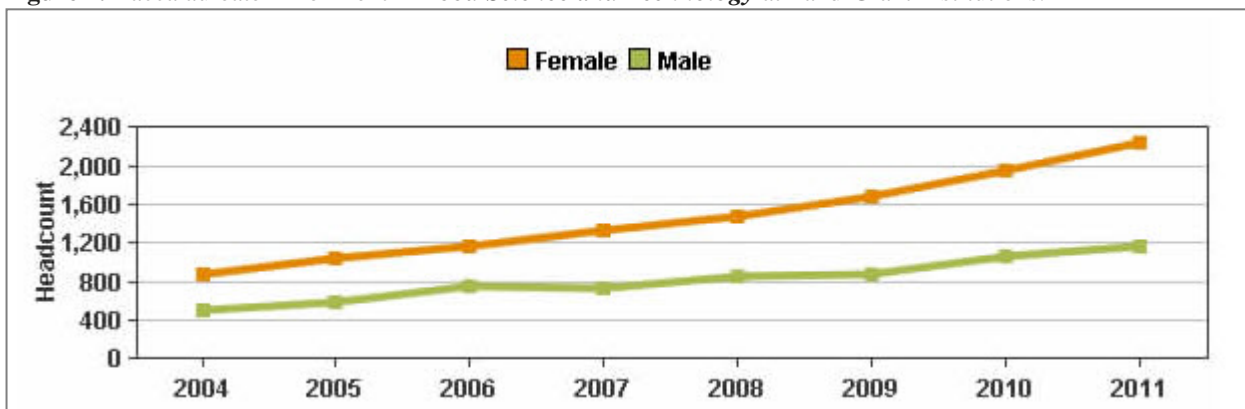


Figure 7. Baccalaureate Enrollment in *Food Science and Technology* at Land-Grant Institutions.





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