Department of Entomology
Strategic Plan 2009-2014

The members of the Department of Entomology are committed to providing high quality programs. We strive to be among the strongest research, extension, and graduate education programs in Entomology in the nation. We are continually looking for new opportunities and adjusting current programs to enhance our ability to meet the changing needs of society. From 2006-09, the Department of Entomology was ranked among the top 10 graduate programs in the United States based on Academic Analytics’ Faculty Productivity Index. Our intent is to maintain our top 10 status during the next 5 years.

Within the Department, we strive for a creative synergy between fundamental and applied entomological research, developing long-term solutions to entomological problems, while providing answers that address immediate short-term problems. We have a strong integration of research and extension efforts that enhances our visibility and effectiveness. We also integrate our graduate education program with our research and extension strengths. We ambitiously pursue an extramural funding base that includes competitive federal grants, and we seek funding for the formation of endowed chairs and graduate student fellowships.

Members of the Department foster a creative environment for scholarly activities. The Department provides the intellectual environment for new discoveries and the application of knowledge to improve the quality of life. We adapt to new opportunities and challenges as they arise, e.g., novel insect-vertebrate interactions, new invasive species, or the planting of insect resistant transgenic crops. The influence of our activities extends beyond the University of Kentucky, through our teaching, outreach, and the strengths of our graduate students. The Department of Entomology, through its extension programs, fosters the adoption of Integrated Pest Management and sustainable management practices while promoting the wise stewardship of the commonwealth’s natural resources.

Beyond our national recognition in research productivity, faculty in Entomology is dedicated instructors who take pride in their graduate and undergraduate teaching responsibilities. Our extension faculty is recognized locally, nationally and internationally for addressing current pest problems with up-to-date information that is delivered directly to clientele or through web-based technologies.

Mission for the Department of Entomology

Our mission is to improve the quality of human life and protect our environment through a better understanding of insects and related arthropods. We conduct fundamental and applied research on insects, deliver information through education and outreach activities, educate graduate and undergraduate students,
develop and provide resources for agricultural and pest management professionals, implement integrative and effective systems for insect pest management, and enhance science education and public appreciation of human-insect interactions.

The Department of Entomology will address the 5 goals of the College of Agriculture Strategic Plan (2009-2014).

**Goal 1**
**Prepare Students for Leadership in an Innovation-Driven Economy and Global Society**

Educating students was one of the earliest missions of the Department and remains the most important way that we enhance the future of the Commonwealth. Graduate education is fully integrated with our other missions – research and extension. The Department expects its graduates to become leaders in their professions and their communities. To this end, the Department must attract and graduate outstanding students with diverse backgrounds and the skills to meet the challenges of the future.

**Strategies**
1. Develop a recruitment program in the Department involving senior PhD students paired with faculty members to visit colleges in Kentucky
2. Encourage faculty to participate in the ABT program within the College of Ag.
3. Encourage faculty to include graduate assistantships in grant proposals
4. **Continue to seek outside funding for endowed graduate fellowships**
5. Continue to fund the publication scholarship program within the Department

**Key Indicators** for the Department of Entomology:
1. Graduate an average of 5 PhD and 4 MS students each year (based on a 4 yr. avg.).
2. Publish approximately 0.5 refereed publications/graduate student/year and 1.5 scientific presentations/graduate student/year.
3. Maintain a multi-year average of 8 post-doctoral scholars within the Department.
4. Increase the number of grants that support graduate student assistantships and tuition.

**Goal 2**
**Promote Research and Creative Work to Increase the Intellectual, Social and Economic Capital of Kentucky and the World Beyond its Borders**
The Department’s land-grant mission encourages truly creative research endeavors that result in the discovery of new knowledge. Further, we aspire to capitalize on the individual and collective achievement of Entomology faculty by applying discoveries for the improving pest management and the natural environment. The Department integrates discovery science and applied research and technology in teaching, technology transfer, and outreach activities to solve entomological problems and provide environmental benefits for Kentucky, the nation, and the world.

**Strategies**

1. Aggressively pursue extramural research funding from diverse sources
2. Provide creative incentives for faculty to seek extramural funding
3. When needed, provide partial funding for graduate students, if a faculty member is between grants

**Key Indicators** for the Department of Entomology

1. Maintain the annual total of external awards at over $2.2M.
2. Maintain a multi-year average of federal competitive grant awards at approximately 50% of the Department’s extramural funding portfolio.
4. Increase the number of patent submittals and patents awarded by an average of 1 per year.

**Goal 3**

**Develop the Human and Physical Resources of the College to Achieve Top 20 Stature**

As part of a land-grant institution, the College of Agriculture offers access to knowledge and learning for citizens and students throughout the Commonwealth, nation, and world. The UK Department of Entomology is playing a prominent role in those areas with its research, teaching, and extension programs. The UK Department of Entomology seeks to be recognized as one of the top graduate programs in entomology in the nation.

**Strategies**

1. Continue to encourage faculty, staff and graduate student creativity
2. Develop plans and pursue funding to renovate research facilities
3. Work towards housing all members of the Department in one building
4. Promote the accomplishments and recognition of the members of the Department locally, regionally, nationally and internationally.
5. Retain outstanding mid-career faculty members
6. Aggressively recruit outstanding new faculty members in high opportunity areas
Key Indicators, the Department of Entomology will:
1. Maintain the Department’s upper 25% quartile ranking according to Academic Analytics’ Faculty Productivity Index.
2. Add one more endowed faculty chair.
3. Renovate / modernize research laboratories in Ag Science North and Dimmock Building.

Goal 4
Promote Diversity and Inclusion

The Department of Entomology is committed to creating an environment where diversity is valued and all individuals can fulfill their highest potential. We seek to sustain a departmental climate wherein differences are valued, create an environment in which every person has opportunities to achieve their highest potential, and we support an inclusive institution that is responsive to the needs of all students, staff, faculty and citizens.

Strategies
1. Recruit members of the Department from diverse sources
2. Maintain an open environment in which diversity is recognized and welcomed
3. Targeted recruitment activities will be a significant activity in all departmental searches

Key Indicators, by 2014 the Department of Entomology will have:
1. Increased the percentages of graduate students, professional staff, and faculty from under-represented groups by 5% in each group.
2. Increased the percentage of female faculty to 20% of the faculty.

Goal 5
Improve the Quality of Life for Kentuckians through Extension, Outreach and Service

Agricultural, forestry, environmental, economic and societal issues create an unprecedented demand for knowledge- and research-based educational programs to address the needs of Kentuckians and citizens of the world. A rapidly changing natural resource landscape in Kentucky and a highly mobile world population require progressive and responsive Entomology Extension programs.

Strategies
1. Maintain the level of faculty commitment to extension programs within the department
2. Continue to seek creative approaches to research/extension split appointments
3. Continue to support the IPM extension program within the Department
4. Continue to creatively use web-based technologies to distribute current
   and up to date information
5. Pursue new funding sources to maintain the quality of extension programs

**Key Indicators**, the Department of Entomology will:
1. Continue to create responsive programs to support agents’ and clientele
   needs, as measured by the bi-annual agent evaluations of programs.
2. Maintain our level of grantsmanship in Extension or Integrated Projects as
evidenced by numbers of proposals submitted and funded.
3. Maintain the quality and visibility of the Department’s web-based
   resources.