

College of Agricultural Sciences and Natural Resources

Strategic Plan AY 03-04 through 08-09¹

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Unit Mission:

The College of Agricultural Sciences and Natural Resources (CASNR) prepares students in natural and social sciences-based professional academic programs for careers in agriculture, natural resources, and other arenas. The CASNR academic programs accomplish this by:

1. Providing strong general education with a foundation in fundamental knowledge, an understanding of the human experience, a global perspective, and a foundation in communication skills (visual, oral and written);
2. Building on the natural and social sciences to provide experiential learning that applies gained knowledge to problem-solving situations using critical thinking and analytical skills;
3. Providing student-centered educational programs where students engage in the process and take responsibility for their education; and
4. Providing international experiences to provide a global perspective to their education.

¹ Minor revisions made to reflect name change from Biosystems Engineering and Environmental Science to Biosystems Engineering and Soil Science; BEES to BESS.

Goals of the Plan: College and Department Interface

College Goal 1#:	<i>Recruit and retain a diverse student population that is academically prepared for a challenging curriculum.</i>		see p. 9
Related department/program goals			
AgEcon	1	<i>Increase the number of high quality students enrolling in the M.S. program in Agricultural Economics.</i>	see p. 15
AgEcon	5	<i>Increase the number of undergraduate students majoring in the Department.</i>	see p. 17
AEE	1	<i>Increase the total number of undergraduate students majoring in the Agricultural Education and Agricultural Extension Education concentrations and in the Communications minor.</i>	see p. 19
AnSci	1	<i>Enhance undergraduate and graduate recruiting.</i>	see p. 22
BESS	1	<i>Improve student recruitment, diversity, internationalization, and program excellence.</i>	see p. 26
EPP	3	<i>To recruit and retain high quality graduate students, faculty and staff.</i>	see p. 33
FST	1	<i>Increase student enrollment.</i>	see p. 36
FWF	1	<i>To attract and retain the best and brightest students interested in natural resources education, research, and careers.</i>	see p. 39
PlSci	2	<i>Recruit and retain a diverse undergraduate and graduate student population that is academically prepared for a relevant and rigorous curriculum.</i>	see p. 44

College Goal #2:	<i>Enhance scholarships, stipends, and research and other scholarly activity of undergraduate and graduate students.</i>		see p. 11
	Related department/program goals		
AgEcon	2	<i>Develop a functioning relationship with the Natural Resources doctoral program administered in the Department of Forestry, Wildlife, and Fisheries and enroll Ph.D. students supported by extramural funds by Fall 2006.</i>	see p. 16
AgEcon	4	<i>Increase the number of refereed and non-refereed publications per faculty FTE.</i>	see p. 17
FST	2	<i>Increase educational opportunities for students.</i>	see p. 37
FWF	4	<i>To expand our graduate program, including the addition of a PhD program.</i>	see p. 41
PISci	3	<i>Improve scholarship and stipend support for, and increase research and other scholarly activity of undergraduate and graduate students.</i>	see p. 45

Departmental/Program Abbreviations: AgEcon=Agricultural Economics; AEE=Agricultural and Extension Education; AnSci=Animal Science; BESS=Biosystems Engineering and Soil Science; EPP=Entomology and Plant Pathology; FWF=Forestry, Wildlife and Fisheries; and PISci=Plant Sciences.

College Goal #3:	<i>Establish excellence in the curricula and co-curricular activities (e.g. CASNR affiliated student organizations).</i>		see p. 11
	Related department/program goals		
AgEcon	2	<i>Develop a functioning relationship with the Natural Resources doctoral program administered in the Department of Forestry, Wildlife, and Fisheries and enroll Ph.D. students supported by extramural funds by Fall 2006.</i>	see p. 16
AgEcon	6	<i>Continue to increase utilization of distance education technologies in Agricultural Economics teaching and extension programs.</i>	see p. 18
AEE	2	<i>Shift delivery emphasis in the current M.S. program course work from traditional to distance delivery.</i>	see p. 20
AEE	4	<i>Increase emphasis on, and student participation in, the Communications minor to develop a full-fledged concentration in the area.</i>	see p. 21
AnSci	5	<i>Strengthen teaching programs in broad areas of animal science.</i>	see p. 24
BESS	1	<i>Improve student recruitment, diversity, internationalization, and program excellence.</i>	see p. 26
BESS	2	<i>Provide and deliver curricula that prepare students for success in the work place, or in graduate/professional schools.</i>	see p. 28
BESS	3	<i>Implement educational programs for nontraditional audiences.</i>	see p. 29
EPP	3	<i>To recruit and retain high quality graduate students, faculty and staff.</i>	see p. 33
EPP	4	<i>Contribute to the strong undergraduate training available through CASNR using modern technology, new courses and innovative programming.</i>	see p. 34
FST	4	<i>Establish educational excellence in the curricula</i>	see p. 38
FWF	1	<i>To attract and retain the best and brightest students interested in natural resources education, research, and careers.</i>	see p. 39

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College Goal #4:	<i>Internationalize the curriculum.</i>			see p. 12
	Related department/program goals			
	AEE	3	<i>Enhance opportunities for international experience for students in the programs.</i>	see p. 20
	BESS	1	<i>Improve student recruitment, diversity, internationalization, and program excellence.</i>	see p. 26
	FST	2	<i>Increase educational opportunities for students</i>	see p. 37
	FWF	4	<i>To expand our graduate program, including the addition of a PhD program.</i>	see p. 41

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College Goal #5:	<i>Recruit and retain high quality faculty and staff.</i>		see p. 13
	Related department/program goals		
AnSci	4	<i>Strengthen research programs in broad areas of animal science.</i>	see p. 23
BESS	4	<i>Develop innovative methods and techniques to deliver quality research and educational information.</i>	see p. 29
EPP	1	<i>To maintain our current expertise while increasing involvement in Biotechnology and our ability to respond quickly to changes in representative disciplines in order to increase extramural funding through cooperative research, teaching and Extension among units and across the UT Campuses and serve our stakeholders.</i>	see p. 32
EPP	2	<i>To use new communication technology to increase the effectiveness and interaction of Extension Specialists, Distance Diagnostics, applied research and teaching programs.</i>	see p. 32
EPP	3	<i>To recruit and retain high quality graduate students, faculty and staff.</i>	see p. 33
FWF	2	<i>To attract and maintain a full complement of recognized scientists and teachers with regional and national reputation for academic excellence.</i>	see p. 40
FWF	6	<i>To expand and improve our facilities.</i>	see p. 43
PISci	1	<i>Recruit and retain high quality faculty and staff.</i>	see p. 43

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Departmental Goals Related to the Tennessee Agricultural Experiment Station (see p. 46) and/or UT Extension (see p. 49)				
	<i>Dept.</i>	<i>Goal #</i>		
	AgEcon	3	<i>Increase external grant and fee-based funding per faculty FTE.</i>	see p. 16
	AgEcon	4	<i>Increase the number of refereed and non-refereed publications per faculty FTE.</i>	see p. 17
	AgEcon	6	<i>Continue to increase utilization of distance education technologies in Agricultural Economics teaching and extension programs.</i>	see p. 18
	AnSci	2	<i>Increase extramural funding.</i>	see p. 22
	AnSci	3	<i>Enhance visibility and communication with diverse clientele of the department.</i>	see p. 23
	AnSci	4	<i>Strengthen research programs in broad areas of animal science.</i>	see p. 23
	BESS	3	<i>Implement educational programs for nontraditional audiences.</i>	see p. 29
	BESS	4	<i>Develop innovative methods and techniques to deliver quality research and educational information.</i>	see p. 29
	BESS	5	<i>Increase impact of research and extension programs, and enhance extramural funding for those programs.</i>	see p. 31
	EPP	1	<i>To maintain our current expertise while increasing involvement in Biotechnology and our ability to respond quickly to changes in representative disciplines in order to increase extramural funding through cooperative research, teaching and Extension among units and across the UT Campuses and serve our stakeholders.</i>	see p. 32
	EPP	2	<i>To use new communication technology to increase the effectiveness and interaction of Extension Specialists, Distance Diagnostics, applied research and teaching programs.</i>	see p. 32
	EPP	3	<i>To use new communication technology to increase the effectiveness and interaction of Extension Specialists, Distance Diagnostics, applied research and teaching programs.</i>	see p. 33
	EPP	5	<i>To improve communication among units of the Department in Knoxville, Jackson and Nashville.</i>	see p. 34

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Departmental Goals Related to the Tennessee Agricultural Experiment Station (see p. 46) and/or UT Extension (see p. 49)				<i>(continued)</i>
	<i>Dept.</i>	<i>Goal #</i>		
	FST	3	<i>Increase research program resources and collaboration.</i>	see p. 37
	FST	5	<i>Increase outreach programs with the food manufacturing industry, food service industry and consumers.</i>	see p. 39
	FWF	2	<i>To attract and maintain a full complement of recognized scientists and teachers with regional and national reputation for academic excellence.</i>	see p. 40
	FWF	3	<i>To continue to seek opportunities for the upgrade of our capabilities and increase our funding.</i>	see p. 41
	FWF	5	<i>To develop academic centers of excellence with increased collaboration and partnerships with federal agencies.</i>	see p. 42
	FWF	6	<i>To expand and improve our facilities.</i>	see p. 43
	PISci	1	<i>Recruit and retain high quality faculty and staff.</i>	see p. 43
	PISci	3	<i>Improve scholarship and stipend support for, and increase research and other scholarly activity of undergraduate and graduate students.</i>	see p. 45

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College of Agricultural Sciences and Natural Resources

The College of Agricultural Sciences and Natural Resources (CASNR) prepares students in natural and social sciences-based professional academic programs for careers in agriculture, natural resources, and other arenas. The CASNR academic programs accomplish this by:

1. Providing strong general education with a foundation in fundamental knowledge, an understanding of the human experience, a global perspective, and a foundation in communication skills (visual, oral and written);
2. Building on the natural and social sciences to provide experiential learning that applies gained knowledge to problem-solving situations using critical thinking and analytical skills;
3. Providing student-centered educational programs where students engage in the process and take responsibility for their education; and
4. Providing international experiences to provide a global perspective to their education.

Goal #1: *Recruit and retain a diverse student population that is academically prepared for a challenging curriculum.*

Reference to UT Strategic Plan

1. Higher student entry scores
 - 1.a. Raise core units' GPA
 - 1.b. Raise entry standardized test scores
4. More freshmen retained in the following Fall Semester
5. Higher 6-year persistence-to-graduation rates
7. More in-state transfer students
12. Higher African American enrollments (UG, G, & professional)
13. Higher overall minority enrollments (UG, G, & professional)
- 15.c. Improve advising & student support services

Departmental/Program Abbreviations: AgEcon=Agricultural Economics; AEE=Agricultural and Extension Education; AnSci=Animal Science; BESS=Biosystems Engineering and Soil Science; EPP=Entomology and Plant Pathology; FWF=Forestry, Wildlife and Fisheries; and PISci=Plant Sciences.

Assessment Measures

Track and monitor enrollment by majors, home county, race, and gender and compare to UT Knoxville data.

Track and monitor incoming student test scores (ACT/SAT for undergraduates and GRE for graduate students) and grade point averages (high school core for undergraduates and collegiate GPA for graduate students).

Track percent of each class on academic review to monitor progress of students.

Plan of Action

1. Program Coordinators will participate in TACRO, 4-H and FFA events to recruit students from across the state of Tennessee.
 - a. Represent CASNR and UT in rural counties.
 - b. Restructure College Ambassador program to provide greater assistance in recruiting students; write clear expectations and goals for College Ambassadors.
 - c. Identify and form relationships with honors and advanced placement programs in Tennessee high schools.
 - d. Engage Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) chapter in recruiting and mentoring minority students.
2. Engage dean, associate/assistant deans, department heads, and faculty in active recruiting across the state.
3. Partner with UT Agricultural Extension Service adult and youth agents and FFA chapters in Tennessee high schools to identify students from urban, as well as traditional rural agricultural communities.
4. Partner with the CASNR Alumni Council to recruit academically-prepared students, to work with College Ambassadors, and to mentor students.
 - a. Develop an FAQ/information sheet to help alumni appreciate the needs of the College and the directions in which it is going.
 - b. Working with the UTIA Director of Development and Alumni, organize regional recruitment meetings with alumni and prospective students.
5. Revise careers brochure and develop companion web page.
6. Develop a retention program that incorporates success workshops and mentors.
7. Develop graduate stipend enhancement competition for faculty to recruit outstanding students.

Improvement Documentation

Program coordinator for Recruitment restructured college ambassador program. College ambassadors made visits to 28 high schools. Applications for fall 2004 for CASNR were up by nearly 30% over fall 2003. Student participation in summer orientation indicates freshman class and transfer student enrollment will be up by 42% (140 students completed summer orientation in 2003 versus a projected 200 for summer 2004).

Program Coordinator for Retention is advising the Minorities in Agriculture, Natural Resources and Related Sciences. MANNRS and CASNR co-hosted a dinner for minority students and faculty. Number of minority student applications increased for fall 2004. A retention

program was initiated. Twelve students, who were identified "at risk" for dismissal, participated in a six week pilot program designed to improve academic performance. Of the twelve, two were dismissed at the end of spring semester, nine increased their semester gpa by 100% (spring semester gpa was at least double the fall semester gpa) and one withdrew from the university.

Goal #2: *Enhance scholarships, stipends, and research and other scholarly activity of undergraduate and graduate students.*

Reference to UT Strategic Plan

- 14. More private and institutional dollars for scholarships
- 47. More donors
- 49. More private gift dollars
- 59.e. Increase research opportunities for undergraduates

Assessment Measures

Track and monitor the number of undergraduate students participating in the CASNR Honors Research and Creative Achievement Program, the distribution of students from the different majors that are participating, the number of students participating in EURCA.

Track and monitor the number of graduate students receiving support through competitive funding.

Track and monitor the number of graduate and undergraduate students presenting research and other scholarly presentations at regional and national meetings.

Track and monitor placement of graduates in jobs and professional and graduate schools.

Track and monitor changes in College scholarship, graduate student stipend enhancement, and student/faculty professional development funds.

Plan of Action

- 8. Complete implementation of the College Honors Program:
 - a. Form Honors Committee with representation from each department.
 - b. Work with UTIA Development Office to cultivate donors for an Honors Program endowment.
- 9. Promote and increase participation in the Exhibition for Undergraduate Research and Creative Achievement by CASNR undergraduates.
- 10. Work with Departments and the UTIA Development Office to cultivate donors for:
 - a. fellowships and other forms of competitive graduate stipend enhancement funds, and
 - b. funding to cover expenses associated with campus visits of prospective graduate students.
- 11. Provide seminars/workshops on how to engage undergraduates in research.
- 12. Develop recognition for faculty mentoring undergraduate and graduate students who successfully publish research or other scholarly

work within one year of graduation.

Goal #3: *Establish excellence in the curricula and co-curricular activities (e.g. CASNR affiliated student organizations).*

Reference to UT Strategic Plan

- 15.b. Revise General Education program, progression requirements, etc.
- 15.c. Improve advising & student support services
- 15.d. Increase outreach/public service opportunities for undergraduates
- 15.g. Increase use of distance learning technologies
- 59. Revise curricula to be relevant for 21st Century
- 59.b. Assure bachelor's graduates ready for workplace
- 59.c. Assure bachelor's graduates ready for graduate/professional school

Assessment Measures

- Track and monitor placement of graduates in jobs and professional and graduate schools.
- Track and monitor participation in CASNR Career Fair by employers and students.
- Track and monitor activity of student organizations.

Plan of Action

- 13. Revise undergraduate curricula to conform with University General Education requirements.
 - a. Encourage faculty to develop or revise courses for consideration as Writing Intensive, Oral Communications, Quantitative Reasoning, and Natural Sciences general education courses.
 - b. Revise curricula to reduce graduation requirement from a minimum of 132 credit hours to a minimum of 124 credit hours.
- 14. Develop a biotechnology major.
- 15. Establish a teaching improvement seminars/workshops series using a faculty and student steering and planning committee to promote:
 - a. Development of honors courses;
 - b. Incorporation of research experiences in the undergraduate curricula;
 - c. Expansion of current internship programs; and
 - d. Adoption of teaching methods that account for different learning styles and promote a student-centered learning environment.
- 16. Develop a student leadership seminar series for officers and faculty advisers of student organizations affiliated with the CASNR designed to increase leadership, people, and communications skills.
- 17. Develop the third edition of the CASNR "Teaching and Advising Manual" to include revisions relating to the upgraded UT Student Information System, revised curricula, expanded financial support and student organizations.

Goal #4: *Internationalize the curriculum.*

Reference to UT Strategic Plan

- 9. More international students
- 10. More UT students studying abroad
- 59. Revise curricula to be relevant for 21st Century
- 59.b. Assure bachelor's graduates ready for workplace

Assessment Measures

Track and monitor the number of students participating in study abroad programs and in short-duration study tours and the number of international students studying in the CASNR.

Track and monitor the number of courses that include an international component.

Track and monitor the number and value of grants and gifts obtained in support of internationalization of the curriculum.

Survey employers of CASNR graduates as to satisfaction with preparation, performance and placement in positions dealing with international markets and marketing.

Plan of Action

- 18. Develop on-campus faculty development seminars/workshops about internationalizing the curriculum.
- 19. Assistant dean will, in concert with the UTIA Coordinator for International Programs in Agriculture and Natural Resources, secure external funding for activities in support of internationalizing the curriculum or to provide support for faculty-guided student international experiences.
- 20. Develop partnerships with units in universities in other countries and other UT units and colleges of agriculture and natural resources in Tennessee and elsewhere for opportunities to internationalize the curriculum and partner in study tours, when feasible.
- 21. Work with appropriate UT unit(s) to offer "agricultural and natural resources" Spanish for-credit course or as non-credit workshop to students.

Goal #5: *Recruit and retain high quality faculty and staff.*

Reference to UT Strategic Plan

- 18. More endowed chairs/professorships (funded with at least \$500K each)
- 19. More named professorship award recipients
- 21. More African-American faculty

22. More overall minority faculty
23. More African-American staff (admin/exec/mgr/professional)
24. More overall minority staff (admin/exec/mgr/professional)
25. Raise faculty salaries to peer average
26. Raise staff salaries to peer average
47. More donors
48. Higher percentage of alumni giving to UT
49. More private gift dollars

Assessment Measures

Track and monitor faculty and staff turnover.

Track and monitor faculty and staff salary.

Track and monitor progress in classroom renovations and technology upgrades.

Track and monitor number of professorships, chairs, faculty and staff professional development opportunities, and faculty and staff professional honors and awards. Track and monitor funding levels for these activities.

Track and monitor the number of faculty participating in the University's faculty development leave program.

Plan of Action

22. Work with department heads to ensure appropriate composition of and provide, when necessary, training for search committees.
23. Work in partnership with the Agricultural Experiment Station and the Agricultural Extension Service to provide competitive salaries and start-up packages, and attempt to maintain faculty salaries at or above peer average.
24. Improve the work environment by providing state-of-the-art teaching and research facilities and a clean and safe work environment.
 - a. Review annually space and equipment needs with department heads.
 - b. Prioritize needs for submission to University Classroom Upgrade, Technology Fee, and Faculty Computer Refresh Programs.
 - c. Prioritize needs for major equipment purchases and identify various sources of funding to support such needs.
 - d. Launch a "Campus Pride" campaign with CASNR Student Council to improve the appearance and cleanliness of campus buildings and grounds.
25. Enhance mentoring of faculty and staff, and work with department heads to provide constructive performance reviews.
26. Foster faculty and staff development through on- and off-campus opportunities.
 - a. Increase funding of faculty development grants program.
 - b. Identify a source of funds for staff development activities.
 - c. Encourage faculty to participate in the University's faculty development leave program.
27. Work with UTIA Development to enhance endowments and gifts for named professorships, chairs, and faculty and staff honors and

awards in the College.

Agricultural Economics

Unit Mission Statement

The Department of Agricultural Economics seeks to be nationally recognized as an outstanding academic unit that provides:

- a) research to expand economic knowledge that can be used by individuals, businesses, and public officials in decisions regarding allocation of resources for production, distribution, and consumption of goods and services related to agriculture and natural resources and improvement of standards of living in rural areas,
- b) extension educational programs that develop and deliver current and relevant information to decision makers involved in these areas, and
- c) resident and nonresident instruction programs that provide students with thorough understanding of economic and business aspects of agriculture, food, natural resources, and rural economies and that lead to acquisition of problem-solving skills commensurate with B.S. and M.S. degrees.

Goal #1: *Increase the number of high quality students enrolling in the M.S. program in Agricultural Economics.*

Reference to UT Strategic Plan

- 12. Higher African American enrollments (UG, G, & professional)
- 52. Increase number of nationally-recognized academic programs

Assessment Measures

- Monitor the number of students entering and graduating from the M.S. program.
- Monitor the undergraduate grade point averages and GRE scores for entering M.S. students.
- Monitor the grade point averages of students in the M.S. program.

Plan of Action

28. Intensify graduate program recruiting efforts for juniors and seniors in our B.S. program.
29. Intensify recruiting activities for B.S. graduates from other UT departments.
30. Intensify recruiting efforts targeting juniors and seniors at regional colleges that do not offer masters degrees in our field.

Goal #2: *Develop a functioning relationship with the Natural Resources doctoral program administered in the Department of Forestry, Wildlife, and Fisheries and enroll Ph.D. students supported by extramural funds by Fall 2006.*

Reference to UT Strategic Plan

- 27. Increase total grant & contract dollars awarded
- 41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships
- 52. Increase number of nationally-recognized academic programs
- 59. Revise curricula to be relevant for 21st Century

Assessment Measures

Monitor the number of Ph.D. students in the Natural Resources program whose major professor is in Agricultural Economics.

Plan of Action

- 31. Interact with the faculty of the Department of Forestry, Wildlife, and Fisheries to develop a working, cooperative relationship with regard to the Ph.D. program in Natural Resources.
- 32. Publicize the availability of the doctoral program in Natural Resources with a focus in resource and environmental economics.
- 33. Develop grant and contract proposals that include funding for doctoral students in natural resource and environmental economics.

Goal #3: *Increase external grant and fee-based funding per faculty FTE.*

Reference to UT Strategic Plan

- 27. Increase total grant & contract dollars awarded
- 33. More direct Federal appropriations & earmarked funds
- 41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships
- 52. Increase number of nationally-recognized academic programs

Assessment Measures

Monitor the dollar value of grant and contract proposals submitted by the faculty.
Monitor the dollar value of grants and contracts awarded to the faculty.
Monitor the dollar value of revenues from fee-for-service and conference activities.

Plan of Action

34. Offer incentives to faculty and staff to intensify efforts to acquire extramural funding including enhanced performance ratings and performance bonuses.
35. Encourage faculty to develop relationships with key persons in funding organizations.
36. Remove institutional barriers to faculty success in proposal preparation and grant administration.

Goal #4: *Increase the number of refereed and non-refereed publications per faculty FTE.*

Reference to UT Strategic Plan

33. More direct Federal appropriations & earmarked funds
52. Increase number of nationally-recognized academic programs

Assessment Measures

Monitor the number of refereed and non-refereed publications by the faculty annually.

Plan of Action

37. Emphasize numbers of refereed and non-refereed publications during the annual performance review process for faculty.
38. Provide budget funding to pay for printing and page-charge costs.

Goal #5: *Increase the number of undergraduate students majoring in the Department.*

Reference to UT Strategic Plan

7. More in-state transfer students
12. Higher African American enrollments (UG, G, & professional)
13. Higher overall minority enrollments (UG, G, & professional)
15. Higher student satisfaction index

Assessment Measures

Monitor the number of undergraduates majoring in Agricultural Economics and Business annually.

Plan of Action

39. Emphasize excellence in undergraduate academic advising by selecting advisors based on comparative advantage and by recognizing good advising during annual faculty performance reviews.
 - a. Nominate leading advisors for appropriate awards.

40. Emphasize excellence in undergraduate teaching by assigning teachers to courses based on suitability and by recognizing good teaching during annual faculty performance reviews.
 - a. Nominate best teachers for appropriate awards.
41. Keep the curriculum current by developing new courses based on current areas of student, faculty, and public interest.
42. Participate in the recruiting activities of the College to the maximum extent possible.

Goal #6: *Continue to increase utilization of distance education technologies in Agricultural Economics teaching and extension programs.*

Reference to UT Strategic Plan

- 15.g. Increase use of distance learning technologies
- 59. Revise curricula to be relevant for 21st Century

Assessment Measures

Monitor the number of courses offered by distance technologies in the Department.

Monitor the number of student credit hours generated by courses offered by distance technologies in the Department.

Assess the apparent student demand for distance-delivered courses annually.

Plan of Action

43. Encourage faculty to develop and deliver distance courses by emphasizing success in this area during annual faculty performance evaluations.
44. Offer faculty additional teaching FTE percentages during the development of distance-delivered courses.
45. Make the necessary equipment and software available to facilitate distance course development.
46. Work with entities within the University that support distance education efforts.

Agricultural and Extension Education

Unit Mission Statement

The Agricultural and Extension Education program provides quality instruction designed to aid students in increasing their knowledge base and developing their intellectual faculties to prepare them for productive careers in agriculture and related disciplines. The program's primary mission is the preparation of agricultural educators for proficiency in their chosen fields with special emphasis on agricultural education and agricultural extension. The curriculum provides sufficient technical information and specialization for initial employment. Also, the program provides an education within a broad university setting which develops a student's understanding of society and enhances the ability to learn after formal education is completed. Students are challenged to develop effective thinking and communication skills, confidence, leadership skills, problem-solving ability, and a desire for life-long learning.

Goal #1: *Increase the total number of undergraduate students majoring in the Agricultural Education and Agricultural Extension Education concentrations and in the Communications minor.*

Reference to UT Strategic Plan

- 7. More in-state transfer students
- 12. Higher African American enrollments (UG, G, & professional)
- 13. Higher overall minority enrollments (UG, G, & professional)
- 46. More graduates in critical shortage areas who stay in TN

Assessment Measures

Annually monitor the number of undergraduate majors in each concentration and the number of Communications minors.

Plan of Action

- 47. Emphasize excellence in undergraduate academic advising.
- 48. Fully participate in the recruitment activities of the College.
- 49. Take advantage of student recruitment opportunities associated with high school vocational and 4-H programs.
- 50. Distribute recruiting literature at all appropriate venues.
- 51. Support and promote the undergraduate student club.

Goal #2: *Shift delivery emphasis in the current M.S. program course work from traditional to distance delivery.*

Reference to UT Strategic Plan

- 15.g. Increase use of distance learning technologies
- 46. More graduates in critical shortage areas who stay in TN
- 59. Revise curricula to be relevant for 21st Century

Assessment Measures

Annually assess the number of distance-delivered graduate courses available from the Department.
Monitor the number of student credit hours generated in distance-delivered courses.

Plan of Action

- 52. Encourage faculty to develop distance-delivered graduate course work by emphasizing this area in annual faculty performance evaluations.
- 53. Provide software and equipment support for developing distance-delivered courses.
- 54. Publicize availability of distance-delivered courses to extension employees and secondary school teachers across the state.

Goal #3: *Enhance opportunities for international experience for students in the programs.*

Reference to UT Strategic Plan

- 10. More UT students studying abroad
- 41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships
- 59. Revise curricula to be relevant for 21st Century
- 59.g. Increase understanding of cultural pluralism in curricula, courses, co-curricular activities, student support services, & research projects

Assessment Measures

Monitor the number of students in the program who have a significant international experience.
Evaluate students' assessments of their international experiences.

Plan of Action

- 55. Develop extramural funding to support international experiences for students in our concentrations.
- 56. Once funding is in place, encourage students to take advantage of international opportunities.
- 57. Provide academic credit for international educational experiences.

Goal #4: *Increase emphasis on, and student participation in, the Communications minor to develop a full-fledged concentration in the area.*

Reference to UT Strategic Plan

15. Higher student satisfaction index

59. Revise curricula to be relevant for 21st Century

59.b. Assure bachelor's graduates ready for workplace

Assessment Measures

Monitor the number of undergraduate majors who take the Communications minor.

Estimate potential student interest from diverse student groups in the College.

Plan of Action

58. Assess potential student demand by surveying students in the College regarding potential interest in a Communications concentration.

59. Conduct a thorough review of courses and curricula available in the Agricultural Science major to identify potential for development of a concentration in Communications.

60. If a concentration in Communications seems justified, revise curricula as necessary to develop the concentration.

61. Collaborate with the College of Communications and Information.

Animal Science

Unit Mission Statement

Our mission is to provide high quality, relevant education and training for undergraduate and graduate students to serve internationally competitive animal agriculture; and develop and transfer new knowledge in the animal commodities that make significant contributions to the economy of Tennessee and the world.

Goal #1: *Enhance undergraduate and graduate recruiting.*

Reference to UT Strategic Plan

- 12. Higher African American enrollments (UG, G, & professional)
- 13. Higher overall minority enrollments (UG, G, & professional)
- 59. Revise curricula to be relevant for 21st Century

Assessment Measures

Numbers of undergraduate applications
Numbers of graduate student applications

Plan of Action

- 62. Revising recruiting brochures
- 63. Revise and emphasize web-based information
- 64. Engage more faculty and staff in recruiting activities
- 65. Target regional colleges for recruitment of prospective graduate students

Goal #2: *Increase extramural funding.*

Reference to UT Strategic Plan

- 27. Increase total grant & contract dollars awarded

Assessment Measures

Number of faculty participating in faculty development activities
Number of faculty participating in grant workshops

Number of activities involving joint faculty/industry partners
Number and size of grants and contracts

Plan of Action

66. Promote and support faculty development
67. Support participation in grant workshops
68. Promote interaction with industry partners
69. Promote mentoring between successful faculty and new faculty

Goal #3: *Enhance visibility and communication with diverse clientele of the department.*

Reference to UT Strategic Plan

47. More donors
48. Higher percentage of alumni giving to UT
49. More private gift dollars

Assessment Measures

Number of web-based contacts (hits)
Number of requests for faculty/staff participation in local and regional activities
Number of requests for departmental publications

Plan of Action

70. Promote and support Extension, Teaching, Research faculty participation in local and regional activities and workshops
71. Strengthen interactions with our alumni groups, producer groups, industry partners
72. Revise departmental recruiting brochures and web-based information

Goal #4: *Strengthen research programs in broad areas of animal science.*

Reference to UT Strategic Plan

27. Increase total grant & contract dollars awarded
34. More US patents based on UT research
41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships

Assessment Measures

Number of peer reviewed publications, abstracts, research bulletins
Number and size of grants and contracts
Number of faculty invited speaking engagements

Plan of Action

73. Promote and support faculty development opportunities
74. Recruit, hire and provide support for quality faculty
75. Promote and support involvement with industry partners

Goal #5: *Strengthen teaching programs in broad areas of animal science*

Reference to UT Strategic Plan

1. Higher student entry scores
2. More National Merit & Achievement Scholars
- 3.c. More students in departmental honors courses/curricula
9. More international students
10. More UT students studying abroad
11. More national scholar/fellows (e.g., Fulbright, Rhodes, Truman)
15. Higher student satisfaction index
- 15.d. Increase outreach/public service opportunities for undergraduates

Assessment Measures

Student exit interviews, comprehensive exams
Success of students in finding careers in our discipline
Regional and national recognition of teaching faculty/teaching program

Plan of Action

76. Update and revise our teaching curriculum
77. Promote and support faculty development in teaching activities
78. Initiate, and encourage and support faculty participation in teaching workshops
79. Recruit, hire and provide support for high quality teaching faculty

Biosystems Engineering and Soil Science

Unit Mission Statement

In the areas of biological, environmental, ecological, and agricultural systems, to fulfill our unique Land Grant responsibilities to all our constituents by:

- Delivering user-oriented, state-of-the-art outreach programs in a wide variety of media;
- Providing outstanding undergraduate and graduate training in the sciences, engineering, and engineering technology to our students;
- Generating new knowledge and developing new technologies and methodologies in nationally recognized research programs.

Goal #1: *Improve student recruitment, diversity, internationalization, and program excellence.*

Reference to UT Strategic Plan

- 7. More in-state transfer students
- 12. Higher African American enrollments (UG, G, & professional)
- 14. More private and institutional dollars for scholarships
- 15.c. Improve advising & student support services
- 52. Increase number of nationally-recognized academic programs

Assessment Measures

Record, sort, and evaluate recruiting events participated in, both on campus and throughout the state (i.e., career fairs, classroom visits, community college visits, new/undeclared student receptions, etc.)

Record faculty involved in recruitment

Enrollment numbers in Biosystems Engineering, and Environmental & Soil Sciences

Advising tracking system

Scholarship funds and number of awards (Bledsoe scholarship)

ABET accreditation results

Degree of online access to departmental publications/posters

Research website traffic

Graduate student pipeline showing enrollment and historical graduation rates

Completion of new graduate handbook

Number and level of graduate research assistantships

Level of international exchange, consulting, and study by faculty

Count of graduate-recruiting relationships with undergraduate programs at other universities and colleges in the state

Plan of Action

80. Undergraduate recruitment and diversity
 - a. Aggressively advertise degree programs to high school students, transfer students, and undeclared UT students through the use of recruitment brochures and flyers, and participation in career fairs on campus and throughout the state.
 - b. Purchase the list of academic achievers in Tennessee, and target those students with an interest in engineering, environmental science, and related fields.
 - c. Focus efforts to increase programs' visibility among minorities, women, and international students.
 - d. Reach out to greater numbers of 4-H, prep-school, and homeschooled students.
 - e. Seek funding to increase the number of scholarships to attract the best qualified and most diverse students.
81. Internationalization.
 - a. Promote international opportunities to all our undergraduate students through guest lectures, seminars, and workshops.
 - b. Encourage faculty to participate in current programs involving Thailand, Jamaica, and Mexico, which may lead to increased numbers of undergraduate applicants from those countries.
82. Undergraduate retention.
 - a. Continue to emphasize excellence in advising.
 - b. Increase the amount of hands-on and design components in instructional courses.
 - c. Continue accreditation of Biosystems Engineering major
 - d. Review the Environmental and Soil Sciences curriculum every 2 to 3 years to assure that it remains viable, current, and attractive to undergraduate students.
 - e. Identify financial aid resources.
 - i. explore providing an automated online "wizard" that will enable a student to quickly identify potential financial aid sources.
83. Competitive graduate programs.
 - a. Disseminate the scholarly activities of the faculty, students, and staff, and strive to enhance the national and international reputation of the research conducted in the department by publishing in widely respected journals and by presenting current scholarly activity at international conferences.
 - b. Conduct a review of each graduate program curriculum within the next two years and, if necessary, revise to ensure that the courses are current and relevant.
 - c. Seek extramural funding to support additional graduate research assistantships at levels that will attract students to the programs. Increase the number of assistantships
 - i. by two each year in each master's program, and

- ii. by one each year in each doctoral program.
- 84. Graduate program diversity and internationalization.
 - a. Encourage faculty and staff to seek and accept opportunities to participate in international exchange, consulting, and study.
 - b. Seek extramural funding to support student exchanges with universities in other countries.
 - c. Continue efforts to attract graduate students from traditionally under-represented groups; one assistantship each year will be committed for this purpose.
 - d. Establish relationships at other colleges and universities in Tennessee to attract qualified Tennessee students to the graduate programs in the department

Goal #2: *Provide and deliver curricula that prepare students for success in the work place, or in graduate/professional schools.*

Reference to UT Strategic Plan

- 46. More graduates in critical shortage areas who stay in TN
- 59. Revise curricula to be relevant for 21st Century
- 59.b. Assure bachelor's graduates ready for workplace
- 59.c. Assure bachelor's graduates ready for graduate/professional school

Assessment Measures

- Integration of Agricultural Systems Technology (AST) program into website, promotional literature, and departmental displays
- Monitor AST enrollment
- Monitor progress of pre-professional program
- Monitor removal of food engineering
- Monitor changing focus of recent/future hires

Plan of Action

- 85. Launch an Agricultural Systems Technology (AST) concentration under the Environmental and Soil Sciences B.S. degree.
 - a. Actively promote this concentration through a variety of means, including direct recruitment of high school target audiences (i.e., 4-H and FFA) as well as through a mailing to the adult agricultural agents in each Tennessee county.
- 86. Initiate offering of a pre-professional concentration that meets the requirements of various pre-professional programs (including most pre-medicine programs).
- 87. Drop food engineering concentration.
- 88. Increase emphasis on bioprocess engineering.

Goal #3: *Implement educational programs for nontraditional audiences.*

Reference to UT Strategic Plan

15.g. Increase use of distance learning technologies

59. Revise curricula to be relevant for 21st Century

Assessment Measures

Number of seminars/conferences; attendance figures

New extension clientele?

Successful establishment and initial report of advising board

Number of online and distance education courses offered

Number of web-enhanced courses

Plan of Action

89. Deliver research-based education and applied learning that improve the quality of life of the clientele we serve.

90. Develop collaborative relationships with users of research-based information, regional research groups, government agencies, and industry groups to determine the critical issues and needs that face our growing, more diverse society.

91. Develop innovative, high-impact educational programs that respond proactively, not reactively, to timely issues that face our society.

a. Effectively market programs to both traditional and non-traditional audiences.

92. Establish an advising board, representative of the agencies, public, and industries we serve.

a. Have the board assess and develop a list of needs and opportunities we should address for each of the client groups which the board members represent.

93. Continue to invest in web-based course development.

a. As an intermediate step, work to make existing courses web-enhanced.

Goal #4: *Develop innovative methods and techniques to deliver quality research and educational information.*

Reference to UT Strategic Plan

15.f. Implement Campus Master Plan including physical facilities, IT infrastructure, equipment, etc.

15.g. Increase use of distance learning technologies

45. Provide state-of-the-art educational programs using basic and applied research in agriculture, family and consumer sciences, resource development and 4-H programs in all 95 counties

59.h Increase active learning, collaborative learning, etc.

Assessment Measures

Web/intranet usage statistics and capabilities

Number of smart and enhanced classrooms

Number of trained GIS faculty and number of active applications

Activation of Plant Biotech wireless

Network security statistics

Security camera coverage and theft statistics

Plan of Action

94. Maintain a state-of-the-art public web site to provide "one-stop shopping" for our teaching, research, and extension clients.
 - a. Use of online databases for alumni information, research publications, news items, job postings, academic descriptions, etc.
 - b. Maintain a password-protected "intranet" to provide a variety of business tools, best practice descriptions, and data entry and reporting capabilities for our own personnel.
95. Support technology-based education by increasing the use of smart classrooms and laboratories.
 - a. Equip 75% of departmental classrooms with digital projectors and have another 25% fully "SmartBoard" equipped.
96. Combine external-funding resources to develop an advanced GIS (geographical information system) initiative to include a repository for environmental data that can be accessed on-line through interactive mapping.
 - a. Set up dedicated space on a main U.T. server
 - b. Train faculty to use and program the system.
 - c. Bring a spatial nutrient management application, a weather server, and an Agricultural Emergency Management System (private) online within the next year.
97. Develop teaching, research and Extension applications that take advantage of the wireless-network.
98. Increase computer security levels by moving servers into a secure server room with backup power supplies.
 - a. To secure and protect physical and intellectual property, install networked security cameras in theft-prone areas.
99. Develop high-impact literature and accompanying CD's for data and applications delivery
 - a. Use outside sources for large jobs,
 - b. Provide reliable, economical color laser printing and CD production capabilities for short-run research and educational programs that need a quick turnaround.

Goal #5: *Increase impact of research and extension programs, and enhance extramural funding for those programs.*

Reference to UT Strategic Plan

27. Increase total grant & contract dollars awarded

Assessment Measures

Real-time grant/contract reporting

Document changes in grant discovery/application/execution processes

Number of project web spaces

Paths available to access publications and posters

Plan of Action

100. Streamline the grant discovery/application/execution process.

a. Standardize and automate as much of the process as possible.

b. Work towards improving financial reporting to reduce the difficulty faculty have in tracking project status.

c. Develop password-protected project/grant web spaces, where a PI, his/her staff, and cooperators/sponsors can collaborate and manage project assets (photos, generated data, collaborative documents, reports, distribution lists, account summaries).

101. Provide greater visibility for research on the web, particularly peer-reviewed publications, adult and 4-H extension information, and posters.

a. Cross-index faculty profile pages and research topic pages

b. Develop comprehensive keyword search capability.

c. Create topical research areas on the website bringing together, for example faculty, projects, classes, publications, posters, sub sites, and web resources on one topic like "soil erosion."

Entomology and Plant Pathology

Unit Mission Statement

The mission of the Department of Entomology and Plant Pathology at The University of Tennessee is to advance scientific knowledge and to assist stakeholders of Tennessee and the world in understanding and managing plant diseases and beneficial plant-associated microorganisms, bioactive phytochemicals, beneficial and pestiferous insects, and other arthropods in an environmentally and economically sustainable manner and in appreciating the role of arthropods and plant pathogens in nature.

Goal #1: *To maintain our current expertise while increasing involvement in Biotechnology and our ability to respond quickly to changes in representative disciplines in order to increase extramural funding through cooperative research, teaching and Extension among units and across the UT Campuses and serve our stakeholders.*

Reference to UT Strategic Plan

33. More direct Federal appropriations & earmarked funds

34. More US patents based on UT research

Assessment Measures

Monitor the grant and contract income of the unit, using 2000 as a baseline.

Annually assess publications and publications in peer-reviewed journals using 2000 as a baseline.

Receive annual feedback from the External Advisory Board on our success in improvement in the agricultural, government and academic communities.

Plan of Action

102. Make faculty hires predicated on current scientific and agricultural needs as vocalized by stakeholders and the External Advisory Board.

103. Reward faculty and staff appropriately for outstanding performance in teaching research or publication.

Goal #2: *To use new communication technology to increase the effectiveness and interaction of Extension Specialists, Distance Diagnostics, applied research and teaching programs.*

Reference to UT Strategic Plan

15.g. Increase use of distance learning technologies

41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships
45. Provide state-of-the-art educational programs using basic and applied research in agriculture, family and consumer sciences, resource development and 4-H programs in all 95 counties

Assessment Measures

Monitor the numbers of distance diagnostic accession, participation in distance education activities and actively seek feedback from stakeholders.

Plan of Action

1. Provide all possible equipment and software to keep our unit at the cutting edge of information technology in our fields of work.
2. Nominate members of the Department for awards for accomplishments in using information technology.
3. Increase applications to funding sources for support of information technology and delivery.

Goal #3: *To recruit and retain high quality graduate students, faculty and staff.*

Reference to UT Strategic Plan

9. More international students
27. Increase total grant & contract dollars awarded
- 27.b. More partnering with UT-Battelle/ORNL
34. More US patents based on UT research

Assessment Measures

Track and monitor GRE scores and GPA's of applicants for graduate studies.

Track and monitor faculty and research staff applicant pools for institutions awarding degrees.

Ask members of the External Advisory Board for comparisons of EPP faculty with those of peer institutions.

Progress towards meeting this goal

Our student applicant pool has increased, allowing us to bring in students with higher GREs than previous years and increased enrollment.

Plan of Action

4. Develop a strategy to recruit a more diverse and highly qualified applicant pool by emphasizing the positive changes taking place at UTIA and EPP specifically.

5. Advertise nationally for all openings and internationally for faculty and post-doctoral positions.

Goal #4: *Contribute to the strong undergraduate training available through CASNR using modern technology, new courses and innovative programming.*

Reference to UT Strategic Plan

15. Higher student satisfaction index

15.g. Increase use of distance learning technologies

46. More graduates in critical shortage areas who stay in TN

Assessment Measures

An annual review of new and revised courses and programs.

Annual review of student satisfaction with courses taken.

Annual review of teaching technology used in each course.

Plan of Action

6. Develop undergraduate minors in Entomology and Plant Pathology

7. Add three new courses for advanced undergraduates

8. Have the entire EPP faculty participate in teaching an undergraduate survey course on the effects that insects and plant pathogens have on society

Goal #5: *To improve communication among units of the Department in Knoxville, Jackson and Nashville.*

Reference to UT Strategic Plan

15.g. Increase use of distance learning technologies

59.e. Increase research opportunities for undergraduates

Assessment Measures

Discuss and assess changes made each year during the annual Department Retreat and Strategic Planning Meeting.

Plan of Action

9. Increase participation in departmental committees by staff in other cities.

10. Purchase all possible technologies that will facilitate increased intradepartmental interactions.

Food Science and Technology

Unit Mission

The mission of the Food Science and Technology Department is to ensure a high quality food supply for the citizens of Tennessee and beyond by providing outstanding programs in undergraduate and graduate education, fundamental and applied research, and consumer and industry education.

Goal #1: *Increase student enrollment.*

Reference to UT Strategic Plan

- 3.c. More students in departmental honors courses/curricula
- 4. More freshmen retained in the following Fall Semester
- 7. More in-state transfer students
- 12. Higher African American enrollments (UG, G, & professional)
- 13. Higher overall minority enrollments (UG, G, & professional)

Assessment Measures

Evaluate enrollment from high schools, college transfers, and transfers within UT

Track students involved in honors courses/curricula

Track enrollment by permanent residence, race and gender

Track amount of information disseminated to high school students, teachers and guidance counselors

Plan of Action

- 11. Revise student recruiting brochure and develop web-based information
- 12. Partner with CASNR recruiters and Extension agents to identify potential students
- 13. Mail or email information to high school students and students with no declared majors
- 14. Mail or email information to high school science teachers and guidance counselors
- 15. Faculty advisors will work with Freshmen to help them adapt to college
- 16. Inform students about available scholarships and financial aid
- 17. Partner with CASNR to promote Honors Research and Creative Achievement Program

Goal #2: *Increase educational opportunities for students*

Reference to UT Strategic Plan

- 10. More UT students studying abroad
- 15. Higher student satisfaction index
- 15.d. Increase outreach/public service opportunities for undergraduates

Assessment Measures

- Track number of students traveling internationally
- Track number of companies and students involved with internships
- Track number of students working part-time in food or food related companies
- Track students involved with honors research and creative achievements program
- Track students involved in making presentations at meetings
- Track resources obtained for student learning
- Track student progress in course work

Plan of Action

- 18. Establish more internships for students with food companies or food related companies
- 19. Increase gifts and resources to assist students with international study
- 20. Obtain information technology resources to enhance student learning
- 21. Encourage and prepare students to make presentations at meetings
- 22. Assist students in finding food industry work

Goal #3: *Increase research program resources and collaboration.*

Reference to UT Strategic Plan

- 27. Increase total grant & contract dollars awarded
- 27.b. More partnering with UT-Battelle/ORNL
- 28. Increased total research expenditures
- 31. More interdisciplinary research
- 33. More direct Federal appropriations & earmarked funds
- 47. More donors

Assessment Measures

- Track grants submitted and grants awarded

Track gifts and contracts

Document research projects involving other departments, universities and ORNL

Plan of Action

23. Faculty will increase the number of federal, state and private organization grants submitted and awarded
24. Faculty will increase the number of research contracts with food industry firms
25. Faculty will work with the food industry to increase monetary and equipment gifts
26. Faculty will involve researchers outside the Department in research efforts
27. Establish industry advisory committee and solicit input about food industry research needs

Goal #4: *Establish educational excellence in the curricula*

Reference to UT Strategic Plan

59. Revise curricula to be relevant for 21st Century
- 59.b. Assure bachelor's graduates ready for workplace
- 59.c. Assure bachelor's graduates ready for graduate/professional school
- 59.d. Strive for bachelor's degrees @ 120 hours required

Assessment Measures

- Reduce graduation requirement from 132 credit hours
- Identify FST courses that meet University General Education Requirements
- Survey FST graduates to determine effectiveness of undergraduate curricula
- Monitor changes made in FST curricula
- Change in number/percentage of graduates entering graduate, professional school, and food industry careers

Plan of Action

28. Revise undergraduate curricula to conform with the University General Education requirements
29. Encourage faculty to revise courses for consideration as Writing Intensive, Oral Communication, Quantitative Reasoning and Natural Sciences general education courses
30. Faculty will regularly discuss changes needed in FST courses
31. Establish industry advisory committee and solicit input about student educational needs

Goal #5: *Increase outreach programs with the food manufacturing industry, food service industry and consumers.*

Reference to UT Strategic Plan

45. Provide state-of-the-art educational programs using basic and applied research in agriculture, family and consumer sciences, resource development and 4-H programs in all 95 counties

Assessment Measures

Amount of printed and web-based information developed

Number of workshops and training programs presented

Number of value added food products developed and marketed

Plan of Action

32. Respond to needs of the food production and processing industry

33. Develop food safety and food security programs for consumers and the food industry

34. Assist food producers with value added food product development

Forestry, Wildlife and Fisheries

Unit Mission Statement

To advance the management, utilization, and appreciation of natural resources in Tennessee, the region, and beyond through our programs in teaching, research, and extension.

Goal #1: *To attract and retain the best and brightest students interested in natural resources education, research, and careers.*

Reference to UT Strategic Plan

1. Higher student entry scores

1.a. Raise core units' GPA

15. Higher student satisfaction index

Assessment Measures

Track enrollment by majors, race, gender, and residence

Exit interviews of graduating students conducted each semester by Department Head.

Track entering students SAT and ACT scores.

Alumni surveys, exit interviews, capstone course evaluations and results, and placement of graduates, and employer surveys.

Plan of Action

35. Develop and implement department recruiting plan with the CASNR office.
36. Implement the engaged student approach to learning.
37. Partner with UT Extension to identify qualified students
38. Continue Spring Camps for Forestry and Wildlife and Fisheries majors.
39. Implement a student led mentoring program for first and second year students.
40. Continue the internship program with employer feedback.
41. Continue application of theory in field setting, and continue block scheduling to allow for cohort group to work on long term projects in team building exercises.

Goal #2: *To attract and maintain a full complement of recognized scientists and teachers with regional and national reputation for academic excellence.*

Reference to UT Strategic Plan

19. More named professorship award recipients
20. More postdocs in Science, Engineering, & Health
24. More overall minority staff (admin/exec/mgr/professional)
25. Raise faculty salaries to peer average
26. Raise staff salaries to peer average

Assessment Measures

Track faculty and staff turnover

Compare faculty salaries annually with all southern natural resources programs.

Increase the number of post docs.

Plan of Action

42. Seek external funds to support professorships, faculty development, and improved facilities.
43. Conduct national searches for all faculty positions as they become available.
44. Review salary comparisons annually with all natural resources programs in the southeast US.
45. Offer competitive salaries, start-ups, and incentives to new hires.

46. Implement facilities improvement plan with CASNR, TAES, and Extension.
47. Continue the faculty mentoring program.
48. Seek grants to support post doctoral positions.
49. Tract faculty professional development activities.

Goal #3: *To continue to seek opportunities for the upgrade of our capabilities and increase our funding.*

Reference to UT Strategic Plan

27. Increase total grant & contract dollars awarded
- 27.b. More partnering with UT-Battelle/ORNL
33. More direct Federal appropriations & earmarked funds

Assessment Measures

Review and account our external funding and levels.
Monitor expenditures for each budget category.

Plan of Action

50. Increase the CESU partnership with more federal agencies and universities.
51. Recruit more involvement of the US Forest Service Forest Inventory Unit in our research and education programs.
52. Seek opportunities to strengthen alliances with the ORNL, especially in the area of forest products.
53. Work with faculty to develop grants with budgets that reflect needed expenditures to conduct research, teaching, or extension programs.

Goal #4: *To expand our graduate program, including the addition of a PhD program.*

Reference to UT Strategic Plan

1. Higher student entry scores
9. More international students
27. Increase total grant & contract dollars awarded
46. More graduates in critical shortage areas who stay in TN

Assessment Measures

Track graduate student entry scores.

Track diversity of graduate students body by discipline, gender, race, and country or state of origin.
Review grant and contract awards, submissions, and expenditures as related to graduate student support.
Collect Tennessee employer needs via employer survey.

Plan of Action

54. Increase recruitment of high ability graduate students.
55. Increase CESU partnership with outside federal agencies and universities
56. Host Advisory Board annually and submit input regarding future employment opportunities
57. Implement a departmental international plan for the future

Goal #5: *To develop academic centers of excellence with increased collaboration and partnerships with federal agencies.*

Reference to UT Strategic Plan

18. More endowed chairs/professorships (funded with at least \$500K each)
19. More named professorship award recipients
20. More postdocs in Science, Engineering, & Health
27. Increase total grant & contract dollars awarded
33. More direct Federal appropriations & earmarked funds

Assessment Measures

Track expenditures annually by mission area, discipline, and sources of funding

Plan of Action

58. Increase partnerships through the existing Cooperative Ecosystem Studies Unit, the US Forest Service -Forest Inventory Analysis Unit, and other cooperative agreements.

Goal #6: *To expand and improve our facilities.*

Reference to UT Strategic Plan

51. More capital additions to endowments

Assessment Measures

Review changes and improvements in facilities and equipment inventories annually.

Review expenditures on facilities and equipment.

Plan of Action

59. Conduct faculty satisfaction survey regarding facilities in 2005 and 2010.
60. Develop a five year facilities plan for improvement with priorities clearly identified and estimated costs projected.

Plant Sciences

Unit Mission Statement

To discover, develop and disseminate knowledge and technologies to serve the teaching, research and outreach needs of students, stakeholders and peers in the agronomic and horticultural plant sciences.

Goal #1: *Recruit and retain high quality faculty and staff.*

Reference to UT Strategic Plan

19. More named professorship award recipients
22. More overall minority faculty
24. More overall minority staff (admin/exec/mgr/professional)
25. Raise faculty salaries to peer average
26. Raise staff salaries to peer average

Assessment Measures

Monitor faculty and staff turnover.
Monitor faculty and staff salaries.
Monitor faculty and staff professional development opportunities.
Monitor faculty and staff awards and certifications.

Plan of Action

61. Work with faculty and OED to insure proper composition of search committees.
 - a. Work closely with committee chair to insure that thorough and proper searches are conducted.

62. Work with CASNR, TAES and TENEXT administration to provide competitive salaries and start up packages.
63. Use discretionary funds to support involvement of faculty and staff in professional development opportunities.
64. Work with administration to modernize teaching equipment and facilities.
65. Insure that appropriate senior faculty mentors are paired with junior faculty and promote close interactions between mentor and mentee.
66. Utilize performance reviews to acknowledge excellence and to constructively identify areas for needed improvement.

Goal #2: *Recruit and retain a diverse undergraduate and graduate student population that is academically prepared for a relevant and rigorous curriculum.*

Reference to UT Strategic Plan

1. Higher student entry scores
5. Higher 6-year persistence-to-graduation rates
8. Better prepared in-state transfer students
13. Higher overall minority enrollments (UG, G, & professional)
14. More private and institutional dollars for scholarships

Assessment Measures

Track enrollment by majors, permanent residence, race, and gender.

Track incoming student test scores (ACT/SAT for undergraduates and GRE for graduate students) and grade point averages (high school core for undergraduates and collegiate gpa for graduate students).

Track percent of each class on academic review to monitor progress of students.

Monitor GPA's and transcripts of transfer students.

Plan of Action

67. Work closely with faculty to promote recruitment of outstanding high school students.
68. Work closely with selected Extension Agents to recruit outstanding high school students, particularly those who are minorities.
69. Identify promising undergraduate students and involve them in the CASNR Honors program.
70. Improve departmental web page for the purpose of recruiting outstanding high school students and transfer students.

Goal #3: *Improve scholarship and stipend support for, and increase research and other scholarly activity of undergraduate and graduate students.*

Reference to UT Strategic Plan

- 3. More students in revamped Honors Program
- 31. More interdisciplinary research
- 47. More donors
- 48. Higher percentage of alumni giving to UT
- 49. More private gift dollars

Assessment Measures

Track the number of undergraduate students participating in the CASNR Honors Research and Creative Achievement Program.

Track the number of graduate assistantships arising from grants and contracts activities.

Monitor scholarship and stipend rates in comparison to those of peer institutions.

Track the number of undergraduate and graduate students who are making presentations at regional and national professional meetings.

Plan of Action

- 71. Work with undergraduate advisors and selected other faculty to encourage promising undergraduate students to participate in the CASNR Honors program.
- 72. Work with UTIA Development Office to cultivate donors for:
 - a. competitive graduate stipend enhancement funds, and
 - b. funding to cover expenses associated with campus visits of prospective graduate students.
- 73. Encourage faculty to include graduate students stipends in funding proposals.
- 74. Require of faculty that all graduate students will have journal article(s) written and submitted for publication before the theses are signed.

University of Tennessee Agricultural Experiment Station

Unit Mission Statement

The UT Agricultural Experiment Station is a statewide division of the UT Institute of Agriculture. Created by the Hatch Act, the Experiment Station is funded by state and federal appropriations as well as extramural sources. Its mission is to enhance the economic viability of the state and nation, foster the wise use of natural resources and improve the quality of life for rural populations through technological advances stemming from research and development in agriculture and related areas.

The Experiment Station conducts applied and basic research on the Knoxville campus and at 11 field laboratories located throughout the state. It collaborates through multi-state research projects with Land Grant Universities throughout the nation. Additionally, it collaborates with the UT Extension Service in the transmission of technological developments through outreach programs.

Goal #1: *Establish research excellence across the continuum from basic to applied agricultural sciences and natural resources.*

Reference to UT Strategic Plan

17. More faculty awards in Arts, Humanities, Science, Engineering, & Health Sciences

27. Increase total grant & contract dollars awarded

Assessment Measures

Number of refereed journal articles published

Number of regional and national awards to faculty

Number of highly competitive grants secured

Plan of Action

75. Recruit and retain high quality faculty and staff

- a. Provide competitive "start-up" packages for new faculty to assure an effective start to their research programs.
- b. Assure merit driven remuneration levels commensurate with other Land Grant Universities in the region.
- c. Provide professional development opportunities.

76. Upgrade research equipment and facilities.

- a. Provide additional greenhouse facilities for use by plant science faculty.
- b. Assure that at least \$1 million is committed to new research equipment each year.

Goal #2: *Expand the Experiment Station's financial and public confidence resource base.*

Reference to UT Strategic Plan

- 27. Increase total grant & contract dollars awarded
- 33. More direct Federal appropriations & earmarked funds
- 41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships
- 49. More private gift dollars

Assessment Measures

- Growth in extramural funding
- Number of grant applications
- Percent of faculty who secure extramural funds
- Number of USDA Impact citations
- Number of statewide public forums addressed

Plan of Action

1. Expand extramural funding by 8% annually
 - a. Develop and continually upgrade incentives for faculty who are instrumental in securing extramural funds and enhancing the public perception of UT and the Experiment Station.
 - b. Redirect funding to toward priority areas
2. Promote the Experiment Station's value to the public
 - a. Develop a speakers' bureau to inform the public of current research activities and impacts.
 - b. Develop effective public relations materials both internally and through USDA Impact reports.

Goal #3: *Ensure that the Experiment Station's research and development activities result in tangible impacts for the state and nation.*

Reference to UT Strategic Plan

- 27.b. More partnering with UT-Battelle/ORNL
- 34. More US patents based on UT research
- 35. More licenses based on UT research
- 36. More royalties & associated income
- 37. More business start-ups based on UT research

Assessment Measures

Number of patent disclosures
Number of new companies started
Partnerships with entities in the private sector
Number of new varieties released
Value of licensing and royalty fees

Plan of Action

1. Develop multi-disciplinary research initiatives to consolidate resources into more complex systems.
2. Provide special funding for research efforts for which there exists a high potential for impacts.
3. Recognize disclosures and variety releases in annual evaluations.

University of Tennessee Extension

Unit Mission

UT Extension is an off-campus division of the UT Institute of Agriculture. It is a statewide educational organization, funded by federal, state and local governments, that brings research-based information about agriculture, family and consumer sciences, resource development, and youth development to the people of Tennessee where they live and work.

Because Extension emphasizes helping people improve their livelihood where they are located, most Tennesseans have contact with UT Extension through their local county Extension agents found in each of the 95 counties. Extension agents are supported by area and state faculty as well as by the educational and research resources and activities of the United States Department of Agriculture (USDA), 74 land-grant universities, and 3,150 county units throughout the nation. The stated mission of the system is to help people improve their lives through an educational process that uses scientific knowledge to address issues and needs.

Goal #1: *Expand Extension's resource base and public support by promoting Extension at all levels of government, securing new funding sources, and marketing our programs to the general public.*

Reference to Strategic Plan

41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships

Assessment Measures

Assessment of the growth of extramural grants and contracts.

Assessment of the county government contribution.

Number of contacts made to share strategic plan: county agricultural committees, state legislators, and identified civic, community, and business leaders across the state.

Plan of Action

4. Promote Extension at all levels of government.
 - a. Keep policy makers informed of the value of Extension by conducting four area meetings with county officials to share progress success and solicit their feedback and suggestions. This will be done in 2004.
5. Expand the funding base by identifying and securing alternative funding sources.
 - a. Increase grant funding by 8%.
 - b. Establish six new program development partnerships.
 - c. Evaluate current resource allocations and redirect the 5% of resources to program priorities.

6. Increase Extension's exposure and value by marketing our programs to the general public.
 - a. Final draft of marketing handbook will be completed by July 1, 2004, and it will include a three-year aggressive marketing plan that promotes mission, vision and accomplishments of the UT Extension Service.
 - b. This plan will be shared with faculty and staff by December 1, 2004.

Goal #2: *Optimize Extension's human potential by energizing internal processes, implementing a plan for staff development, recruiting and training volunteers, and valuing human resources.*

Reference to UT Strategic Plan

25. Raise faculty salaries to peer average
26. Raise staff salaries to peer average
41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships
42. Greater use of volunteers and students in UT Extension
45. Provide state-of-the-art educational programs using basic and applied research in agriculture, family and consumer sciences, resource development and 4-H programs in all 95 counties

Assessment Measures

Monitor the annual average salary of faculty and staff as compared to the Southeastern average salaries. This will be done on January 1 of each year. This evaluation will be based on current salary data from the region.

The extension MIS system will be used to assess the:

- Number of volunteers utilized in Extension programs.
- Number of volunteers trained.
- Number of staff receiving inservice training.

The ES-237 Report to USDA will be used to assess the:

- Ratio of volunteers to 4-H youth.
- Number of 4-H youth and adult volunteers providing leadership.

Plan of Action

7. Engage people and energize internal processes.
 - a. Increase communication within the organization by developing a monthly newsletter and disseminating minutes of monthly meetings with faculty and staff.
 - b. Change hiring and staffing processes to allow for three opportunity hires within the organization, thereby increasing organizational diversity.

- c. Have in place a committee to examine the reporting system with the draft recommendations by July 1, 2004.
- 8. Develop and implement a plan for staff development.
 - a. Provide all employees a choice to select up to five days of professional development by July 1, 2004.
- 9. Recruit, train, and empower volunteers.
 - a. 30 new volunteers will be trained to conduct educational programs with youth and adults by July 1, 2004.
- 10. Value human resources.
 - a. Develop a new award for innovative programming by July 1, 2004.
 - b. Use merit pay system.
 - c. Provide training for all middle managers regarding employee performance appraisals by July 1, 2004.

Goal #3: *Ensure quality, high-impact, needs-based programming.*

Reference to UT Strategic Plan

41. More Institute of Agriculture & Veterinary Medicine educational & research partnerships

Assessment Measures

UT Extension partners with TSU Cooperative Extension Program and UT Experiment Station to submit a combined Annual Accomplishment Report to our Federal partner, USDA. The Annual Review of the Extension Annual Accomplishment Report is completed by USDA program analysts, and it serves as an assessment of our impacts and reporting practices of those impacts.

Number of suggested improvements to Tennessee Annual Report (four suggested in 2003).

Number of required improvements to Tennessee Annual Report (none suggested in 2003).

Assessment of the programs and measured impacts provided to Tennesseans in the five USDA goals.

Assessments outside of USDA will include:

Number of partnerships with public and private organizations.

Number of people served through new partnerships with public and private organizations.

Plan of Action

- 11. Develop partnerships.
 - a. Develop five new collaborations and partnerships that promote high-impact programming.
 - b. Encourage the exchange of ideas and knowledge within the organization and with external partners through the expansion of the Extension Advisory Council by July 1, 2004.
- 12. Prioritize programs that meet the changing needs of a changing clientele.
 - a. Redirect resources for at least two educational events/activities by July 1, 2004.

- b. Conduct two workshops on creative teaching methods for 25 faculty and staff by July 1, 2004.
- 13. Establish and support state-of-the-art technology as a means to deliver information and high-impact programming.
 - a. Implement a statewide Extension technology plan by hiring six new professionals.
 - b. Annually commit \$500,000 to keep technology current.

Additional Comments

UT Extension's SACS plan coordinates closely with the 2001 Extension Strategic Plan, available at:
<http://www.utextension.utk.edu/administration/dean/default.htm>.