



4-26-2001

## University of Tennessee Board of Trustees Exhibit Records, 2001 April 26, Exhibits 1 - 7

University of Tennessee

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Office of the General Counsel and Secretary

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Telephone 865/974-3245  
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TO: Members of the Board of Trustees

FROM: Catherine S. Mizell  
Vice President, General Counsel and Secretary

DATE: March 28, 2001 

SUBJECT: 2001 Spring Board of Trustees Meeting  
1:00 p.m., Thursday, April 26, 2001  
The University of Tennessee at Martin  
Martin, Tennessee

The 2001 Spring Meeting of the Board of Trustees will be held at The University of Tennessee at Martin on April 25-26.

Trustee functions will begin Wednesday, April 25, with a noon luncheon. The enclosed schedule outlines events planned for Wednesday afternoon and Thursday. The Wednesday evening dinner will be at Boyette's at Reelfoot Lake. Very casual clothing (no ties) has been recommended.

A brunch and morning program are being planned for the spouses beginning Thursday at 9:30 a.m. A mailing giving additional information will be forwarded when plans are finalized.

Hotel accommodations have been reserved at the Hampton Inn in Union City. Please complete and return the enclosed reply form ***no later than April 10, 2001.***

Please call Linda Logan or me if you have any questions. We look forward to seeing you in April.

CSM:ll


Enclosures

cc: Members of the President's Staff  
Spouses of Trustees and President's Staff



Office of the General Counsel and Secretary  
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TO: Members of the Board of Trustees

FROM: Catherine S. Mizell   
Vice President, General Counsel and Secretary

DATE: April 12, 2001

SUBJECT: Spring 2001 Board of Trustees Meeting  
1:00 p.m., Thursday, April 26, 2001  
Ballroom, Boling University Center, Martin

This notebook includes the agenda and supporting materials for the April 25-26 Spring Meeting of the Board. Also included is a schedule of all meetings, social events, and transportation arrangements. Please bring the notebook with you if you wish to have the materials available at the committee and Board meetings.

Hotel reservations have been made at the Hampton Inn in Union City in accordance with your requests. We look forward to seeing you April 25-26.

CSM:ll

Enclosures

cc w/enclosures: President's Staff  
Spouses of Trustees and President's Staff

SCHEDULE OF EVENTS  
2001 SPRING BOARD OF TRUSTEES MEETING  
THE UNIVERSITY OF TENNESSEE at MARTIN

Wednesday, April 25, 2001

- 11:40 a.m.**     ***Transportation departs the Hampton Inn for campus***
- 12:00 noon     Lunch, 206 Boling University Center
- 1:00 p.m.     Faculty and Student Council meeting, Legislative Chamber, Boling University Center
- 2:45 p.m.     Advancement and Outreach Council meeting, 230 Boling University Center
- 5:30 p.m.     Reception, Hampton Inn, Union City
- 6:15 p.m.**     ***Transportation departs the Hampton Inn for Boyette's***
- 7:00 p.m.     Dinner at Boyette's, Reelfoot Lake
- 8:30 p.m.**     ***Transportation returns to the Hampton Inn***

Thursday, April 26, 2001

- 8:10 a.m.**     ***Transportation departs the Hampton Inn for campus***
- 8:30 a.m.     Continental breakfast, 206-B Boling University Center
- 9:00 a.m.**     ***Spouses' transportation departs Hampton for Chancellor's Residence***
- 9:00 a.m.     Finance and Administration Committee meeting, 206-A Boling University Center
- 10:30 a.m.**    ***Spouses' transportation departs for Barnett's Backyard Town***
- 10:30 a.m.    Break
- 10:45 a.m.    Academic Programs and Planning Committee, 206-C Boling University Center
- 12:00 noon    Lunch, Ballroom, Boling University Center (Trustees, staff, special guests and spouses)
- 1:00 p.m.**     ***Spouses' transportation departs campus for Waterfowl of Chenoa***
- 1:00 p.m.     Spring Board of Trustees meeting, Ballroom, Boling University Center

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## FOR IMMEDIATE USE

April 18, 2001

### UT Board To Meet On Martin Campus

MARTIN, Tenn.-- The University of Tennessee Board of Trustees will meet at UT-Martin April 26.

The meeting of the full board is scheduled for 1 p.m., CDT, in the ballroom of the Boling University Center. Committee and council meetings are set for the afternoon of April 25 and the morning of April 26.

Items to be considered include a resolution concerning the recently created UT Foundation and naming the UT-Martin Skyhawks' stadium.

The trustees also will receive an update on the current UT budget.

The schedule for other meetings, all in Boling University Center, is:  
-Faculty and Student Council, 1 p.m., April 25, Legislative Chamber of the center.  
-Advancement and Outreach Council, 2:45 p.m., April 25, Room 230.  
-Finance and Administration Committee, 9 a.m., April 26, Room 206-A.  
-Academic Programs and Planning Committee, 10:45 a.m., April 26, Room 206-C.

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**Contact:** John Clark (865-974-5186)

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ORDER OF BUSINESS  
2001 SPRING MEETING  
BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE

April 25-26, 2001  
1:00 p.m.

Boling University Center  
UT Martin

- I. Call to order and invocation
- II. Roll call
- III. Introductions and presentations
- IV. Report of the President
- V. UT Martin Report
- VI. Approval of minutes of prior meetings
  - A. Winter meeting of the Board, February 22, 2001
  - B. Executive Committee meeting, March 8, 2001
  - C. Executive Committee meeting, April 9, 2001
- VII. Unfinished business
- VIII. New business
  - A. Report of the Finance and Administration Committee
    1. 2000-2001 budget update
    2. Approval of University of Tennessee Foundation
    3. Report on facilities needs
    4. Filing of minutes of the February 21, 2001 UT Bowld Hospital Liaison Committee meeting
  - B. Report of the Academic Planning and Programs Committee
    1. Approval of proposal for new PhD with a major in Natural Resources (UTIA).

- C. Report of the Faculty and Student Council
- D. Report of the Advancement and Outreach Council
- E. Report of the Liaison Committees
  - 1. UT Chattanooga Liaison Committee
  - 2. UT Martin Liaison Committee

IX. Other business

- A. Announcement of future meetings:
  - 1. Annual meeting in Knoxville: June 27-28, 2001
  - 2. Fall meeting in Knoxville: October 4-5, 2001






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## MEMORANDUM

**TO:** Members of the Board of Trustees

**FROM:** J. Wade Gilley 

**DATE:** April 18, 2001

**SUBJECT:** Review of 2000-2001 Academic Year

Periodically, I try to provide information to the Board relative to the status of the administrative initiatives we have undertaken at the University. While many of these actions will be topics for discussion at the upcoming board meeting in Martin, I wanted to give you this information prior to the meeting so that you would have time to reflect on it.

Effective July 1, 2000, the Southern Association of Colleges and Schools approved the governance structure changing the University of Tennessee from seven operating units including four accredited universities to three accredited universities. (This was the final step following the Board of Trustees action February 3, 2000). This restructuring resulted in the following:

- *Streamlining efforts are now being effected, saving up to \$10 million per year in administrative costs.*
- *More than 10 high level (\$100,000+ per year) administrative positions have been eliminated.*
- *The central university-wide downsizing and de-emphasizing has occurred.*
- *Each of the three accredited universities – UT (Knoxville, Memphis and Tullahoma), UT Chattanooga and UT Martin has a better focused vision and mission.*

On August 28, 2000, the university launched a new emphasis on research at a forum in which strategic research themes were adopted. Nine major new centers of excellence in research were identified and funded. With \$56 million in university and state matching funds it is expected that this initiative will attract at least \$280 million in new federal research support over the next five to seven years. (Information in the five strategic themes and nine centers are available on request.)

**Four major searches were completed** this academic year to date.

- *Dr. Loren Crabtree (Colorado State) was appointed vice president and provost of the Knoxville Campus.*
- *Dr. Peter Alfonso (UNC-Greensboro) was appointed associate vice president for research.*
- *Dr. Nick Dunagan was appointed Chancellor of UT Martin completing the transition from the Conn administration.*
- *Mr. Buzz Peterson (University of Tulsa) was appointed men's head basketball coach at Knoxville.*

**July 2000 saw a new budget for the University of Tennessee.**

- *With state appropriations, student fees, and administrative savings, average salaries were increased 6.5% for faculty and 5% for staff. (According to a recent AAUP news release, faculty salaries nationally increased about 3.5% in 2000-2001.)*
- *The Tennessee General Assembly endorsed the university's research mission and appropriated \$30 million in matching funds over four years to support that vision.*

**At UT Chattanooga, a new surge in construction, private fundraising** and movement toward becoming the **nation's model metropolitan university** has taken place. The advancements include:

- *\$28.8 million in state funds for a new engineering and science building.*
- *\$45 million in a new public/private partnership to develop land south of Martin Luther King Boulevard and create several hundred new modern beds for UTC students.*
- *A new national model, university/county \$10 million public elementary school at no cost to the county or the university.*
- *The approval of a \$1.1 million grant from the university to UTC to develop a new metropolitan college to foster university/city/county partnerships beneficial to each entity. (These funds came from administrative savings from the streamlining.)*

**The University of Tennessee at Martin** came through an unusual year in great shape with new and vibrant leadership. The following are some of the positive developments at UTM this year.

- *Dr. Nick Dunagan was appointed Chancellor after a comprehensive and competitive national search.*
- *Enrollment was up at UTM, reversing a two-year downward trend.*
- *The university provided Martin a five year \$1.1 million grant (from administrative savings) to create a broad-based online degree program which will make UTM*

*the leader in Tennessee and in the UT system in providing on-line courses and degrees to working Tennesseans all across the state.*

- *A new cooperative agreement was developed between the UT Institute for Agriculture and the College of Agriculture at UT Martin promising new developments and efficiencies for both.*

**At UT Knoxville** several studies have been completed, several accreditations have been or are being renewed and other initiatives taken.

- *A study of residential housing at Knoxville conducted by a well recognized consultant under the supervision of vice president Phil Scheurer revealed that as much as \$163 million will be required to bring the approximately 10,000 beds at UTK up to health, safety and contemporary living standards. The study will be completed and a comprehensive recommendation will be provided to the Trustees at the annual meeting in June of 2001.*
- *A study of campus life, conducted by a special committee chaired by Professor Grady Bogue, has several significant recommendations for improving campus life. The university anticipates launching a special initiative this summer.*
- *Dean Marleen Davis (Architecture) has chaired the campus planning committee which is closing in on a highly regarded campus master plan scheduled to be presented to the Trustees in June of 2000. This committee has included students, faculty, administrators, trustees (Williams and Sansom) and members from the Knoxville city government including Mayor Ashe. The UT Athletic Department has been actively involved in the master plan development.*
- *A study of admission practices and recruiting has been completed utilizing the nationally known firm of Noel-Levitz and is producing an entirely new approach to student recruiting.*
- *A committee headed by Vice Provost Dr. Anne Mayhew has studied the organization of the Graduate School and is recommending changes that should streamline and simplify the process of applying and admission to graduate programs.*
- *The Commencement Ceremony has been streamlined. Each college will now hold individual ceremonies. The spring commencement should be shortened from 3 hours to no more than 1 ½ hours in length.*
- *UT New College, housed administratively in Knoxville but providing services to all UT units, will be up and operational by August. The first program offered through New College will be the UT Martin Bachelors of University Studies degree.*
- *Movement to implement a new computerized student information system is well underway and is headed by vice president Phil Conn.*
- *The facilities fee at Knoxville is funding major campus improvements including a major new plaza, new campus entrances, the modernization of classrooms and new investments in information technology infrastructure. (For example, \$300,000 from the facilities fee has been matched by the college of engineering to fully modernize all classrooms in engineering.)*

- *Knoxville has occupied the new space on Middlebrook Pike that, among other things, allowed for the demolition of several temporary buildings at the corner of Andy Holt and Volunteer boulevards.*
- *Ground has been broken for a new \$20 million student recreation center and the Thornton Student Athlete Center (both on Volunteer Boulevard) will be dedicated on April 21, 2001.*

**A new university-wide commitment has been made to diversity and equity** and the state of Tennessee has entered into a new agreement regarding the Geier Case.

- *Mr. Theotis Robinson was appointed vice president for equity and diversity.*
- *Ground has been broken for a new Black Culture Center.*
- *Dr. Frank Black has been appointed interim vice chancellor for academic affairs at UT Martin.*
- *Dr. Michael Blackwell, formerly chief of staff to the U. S. Surgeon General, has been appointed dean of the College of Veterinary Medicine.*
- *Mr. Richard Brown has been appointed vice chancellor for finance and administration at UTC.*
- *A special committee which includes two members of the Board of Trustees (Waymon Hickman and Rhynette Hurd) is reviewing all of the university's AA/EEO plans consistent with the new Geier agreement.*
- *The institution issued a report in November detailing the positive progress of the entire university system in providing opportunities for African Americans and other minorities while acknowledging that much more can be done.*

**State governmental relations has changed** with the appointment of Tom Ballard as vice president of governmental and public relations. (The positions of director of governmental relations, vice president for public service and associate vice president for public relations have all been eliminated.) Following are some changes brought about by this reorganization.

- *The UT National Alumni Association under the leadership of president Lynn Fain and associate vice president Dave Roberts has reorganized its Public Affairs Committee, expanded it to 100 members who are well known to the legislature, developed an elaborate electronic mail system, and provided alumni with talking points from time to time as needed with the changing winds of Nashville.*
- *The changed emphasis of the Alumni Magazine as it focuses on the new mission and vision of the university and how that relates to state, federal and private support.*

Many of you have been involved in these changes and for that I am deeply appreciative. While there may still be some rocky times ahead for the University, I am confident that with the dedication and commitment you have shown, the university will be able to make significant progress toward reaching its goals.

Thank you.

BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE

ACTION ITEM

DATE: April 26, 2001

COMMITTEE: Finance and Administration

CAMPUS/INSTITUTE: The University of Tennessee System

ITEM: Approval of FY 2001 Budget Revision

RECOMMENDATION: Approval

STAFF MEMBER: Sylvia Shannon Davis

SUMMARY: The University's FY 2001 budget has been revised to provide updated revenue and expenditure projections for the remainder of the year, including salary increases for faculty and staff. To save printing and duplication costs, the revised budget has not been reprinted at this time, but it will appear in the budget materials submitted to the Board in June.

BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE

ACTION ITEM

DATE: April 26, 2001

COMMITTEE: Finance and Administration

CAMPUS/INSTITUTE: The University of Tennessee at Martin

ITEM: Naming of UT Martin Football Stadium for Hardy Moore Graham

RECOMMENDATION: Approval

STAFF MEMBER: J. Wade Gilley

SUMMARY: Chancellor Nick Dunagan proposes that the UT Martin football stadium be named in honor of Hardy Moore Graham in recognition of his longstanding and generous financial support for UT Martin (see attached summary).

Proposal to the UT Board of Trustees  
To name the UT Martin Football Stadium  
In Honor of Hardy Moore Graham

The University of Tennessee at Martin requests approval to name the current Skyhawk football stadium in honor of long time supporter and donor, Hardy Moore Graham. Dating back to 1950 when legislation elevating UT Junior College to university level was first proposed to the Tennessee legislature, Hardy Moore Graham has supported the efforts of The University of Tennessee and The University of Tennessee at Martin. His efforts paved the way for UT Martin to become a four-year degree granting institution and his financial support has allowed for students from Northwest Tennessee to attend college and athletic programs to grow. His contributions exceed one million dollars. He has been financially contributing to UT Martin for 31 years and his latest gift of \$100,000 toward the football building fund reveals his love for athletics at the collegiate level. He has provided financial support to UT Memphis by establishing a scholarship endowment fund to assist students choosing to pursue the practice of medicine in rural areas.

Hardy M. Graham was born in 1912 in Meridian, Mississippi and after graduating from the University of Mississippi and completing law school, he located in Union City, Tennessee. He built a thriving Coca-Cola business in both Union City and Meridian, Mississippi. His generosity to his community and his adopted University, UT Martin, serves as an example to many.

**Outstanding Citizenship**

Young Man of the Year - Union City  
Past President Union City Industrial Board  
Past President UT Martin Development Committee - 1970-71  
Member of UT Martin Development Committee - 1969-72  
Past President Tennessee Municipal League  
Mayor of Union City  
Past Chairman Union City School Board  
Member - Senior Status - Union City Rotary Club  
Member UT Development Council 1972-75 and 1982-85  
UT Martin Homecoming Distinguished Service Award - 1989

BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE

ACTION ITEM

DATE: April 26, 2001

COMMITTEE: Finance and Administration

CAMPUS/INSTITUTE: The University of Tennessee System

ITEM: Resolution Concerning The University of Tennessee  
Foundation

RECOMMENDATION: Approval

STAFF MEMBER: Emerson H. Fly

SUMMARY: See attached Resolution.



RESOLUTION  
OF THE  
THE UNIVERSITY OF TENNESSEE  
BOARD OF TRUSTEES

**Proposed for Adoption on April 26, 2001**

WHEREAS, on September 28, 2000, a Charter of Incorporation for The University of Tennessee Foundation, Inc. ("UT Foundation) was filed with the Secretary of State for the State of Tennessee; and

WHEREAS, the UT Foundation is a nonprofit corporation formed for the exclusive purpose of benefiting the educational, research, and public service missions of The University of Tennessee and its constituent parts; and

WHEREAS, the assets and earnings of the UT Foundation may be used only for the benefit of The University of Tennessee; and

WHEREAS, upon permanent dissolution or liquidation of the UT Foundation, its Board of Directors shall cause all assets remaining after satisfaction of obligations to be transferred or conveyed to The University of Tennessee or its successor; and

WHEREAS, the founding members of the Board of Directors of the UT Foundation are the following distinguished Tennesseans and friends of the University: The Honorable Lamar Alexander, Mr. James W. Ayers, The Honorable Howard H. Baker, Jr., Mr. Emerson H. Fly, Mr. James A. Haslam II, Mr. Ben Kimbrough, The Honorable Ned Ray McWhorter, Mr. R. Clayton McWhorter, and Mr. William B. Sansom; and

WHEREAS, the President of the University and the Vice President for Development and Alumni Affairs are *ex officio* members of the Board of Directors of the UT Foundation; and

WHEREAS, the UT Foundation will provide flexibility and options to the University's private fund-raising efforts and thereby facilitate increased private giving to augment state and institutional funding for the University; and

WHEREAS, the UT Foundation joins a large number of foundations established to support the private fund-raising efforts of public universities, including many of the top-25 public research institutions;

NOW THEREFORE BE IT RESOLVED that the Board of Trustees of The University of Tennessee approves the following principles concerning The University of Tennessee Foundation, Inc., and its relationship to the University:

1. Effective July 1, 2001, all gifts to the University from private sources will be received by the UT Foundation, unless the donor expressly conditions the gift on receipt by the University.
2. The University reserves the right to accept or reject any gift, or the conditions of any gift, offered by the UT Foundation.
3. The University and the UT Foundation will enter into an operating agreement to govern the relationship between the two entities, including the coordination of fund-raising activities and the management and use of funds.

# The University of Tennessee Foundation

## The UT Foundation

The University of Tennessee Foundation, Inc., has been chartered through the state of Tennessee. Its officers

- ☛ receive no state tax dollars
- ☛ receive and manage gifts that are given to the university's academic and athletic programs
- ☛ promote private support for the university's programs, students, and faculty
- ☛ advance the cause of higher education in Tennessee
- ☛ assist the university in achieving excellence in its primary missions of teaching, scholarship, research, and public service

Effective July 1, 2001, all gifts to the university will be received by the UT Foundation. Gifts restricted for particular campuses and/or programs will flow through the foundation to the appropriate university accounts.

## Why is a foundation helpful?

The University of Tennessee Foundation

- ☛ provides a framework to support the needs of a large university fund-raising program. The University of Tennessee joins a large number of other universities (such as Florida, Georgia, Georgia Tech, Illinois, Indiana, and Wisconsin) in establishing a foundation to support private fund-raising
- ☛ adds a degree of flexibility and more options to the university's fund-raising efforts
- ☛ serves the university in partnerships and joint ventures
- ☛ allows the university to move more quickly to receive a gift or a buy, sell or lease real property when timing is critical
- ☛ is a vehicle to help secure additional private gifts that will augment state and institutional funds

## **Working relationships**

The University of Tennessee Foundation will work closely with the UT Development Council and the UT National Alumni Association's Board of Governors, both of which have helped the university raise private gifts and advanced the institution for more than 40 years. These organizations will be represented on the board of the UT Foundation. The foundation will serve all campuses and institutes of the University of Tennessee.

## **Leadership**

The UT Foundation will be led by a board of directors working in concert with the president of the foundation, Emerson H. Fly, who is also UT's executive vice president and chief operating officer. This board will be drawn from corporate and community leaders from across the state of Tennessee and the nation.

BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE

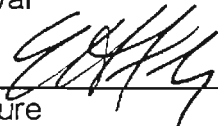
Date: April 26, 2001

COMMITTEE: Finance and Administration Committee

CAMPUS/INSTITUTE Knoxville

ITEM: Approval to convey Easements to the Knoxville Utilities Board

RECOMMENDATION: Approval

STAFF MEMBER:   
\_\_\_\_\_  
Signature

BACKGROUND

The Knoxville Utilities Board has requested Easements to relocate sewer trunk lines in preparation for construction of the City of Knoxville Convention Center.

The Easements will run along Cumberland to the East of Eleventh Street as shown on Exhibits "A". The University will have the use and enjoy the Easement Tract for any purpose that does not interfere with or endanger the use and operation of the sewer lines installed on the Easement Tract by KUB. The University is only giving KUB an easement over, under and across the Easement Tract. The Easement Tract will continue to be owned by the University.

Permanent Easement – 497 square feet  
Temporary Construction Easement – 8125 square feet



County of        KNOX  
 CLT Map No. 108D Parcel No. "4" 11  
 Deed Reference: Book 1131 Page 205  
 KUB Map No.: \*\*\*\*\*  
 KUB Field Book: \*\*\* Page: ..

Exhibit "A"  
 Scale: 1" = 50'

Prepared By: BWSC  
 Address: STE. 2400 1st. TN PLAZA  
KNOXVILLE, TN 37929  
 Date: 4-02-01 W.O. No.: \*\*\*\*\*  
 Chkd by:        Appd. by:       

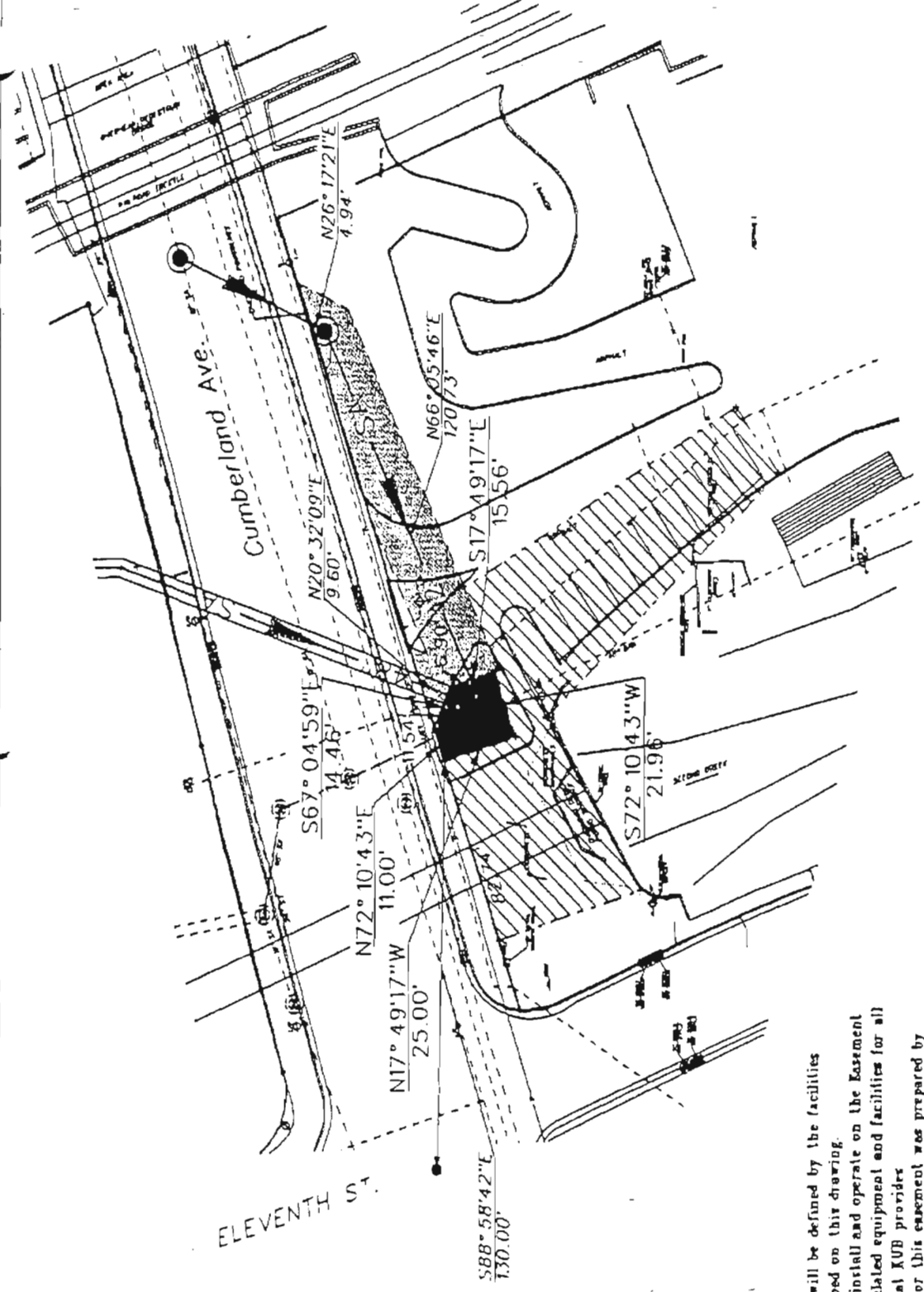
**BASIMENT NOTES:**

1. This utility easement will be defined by the facilities first installed and described on this drawing.
2. KUB has the right to install and operate on the Easement Tract utility lines and related equipment and facilities for all of the utility services that KUB provides.
3. The boundary survey for this easement was prepared by Gary C. Clark, RLS # 1327, Barge Waggoner Sumner & Cannon, Inc., Suite 2400, First TN Plaza, Knoxville, TN 37929.
4. Shaded area denotes permanent utility easement.
5. Hatched area denotes temporary construction easement.



ELEVENTH ST.

Cumberland Ave.



**BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE**

**ACTION ITEM**

**DATE:** April 26, 2001

**COMMITTEE:** Finance and Administration

**CAMPUS/INSTITUTE:** UT Health Science Center

**ITEM:** Filing of Minutes of the UT Bowld Hospital Liaison Committee

**RECOMMENDATION:** Acceptance and Filing of Minutes

**STAFF MEMBER:** Catherine S. Mizell  
Vice President, General Counsel and Secretary

**SUMMARY:** In accordance with hospital accreditation requirements, the minutes of the February 21, 2000, meeting of the UT Bowld Hospital Liaison Committee are submitted for filing.

MINUTES  
LIAISON COMMITTEE  
UT BOWLD HOSPITAL  
THE UNIVERSITY OF TENNESSEE

February 21, 2000

Members Present: Ms. Johnnie Amonette, Chair  
Mr. Rob Nolly  
Dr. Osama Gaber  
Dr. Fred Kraus, Jr.

Invited Guests: Mr. Bob Buck  
Dr. Jerry Thompson  
Ms. Roberta Mills  
Ms. Sara Hall  
Ms. Sheree Noffsinger  
Ms. Paula Spears

Members Absent: Mr. Bill Rice  
Mr. Jerry Jackson  
Mr. Arnold Perl  
Ms. Lucy Shaw  
Dr. Kevin Newman  
Mr. Wade Gilley

**Call to Order**

The quarterly meeting of the Liaison Committee of the UT Bowld Hospital was called to order by Mrs. Johnnie Amonette at 12:20 p.m. on Monday, February 21, 2000.

**Approval of Minutes**

The minutes of the November 15, 1999 meeting were previously distributed to members for review.

**MOTION WAS MADE AND SECONDED AND CARRIED TO RECOMMEND  
APPROVAL OF THE MINUTES AS WRITTEN, AND FORWARD TO BOARD OF  
TRUSTEES .**

**Financial Summary**

Mr. Buck presented the financial statement for both month and Year to Date for December, 1999. Mr. Buck presented the Statement of Revenue and Expense for the Periods ending December 31, 1999 and December 31, 1998. The Total Revenue for



December, 1999 was \$4,648,969, total expense for the same period was \$4,283,689, leaving a net income of \$365,280. This reflects a \$439,175 increase from the same period last year. Year to Date Revenue for December, 1999 was \$27,876,964, total expense for the same period was \$26,272,275, leaving a net income for the year of \$1,604,689. This reflects an increase of \$1,874,789 over the previous year. It was noted that these figures also reflect a decrease in debt on the Tennessee School Bond Authority loan for the ARA renovation. Ms. Amonette commented on this positive financial statement. Mr. Nolly thanked the medical staff for admitting their patients to UT Bowld and hospital staffs for rendering cost effective care.

### **Report from the Executive Director**

- The Medical Executive Committee minutes for November 10, 1999 and January 12, 2000 were presented for approval. Mr. Nolly noted the recruitment of Kerrye Allen to the position of Nurse Manager for Surgical Services. He also noted that Dr. Caroline Rielly had received the Distinguished Service Award at the Annual Medical Staff meeting in December, 1999.

### **COMMITTEE ACTION: MOTION WAS MADE, SECONDED AND CARRIED TO RECOMMEND APPROVAL OF THE MINUTES AS WRITTEN.**

- Mr. Nolly presented the form "ARA Physician Assessment" as approved by the Medical Care Committee and the Medical Executive Committee.

### **COMMITTEE ACTION: MOTION WAS MADE, SECONDED AND CARRIED TO RECOMMEND APPROVAL OF THE FORM PRESENTED.**

Mr. Nolly reported the following:

- Y2K precautions had been successful. There was one small dating problem with monitors in the CICU which was readily overcome.
- Redecoration of 5 Bowld is scheduled to begin next week.
- Employment advertising is utilizing a new approach. UT Bowld is posting available positions on the Job Net with WREG Channel 3 and has renewed the image advertisements in the *Commercial Appeal*.
- JOA Updates - Imaging JOA, the consolidation of nuclear medicine has been completed; feasibility studies continue regarding utilizing the Jesse Turner Tower; recruitment of an administrator for the Imaging JOA is underway
- Laboratory Service has completed the consolidation of microbiology testing within the MED; recruitment of an administrator for this service is also underway.

Negotiations regarding the acquisition of blood service from the MED continue.

- Cardiology Service discussion continue. The MED has secured the service of an outside consultant to validate their plans for re-establishing cardiology services. This would provide an opportunity for consideration of a JOA for diagnostic cardiology services. Discussion was held regarding the payment system for cardiology patients. It was noted that the expenses would be shared based on utilization by each institution.

Ms. Amonette reported on the recent program announcement requesting that the public schools help the students focus on healthcare careers. Discussion was held regarding the impact of St. Jude's expansion and the need for more allied health professionals.

### **Credentials Committee Recommendations**

Mr. Nolly presented 33 initial applications and 19 reappointment applications for medical staff membership and 2 allied health reappointment applications.

**COMMITTEE ACTION - A MOTION WAS MADE AND SECONDED TO APPROVE THE CREDENTIALS COMMITTEE RECOMMENDATIONS AS PRESENTED.**

### **Quality Council Report**

Ms. Mills presented the October and November, 1999 minutes for approval. She noted the proposed change in the physician consultation form, the vascular access quality improvement opportunity identified, the plan to work with the Mid South Foundation for Healthcare PPO to review pneumonia and congestive heart failure, patient satisfaction surveys regarding the outpatient ambulatory care unit, the call center study regarding access and availability of physicians and the ORYX indicator selection process.

**COMMITTEE ACTION - A MOTION WAS MADE AND SECONDED TO APPROVE THE QUALITY COUNCIL MINUTES AS PRESENTED.**

### **Continuing Education**

Paula Spears, Manager for Quality Improvement, gave a brief summation of the results of the most recent patient satisfaction survey. Discussion was held regarding possible improvements.

### **Chair's Comments**

Ms. Amonette noted that the recent Winter meeting of the Board of trustees was successful and that Mr. Rice had done a great job with the restructuring committee.

She further congratulated Sheree Noffsinger on her CPHQ certification.

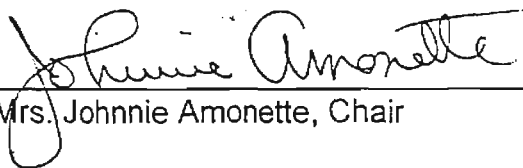
**Next Meeting Date**

The next meeting will be held on May 15, 2000.

**Adjournment**

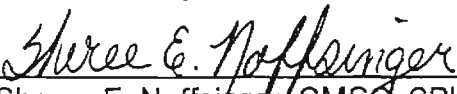
There being no further business, the meeting adjourned at 1:30 p.m.

Respectfully submitted:

  
\_\_\_\_\_  
Mrs. Johnnie Amonette, Chair

\_\_\_\_\_  
Robert J. Nolly, Acting Executive Director

Prepared by:

  
\_\_\_\_\_  
Sheree E. Noffsinger, CMSO, CPHQ

**BOARD OF TRUSTEES  
THE UNIVERSITY OF TENNESSEE**

**Action Item**


**DATE:** 26 April 2001

**COMMITTEE:** Academic Programs & Planning

**CAMPUS/INSTITUTE:** UT (College of Agricultural Sciences & Natural Resources)

**ITEM:** Proposal for a Program of Study Leading to the Degree of Doctor of Philosophy (Ph.D.) With a Major in Natural Resources

**RECOMMENDATION:** Approve & Forward to THEC for Approval

**STAFF MEMBER:** Robert A. Levy  
Signature 

**BACKGROUND:** This proposal is for a PhD program to be located in the College of Agricultural Sciences and Natural Resources, Department of Forestry, Wildlife and Fisheries. The proposed program is part of one of UT's thematic areas of excellence, one of 33 outstanding academic departments.

The program will be almost unique in the United States—an interdisciplinary program aimed at identifying and solving a variety of inter-related natural resource issues: sport and commercial fisheries/aquaculture; recreational and sustainable forest industries; wildlife management. It will specifically work with a variety of Tennessee state government agencies and industries, and consumer groups to insure Tennessee's short-term and long-term economic development.

The department recently created a multi-agency Ecosystems Studies Unit, to complement the regional US Geological Survey Field Laboratory begun in the 1980's. Recently, the USDA Forest Service decided to relocate its 200+ person research station in Knoxville. These units constitute a major source of research for faculty and students.

There are relatively modest implementation costs for this proposal: some additional faculty lines, two graduate students, and some laboratory equipment upgrades. These costs should be recovered by the program (the department currently has \$4.56 million in grant support, a figure that should rise significantly with a doctoral program).

Dr. Ted Howard, University of New Hampshire, served as consultant for the proposal and gave it his unconditional recommendation.

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**PROPOSAL FOR THE INITIATION OF A  
NEW DEGREE PROGRAM**

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Submitted by

The University of Tennessee, Knoxville

College of Agricultural Sciences and Natural Resources  
Department of Forestry, Wildlife and Fisheries

**A NEW PROGRAM LEADING TO THE DEGREE OF:**

Doctor of Philosophy                  Natural Resources

CIP/T/SEC Code

Ph.D.  
Formal Degree Abbreviation

Ph.D. with Major in Natural Resources  
Degree Designation on Student's Transcript

August 1, 2001

**ABSTRACT**

**DEGREE PROGRAM**

Institution: The University of Tennessee, Knoxville

Division/Department: College of Agricultural Sciences and Natural Resources  
Department of Forestry, Wildlife and Fisheries

Program Leading to Degree of: Doctor of Philosophy with a Major in: Natural Resources

With Sub-Majors in: Not Applicable

Proposed Start-up Date: August 1, 2001 Total Credit Hours Required for Major: 72

New Courses Proposed: FOR 630, FWF 600, FWF 601, FWF 610, FWF 612

Number of New Courses: 5 Number of New Course Credit Hours: 12-24

Estimated Headcount Enrollment, FTE's, Graduates and Faculty for New Program

Year	Fall Full-Time Headcount	Fall Part-Time Headcount	Fall Full-Time Equated Students	Graduates	FTE Faculty Current	FTE Faculty New
1	6	0	6.0	0	22.25	0
2	10	0	10.0	2	22.25	0
3	10	1	10.5	1	22.25	.25
4	12	2	13.0	4	22.50	1.00
5	11	3	12.5	4	23.50	1.00

New Costs Generated By Program	Year 1	\$ 0
	Year 2	\$ 30,000
	Year 3	\$ 75,000
	Year 4	\$ 174,950
	Year 5	\$ 254,900

Accrediting Organization: Not Applicable

## INTRODUCTION

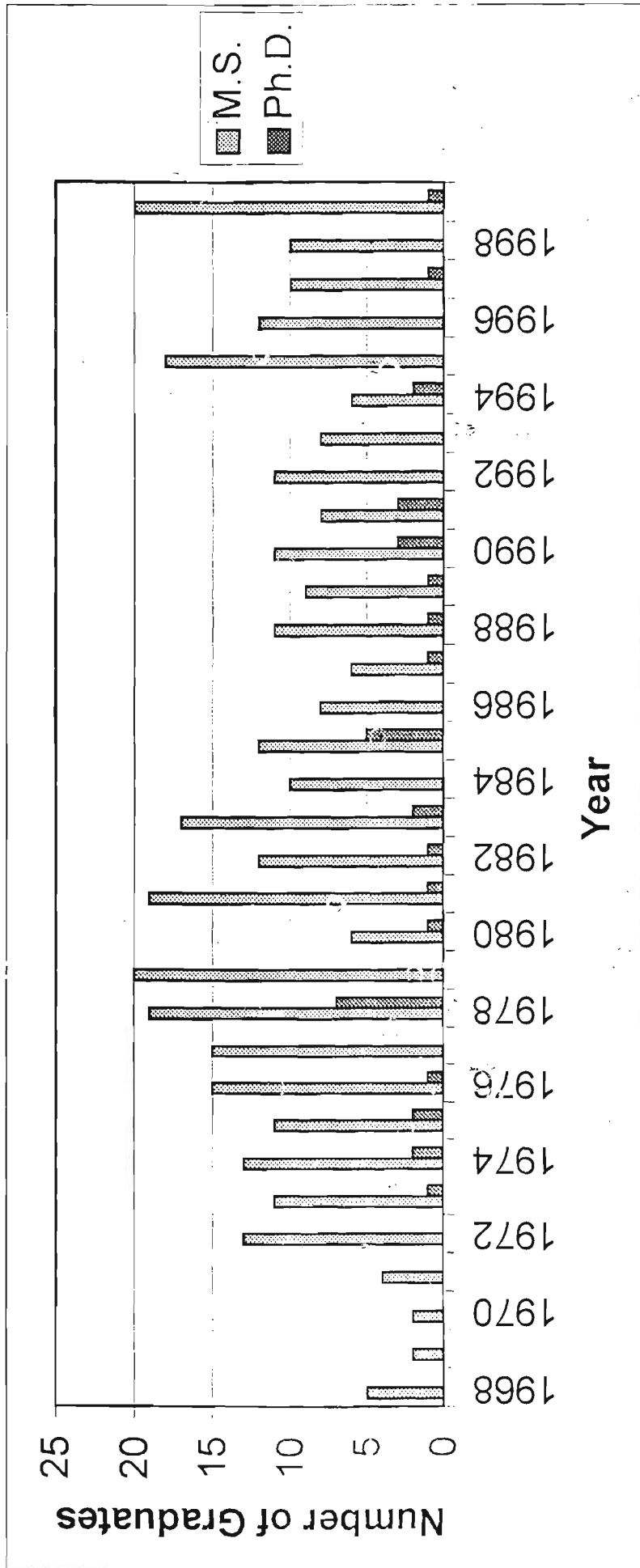
The University of Tennessee Department of Forestry, Wildlife and Fisheries (FWF) was established in 1964 as an integrated, multidisciplinary department emphasizing natural resource science and management. Since inception of a graduate program in 1966, FWF faculty members have supervised 390 completed graduate degrees – or approximately 12 degrees per year. Of these graduates, 319 were M.S. students within the department, 35 were Ecology masters students, and 36 were doctoral students in either Animal Science or Ecology (Figure 1). At the present time, faculty within the Department of Forestry, Wildlife and Fisheries are directing 40 M.S. and 6 Ph.D. students.

Several changes in the Department of Forestry, Wildlife and Fisheries, UT, and in the region have occurred during the last decade that have made this proposal for a Natural Resources Ph.D. program within the department necessary. The University of Tennessee identified Environment and Natural Resources as one of eight Thematic Areas of strength in research, scholarship, and creative activity in 1998 (Academic Affairs 1998). The UT Vice Chancellor for Academic Affairs and the Academic Deans recommended that the thematic areas be the focus of resource allocations within the university. FWF was identified as one of 33 outstanding programs within the university. Moreover, many of the Department of Forestry, Wildlife and Fisheries faculty hired during the last five years have no programs in which they can train doctoral students, due to changes in or elimination of existing Ph.D. programs at UT. Without a means of training doctoral students and developing research programs enhanced through doctoral-level research, the faculty will be limited in their ability to develop nationally or internationally recognized programs.

The Department of Forestry, Wildlife and Fisheries recently developed a strategic plan for 2000 – 2007, which was approved by the Vice President of the UT Institute of Agriculture. The primary mission of the department, as outlined in the strategic plan, is “to advance the management, utilization, and appreciation of natural resources in Tennessee, the region, and beyond.” Accomplishing this mission will require developing a strong doctoral education and research program and attracting outstanding graduate students in all disciplines.

Finally, a major change within the Department and College of Agricultural Sciences and Natural Resources is the addition of research stations or programs supported by the major federal natural resource agencies. The U.S. Geological Survey Southern Appalachian Field Laboratory (SAFL) has been on the UT campus since the 1980s and maintains a large research program pertaining to the management of the U.S. Department of Interior lands in the southern Appalachians. Recently, the Department of Forestry, Wildlife and Fisheries established a Cooperative Ecosystem Studies Unit with a number of federal agencies and universities. The Unit, which will be housed within the department, will develop collaborative research programs on ecosystem functioning and management between the member agencies and universities for the region. The third federal research unit with strong ties to the department’s research and teaching programs will be the USDA Forest Service, Southern Research Station, Forest Inventory and

Figure 1. Graduate degrees directed by Forestry, Wildlife and Fisheries faculty, 1968-1999.\*



\* Ph.D. graduates reflect students directed by FWF faculty in other program such as Animal Science, Ecology, and Plant and Soil Science.



Analysis Unit (FIA). This unit is responsible for periodically assessing the extent and conditions of the forests located within 13 southern states and for developing new technology and methodologies for conducting this work. The Forest Service will begin the multiple-year process of relocating the 200-person staff to Knoxville this year. All three of these research units will be involved in research efforts that provide a multitude of opportunities for doctoral-level research. The Ph.D. in Natural Resources would provide synergism between the research programs of UT and the cooperating agencies and offer a unique educational opportunity for doctoral students.

The Department of Forestry, Wildlife and Fisheries possesses a number of strengths that would support a doctoral program. The current departmental programs are recognized in Tennessee as being important to the environmental and economic well-being of the state. The department's research, education, and extension programs have been recognized by a number of state committees and task forces as high priorities for the state. These include the Governor's Council on Agriculture and Forestry (1996), the Governor's Forest Management Advisory Panel (1998), the University of Tennessee Academic Program Evaluation Committee (1998).

The structure of the department also provides a unique opportunity to address many of the current and future natural resource problems of the state and region. At a time when most natural resource professionals are recognizing the interdisciplinary nature of natural resource issues, the majority of natural resource programs in the South are organized on a disciplinary basis. The departments may be organized by general discipline – forestry, wildlife, fisheries – or one or more of the disciplines may not be represented on the campus. One of the primary strengths of the UT FWF Department is that the faculty have strived for interdisciplinary research, teaching, and extension since its establishment. Several courses are team-taught by faculty from more than one area including freshman-level introductory courses and the senior capstone course in natural resource planning. In addition to team-taught classes, students in all specialties within FWF are required to complete 25 hours of common courses to emphasize the interdisciplinary nature of natural resources management. Finally, a number of interdisciplinary research efforts have been developed. Most recently, a team of forestry and wildlife faculty began a multi-year project funded by the National Wild Turkey Federation to evaluate forest and wildlife management options for hardwood forests. Another multidisciplinary project that will involve 6-7 departmental faculty members was recently funded at \$1.2 million for 4 years to explore natural resource planning within Tennessee. Given this environment, Ph.D. students have opportunities to experience a unique educational program and become better prepared to address the more pressing interdisciplinary natural resource problems.

The past and current performance of the faculty in graduate education demonstrates that a doctoral program will flourish in the department. The department has been responsible for 354 M.S. students since 1968. Even without a departmental doctoral program, FWF faculty members have directed 36 Ph.D. students since 1973. At the present time, nine of the departmental faculty members are approved to direct doctoral students. The remaining departmental faculty have not sought approval to direct since there is not an appropriate campus outlet for them to direct Ph.D. students. Examining the graduate degrees by department within the College of Agricultural Sciences and Natural Resources further illustrates that the Department of Forestry, Wildlife and Fisheries maintains one of the largest graduate programs in the College.

## I. Program Description

### A. Program Goals and Objectives

The proposed Natural Resources Ph.D. degree program within the Department of Forestry, Wildlife and Fisheries at The University of Tennessee, Knoxville is designed to address national and regional needs in the area of multidisciplinary natural resource sciences and management. The Ph.D. will build upon the primary strength of the FWF department – an interdisciplinary approach to both teaching and research in natural resources. At a time when most natural resource issues are recognized as being interdisciplinary in nature, the FWF department at UT remains one of the few natural resource programs in the U.S. that consists of forestry, wildlife, fisheries, and forest products professionals.

Natural resources Ph.D. graduates, therefore, would be able to compete successfully for positions in both the public and private sectors. By emphasizing an interdisciplinary problem-solving approach while requiring a strong foundation in one of a myriad of specialized disciplines, the program will better prepare graduates to address natural resource issues comprehensively and develop scientifically-based solutions. Moreover, due to the required coursework in communications, teaching methods, and problem-solving, Natural resources Ph.D. students will be well-prepared for traditional academic positions.

The specific goals of the program are to:

1. provide a high quality doctoral training program in the state of Tennessee in the area of Natural Resources;
2. serve as a resource for the state, region, and nation in the area of interdisciplinary approaches to natural resource issues and management;
3. train highly skilled individuals to assume leadership roles in research, teaching, and service in natural resources; and
4. develop an educational program that emphasizes an interdisciplinary, science-based approach to solving natural resource problems.

These goals fit well within the mission of the University of Tennessee Institute of Agriculture. Specifically, the Institute's mission of "improving the quality of life, increasing agricultural productivity and income, protecting the environment, promoting the economic well-being of families, and conserving natural resources for all Tennesseans," will be enhanced substantially by the proposed Ph.D. program. This proposal will also address many of the issues raised by the President's Committee on the Future regarding the quality of graduate and professional programs

The program also helps to fulfill the mission of the FWF Department “to advance the management, utilization, and appreciation of natural resources in Tennessee, the region, and beyond.” The program directly addresses a goal outlined in the departmental strategic plan of establishing a departmental Ph.D. program.

## B. Curriculum Description

### 1. General Description

The Natural Resources Ph.D. program will emphasize interdisciplinary research approaches toward the understanding and management of natural resources in a broad context. Areas of study will include forest, wildlife, and fisheries biology; ecosystem function and structure; natural resource economics and policy; human dimensions of natural resource management; natural resource organization administration and management; forest products and wood science, and multidisciplinary natural resources management. The program will be located within and administered by the Department of Forestry, Wildlife and Fisheries. Faculty members from other departments within the College of Agricultural Sciences and Natural Resources and the university will be encouraged to join the Natural Resources Ph.D. faculty and serve as student advisors or committee members.

### 2. Admission Requirements

Applicants to the Ph.D. program normally should have completed a master’s degree prior to beginning the doctoral program. Specific admission requirements include:

- a. a minimum grade point average of 3.0 out of a 4.0 scale;
- b. a minimum composite score from the general Graduate Record Examination (GRE) on the verbal, mathematical, and analytical sections of 1650, with a minimum of 1100 on the verbal and mathematical sections;
- c. a statement of professional goals, natural resource management philosophy, and reasons for applying to the program; and
- d. three letters of reference from individuals capable of evaluating the applicant’s potential for graduate work in interdisciplinary natural resource management.

### 3. Program Requirements

- a. A candidate for the Natural Resources Ph.D. must complete 72 semester credit hours of coursework beyond the bachelor's degree. Forty-eight semester credit hours must be in graduate coursework approved by the student's doctoral committee. Up to 24 semester credit hours of master's-level coursework may be applied to the 48-hour requirement. In addition, 24 semester credit hours of FWF 600 - Doctoral Research and Dissertation - are required. A minimum of 6 semester credit hours must be taken in UT Knoxville courses at the 600-level, exclusive of dissertation hours.
- b. A doctoral committee consisting of at least four faculty members must be identified by the student and major professor. At least two of the committee members must be from the Department of Forestry, Wildlife and Fisheries and one member must be from an academic unit other than Forestry, Wildlife and Fisheries. Three of the committee members, including the major professor, must be approved by the Graduate School to direct doctoral research. The committee should be formed during the first year of the student's program.
- c. All students are required to successfully complete an oral and written comprehensive examination on all coursework completed as part of the Ph.D. requirements. The exam will be scheduled when the student has completed all or nearly all of the coursework. The Ph.D. committee will determine the content, nature, and schedule of the comprehensive exam and certify the results.
- d. During the first year, the student should develop a research prospectus that outlines the research problem to be addressed as part of their doctoral research. The prospectus will be presented to the student's committee and the committee will approve the research topic and approach.
- e. All students will be required to complete, present, and defend a dissertation. The student should provide each member of the committee a copy of the dissertation at least two weeks prior to the scheduled defense. All students will be required to present a seminar on their dissertation as part of the degree requirements. The seminar can be part of the dissertation defense or presented before the formal defense.

4. Program of Study

- a. All students in the program will be expected to complete the minimum number of credits within each of the areas as listed below.
- i. Research Methods and Analysis (9 credits in at least two of the subject areas)
    - Research/Experimental Design
    - Statistics/Econometrics/Biometrics
    - GIS Remote Sensing
  - ii. Core Subject areas (33 credits to be determined by Doctoral Committee)
  - iii. Professional Development (6 credits)
    - Teaching - All students will be expected to complete FWF 601 and assist in teaching a course during their tenure in the program.
    - Problem Solving – FWF 610 will be required of all doctoral students that will include participation in an interdisciplinary team to address a significant national or regional natural resource issue.
    - Professional Communications – all students will be required to complete FWF 612 as part of their program of study. Part of the seminar requirement will consist of assisting in the development and conduct of FWF 512.
  - iv. FWF 600 Doctoral Research and Dissertation (24 credits)

5. Retention Standards

A student admitted to graduate study must maintain a 3.0 grade point average on all classes taken for graduate credit. Failure to do so will result in one of the following actions.

- a. Probation – after completing nine hours of graduate credit, any student will be placed on academic probation when his/her grade point average falls below 3.0.
- b. Dismissal – If a student is on academic probation, the student's degree status will be terminated by the Graduate School if the student's semester grade point average falls below 3.0 in a subsequent semester.

5. Cycle of Course Offerings

All courses will be rotated on a two-year cycle within the Department of Forestry, Wildlife and Fisheries. At the present time, two of the Professional Development courses described above (FWF 601, FWF 610) will be rotated on a two-year cycle as well. If demand warrants, however, these classes will be taught annually. The third Professional Development class (FWF 612) will be offered annually in the fall.

A. First Academic Year (2001-02)

Fall Semester

Professional Development

FWF 601	Teaching Methods in Natural Resources (3)
FWF 612	Seminar in Forestry, Wildlife and Fisheries (1)

Core Subject Areas

FOR 512	Seminar (1)
FOR 570	Management and Policy of Forest Resource Organizations (3)
FOR 590	Advanced Topics in Forestry (1-3)
FOR 630	Forest Growth and Development (3)
FWF 590	Advanced Topics in Forestry, Wildlife and Fisheries (1-3)
WFS 512	Seminar (1)
WFS 530	Wildlife Diseases (2)
WFS 550	Fish Physiology (3)
WFS 590	Advanced Topics in Wildlife and Fisheries Science (1-3)

Research

FOR 593	Independent Study in Forestry/Forest Products (1-4)
FWF 600	Doctoral Research and Dissertation (1-15)
WFS 593	Independent Study in Wildlife and Fisheries Science (1-4)

## Spring Semester

### Professional Development

FWF 610 Seminar in Natural Resources (2)

### Core Subject Areas

FOR 520 Advanced Forest Tree Biology (3)  
FOR 530 Advanced Forest Resource Management (3)  
FOR 590 Advanced Topics in Forestry (1-3)  
FWF 540 Seminar on Integrated Resource  
Management (2)  
FWF 590 Advanced Topics in Forestry, Wildlife  
and Fisheries (1-3)  
WFS 545 Population and Habitat Analysis (2)  
WFS 556 Recirculating Aquaculture (3)  
WFS 590 Advanced Topics in Wildlife and  
Fisheries Science (1-3)

### Research

FOR 593 Independent Study in Forestry/Forest  
Products (1-4)  
FWF 600 Doctoral Research and Dissertation (1-15)  
WFS 593 Independent Study in Wildlife and  
Fisheries Science (1-4)

## B. Second Academic Year (2002-03)

### Fall Semester

### Professional Development

FWF 612 Seminar in Forestry, Wildlife and  
Fisheries (1)

### Core Subject Areas

FOR 512 Seminar (1)  
FOR 520 Natural Resource Issues at the  
International Level (2)  
FOR 580 Advanced Silviculture (3)  
FOR 585 Advanced Forest Biometry (3)  
FOR 590 Advanced Topics in Forestry (1-3)  
FWF 590 Advanced Topics in Forestry, Wildlife  
and Fisheries (1-3)  
WFS 512 Seminar (1)  
WFS 590 Advanced Topics in Wildlife and  
Fisheries Science (1-3)

## Research

FOR 593	Independent Study in Forestry/Forest Products (1-4)
FWF 600	Doctoral Research and Dissertation (1-15)
WFS 593	Independent Study in Wildlife and Fisheries Science (1-4)

## Spring Semester

### Professional Development

FWF 601	Teaching Methods in Natural Resources (3)
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### Core Subject Areas

FOR 570	Management and Policy of Forest Resource Organizations (3)
FOR 590	Advanced Topics in Forestry (1-3)
FWF 590	Advanced Topics in Forestry, Wildlife and Fisheries (1-3)
WFS 525	Endangered Species Management and Conservation of Biodiversity (2)
WFS 555	Fish Culture (3)
WFS 590	Advanced Topics in Wildlife and Fisheries Science (1-3)

## Research

FOR 593	Independent Study in Forestry/Forest Products (1-4)
FWF 600	Doctoral Research and Dissertation (1-15)
WFS 593	Independent Study in Wildlife and Fisheries Science (1-4)

## 7. Sample Curricula

Listed below are sample curricula for the the proposed Natural Resources Ph.D. program, assuming that the first students would begin Fall Semester 2001. Because a doctoral program of study depends heavily on the interests of the student and the research being conducted as part of the degree, it is important to remember that no two programs will be identical. Moreover, due to the wide range of disciplines within the department, the following curricula represent a only a fraction of the coursework that may be taken by Ph.D. students in Natural Resources.

A final consideration in developing the sample curricula is how to best address prior graduate work completed by doctoral students. The vast



majority of students admitted to the Natural Resources Ph.D. program will have earned a Master of Science degree before beginning doctoral work. To better represent the variety of students likely to complete the proposed program, the following Forest Management and Economics curriculum is designed for a student without any prior graduate education while the Wildlife curriculum is designed for a student who has completed a Master of Science degree prior to enrolling in the proposed Ph.D. program.

a. Forest Management and Economics Curriculum

Fall Semester 2001

ECON 511 (3)	Microeconomic Theory
FWF 512 (1)	Seminar
FWF 601 (3)	Teaching Seminar in FWF
STATS 571 (3)	Statistical Methods

Spring Semester 2002

ECON 512 (3)	Microeconomic Theory
ECON 582 (3)	Elements of Econometrics
FOR 530 (3)	Advanced Forest Management

Fall Semester 2002

ECON 583 (3)	Econometric Techniques
FOR 630 (3)	Forest Growth and Development
FWF 512 (1)	Seminar

Spring Semester 2003

FOR 610 (2)	Seminar in Natural Resources
FOR 580 (3)	Advanced Silviculture
FOR 585 (3)	Advanced Forest Biometry
PLANNING 530 (4)	Policy and Land Use Analysis

Fall Semester 2003

ECON 579 (1)	Environmental Policy Research Workshop
FWF 612 (1)	Seminar in FWF
POL 560 (3)	Public Budgeting and Finance
FWF 600 (3)	Research and Dissertation

Spring Semester 2004

AG ECON 525 (3)	Agribusiness Operation Research Methods
ECON 678 (3)	Economics of Environmental Policy
FWF 512 (1)	Seminar in Natural Resources
FWF 600 (3)	Research and Dissertation

Fall Semester 2004

FWF 600 (9) Research and Dissertation

Spring Semester 2005

FWF 600 (9) Research and Dissertation

b. Wildlife

Fall Semester 2001

BSE 555 (3) GIS & GPS Applications in Biosystems

FWF 601 (3) Teaching Seminar in FWF

WFS 530 (2) Wildlife Diseases

WFS 545 (2) Population and Habitat Analysis

Spring Semester 2002

EEB 577 (3) Landscape Ecology

EEB 583 (3) Zoogeography

FWF 600 (2) Doctoral Research

WFS 540 (2) Predator Ecology

Fall Semester 2002

FOR 630 (3) Forest Growth and Development

FWF 520 (2) Natural Resource Issues at  
International Level

FWF 600 (3) Doctoral Research

FWF 612 (1) Seminar in FWF

Spring Semester 2003

FOR 580 (3) Advanced Silviculture

FWF 600 (3) Doctoral Research

FWF 610 (2) Seminar in Natural Resources

WFS 525 (2) Endangered Species Management and  
Conservation of Biodiversity

Fall Semester 2003

FWF 600 (8) Research and Dissertation

Spring Semester 2004

FWF 600 (8) Research and Dissertation

8. Course Catalog Descriptions

The courses proposed for the Ph.D. program are listed below with their respective catalog descriptions.

**FOR 630. Forest Growth and Development. 3 hours.**

Forest stand dynamics, analysis of changes in species composition and forest stand structure (physical and temporal) during forest succession, how stands respond to disturbances (anthropogenic and natural), modeling techniques to make predictions of future stand development. Prereq: Undergraduate silviculture course, or consent of instructor. 2 hrs and 1 lab. F, A

**FWF 600. Doctoral Research and Dissertation. 3-15 hours.**

P/NP only. E.

**FWF 601. Teaching Methods in Natural Resources. 3 hours.**

Review of teaching and learning methods in natural resources education at the collegiate level. Methods for conducting lectures and laboratories in natural resources. Methods for student evaluation. Practicum in teaching. Prereq: Consent of instructor.

**FWF 610. Seminar in Natural Resources. 2 hours.**

Seminar required of all Natural Resources Ph.D. students on selected issues in natural resources and natural resource management at the regional, national, or international level. Focus will be on developing an interdisciplinary approach to addressing problems presented to students, including evaluation current state of knowledge, developing alternative actions to address the problems, and identifying criteria for evaluation of alternatives.

**FWF 612. Seminar in Forestry, Wildlife and Fisheries. 1 hour.**

Current issues and developments in forestry, wildlife and fisheries. Required of all doctoral students in residence during fall. May be repeated. Maximum 3 hrs. F

C. Evaluation

The proposed Ph.D. program will be evaluated based on the success in meeting the program objectives set forth in Section I. Program Description:

1. provide a high quality doctoral training program in the state of Tennessee in the area of Natural Resources;

2. serve as a resource for the state, region, and nation in the area of interdisciplinary approaches to natural resource issues and management;
3. train highly skilled individuals to assume leadership roles in research, teaching, and service in natural resources; and
4. develop an educational program that emphasizes an interdisciplinary, science-based approach to solving natural resource problems.

Program reviews will be conducted annually by the FWF Student Advisory Committee, the graduate coordinators for the department, and the department head. The department head will provide an annual report to the Dean of the College of Agricultural Sciences and Natural Resources and the FWF Advisory Board. A formal review will be conducted every five years in accordance to University and THEC policy. Table 1 lists the objectives to be evaluated, the information and information source needed for the evaluation, the responsible parties, and the frequency of evaluation.

#### D. Accreditation

There is no accreditation agency for a Ph.D. in Natural Resources at the present time.

The forestry curricula in the FWF Department, leading to the B.S. degree with concentrations in resource management and wildland recreation, has been accredited by the Society of American Foresters since 1969. The current accreditation was granted through 2006. The University of Tennessee is the only professionally accredited forestry program in Tennessee.

Table 1. Natural Resources Ph.D. Evaluation Framework

Objective	Information	Information Source	Responsible Party	Frequency
Provide a high quality doctoral training program in the state of Tennessee in the area of Natural Resources	Alumni Tracking Assistantships Student Applications and Admissions Entrance Requirements Scholastic Performance	Departmental Faculty; Graduate Coordinators	Student Advisory Committee; Graduate Coordinators; Department Head	Annual
Serve as a resource for the state, region, and nation in the area of interdisciplinary approaches to natural resource issues and management	Grants and contracts Publications resulting from dissertations Dissertations	Departmental Advisory Committee	Student Advisory Committee; Graduate Coordinators; Department Head	Annual
Train highly skilled individuals to assume leadership roles in research, teaching, and service in natural resources	Alumni Tracking; Alumni Survey Faculty/Student Awards	Departmental Advisory Committee	Student Advisory Committee; Graduate Coordinators; Department Head	Annual
Develop an educational program that emphasizes an interdisciplinary, science-based approach to solving natural resource problems	Course syllabi Exit Interviews with graduates Student Evaluations	Department Head	Student Advisory Committee; Graduate Coordinators; Department Head	Annual
Conduct formal review per University and THEC requirements	All Data Employee Survey	All Sources	Department Head, Dean, VP for Agriculture, THEC	Every Five Years

## II. Related Programs within the Institution

The primary source of doctoral candidates will be from natural resource departments like FWF. Undergraduate enrollment and productivity within the UT Department of Forestry, Wildlife and Fisheries are listed below:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
BS Forestry Degrees	24	20	25	13
BS Wildlife and Fisheries Degrees	44	33	32	20
BS Forestry Enrollment	98	79	88	82
BS Wildlife and Fisheries Enrollment	142	119	123	104
BS Forestry Credit Hours	2,743	2,724	2,624	2,251
BS Wildlife and Fisheries Credit Hours	805	657	654	610

Graduate enrollment and productivity within the UT Department of Forestry, Wildlife and Fisheries are listed below:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
MS Forestry Degrees	4	3	8	7
MS Wildlife and Fisheries Degrees	6	7	7	5
MS Forestry Enrollment	13	17	22	15
MS Wildlife and Fisheries Enrollment	18	20	22	18
MS Forestry Credit Hours	116	135	176	152
MS Wildlife and Fisheries Credit Hours	101	141	144	137

## III. Program Demand/Need

### A. Academic or Institutional Need Evidence

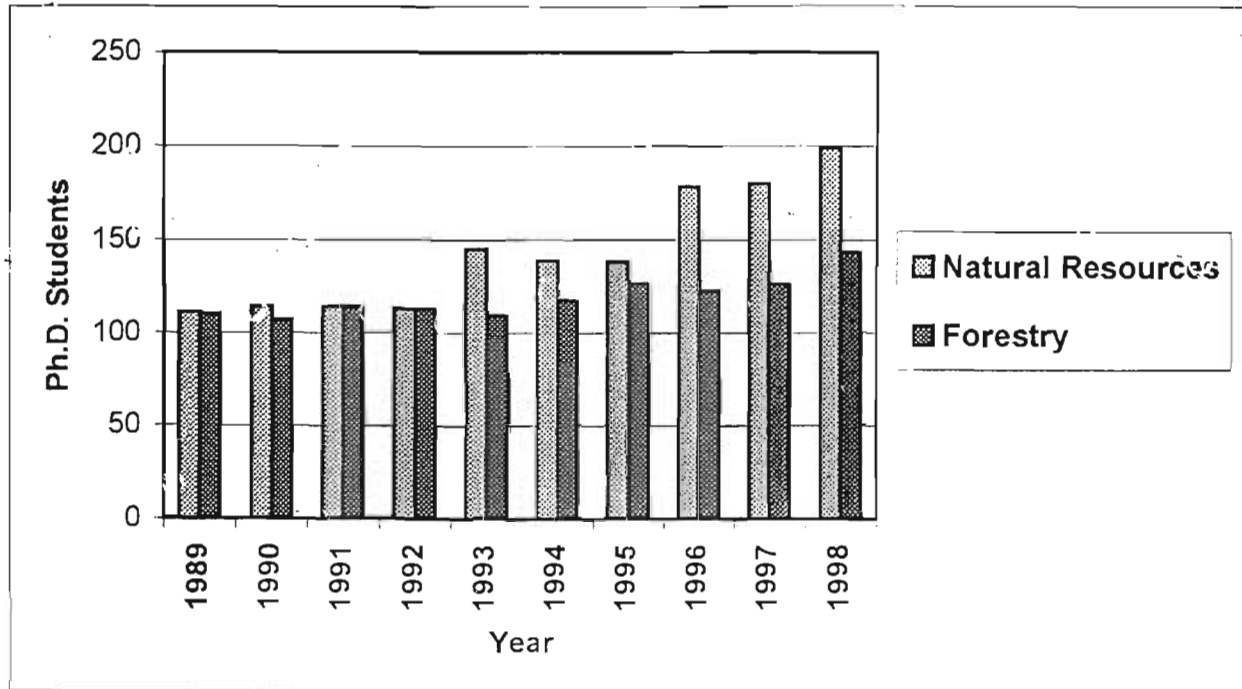
Establishing a Natural Resources Ph.D. within the Department of Forestry, Wildlife and Fisheries will address several important academic and institutional needs relative to natural resources and the environment. First, the degree will enhance the UT's Environment and Natural Resources thematic area of strength in research, scholarship, and creative activity. The degree will also reinforce the FWF Department's emphasis on interdisciplinary research and teaching. This approach is necessary to address the current range of natural resource issues in Tennessee, the region, and the nation.

## B. Student Demand

There is considerable evidence that a Ph.D. program with the Department of Forestry, Wildlife and Fisheries will meet a student demand that has existed at the University of Tennessee and within the region for some time. Prospective doctoral students frequently contact departmental faculty to inquire about the possibility of earning a doctorate within FWF. In fact, FWF faculty members have supervised 36 Ph.D. students in other departments such as Animal Science and Ecology since 1974. Moreover, FWF faculty are directing 6 current doctoral students with 2 additional students approved to begin in January 2001. Of these eight Ph.D. students currently enrolled or accepted into other UT programs, the majority are likely to switch into the Natural Resources Ph.D. program if approved. The department could have supported a larger number of doctoral students over this time period if a Ph.D. program had been available in Forestry, Wildlife and Fisheries. A number of prospective students opted for other institutions that could offer a doctoral degree titled natural resources, forestry, wildlife, or fisheries.

National graduation figures indicate a growing demand for Natural Resources Ph.D. programs. As Figure 2 illustrates, Ph.D. graduates in Natural Resources (wildlife, fisheries, recreation, water) increased by 79 percent between 1989 and 1998. Forestry (forestry, forest products) Ph.D. graduates increased by 30 percent over the same time period. Although the number of Ph.D. graduates in natural resources and forestry has increased, these trends do not hold for all specialties within natural resources and forestry. Specifically, doctoral graduates in mensuration, management and policy, recreation, and wood products has declined or remained relatively constant since 1989 (Table 3). These specialties are still in great demand by public and private employers, but most available doctoral programs are geared towards traditional disciplinary lines. As a consequence, the proposed interdisciplinary program at UT could fill a need of potential students and supply graduates better equipped to deal with the multidisciplinary nature of natural resource issues.

Figure 2. Natural resources Ph.D. degrees granted in the U.S., 1989-1998.<sup>1</sup>



<sup>1</sup>Source: National Association of Professional Forestry Schools and Colleges, 1999a.

Table 3. National Doctoral Graduates in Selected Disciplines within Natural Resources, 1989-1998.

<b>Discipline</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
Natural Resource Policy and Mgmt.					20	19	21	19	21	20
Parks\Recreation					15	16	12	16	17	16
Forest Management	28	27	26	24	23	19	20	23	23	19
Forest Mensuration	13	12	11	9	8	8	8	10	9	7
Wood Science	27	28	26	28	16	16	14	16	17	14
<b>TOTAL</b>	<b>68</b>	<b>67</b>	<b>63</b>	<b>61</b>	<b>82</b>	<b>78</b>	<b>75</b>	<b>84</b>	<b>87</b>	<b>76</b>

Source: Food and Agricultural Education Information System 1999.



### C. Employer Need

The demand for graduates holding the Ph.D. in Natural Resources in both the private and public sectors is projected to increase substantially for the foreseeable future. The U.S. Department of Labor, Bureau of Labor Statistics (2000) projects that the demand for forest and natural resource scientists will grow through the next decade. The strongest growth is expected to be in the areas of research and testing, due primarily to the increased interest in environmental quality and land management. Many of these positions will require graduates with a Ph.D. that emphasizes a strong multidisciplinary approach to natural resource management. Moreover, the recent creation of the Land Conservation, Preservation, and Infrastructure Improvement Program as part of the 2001 Appropriations Act (H.R. 4578) will result in millions of dollars of new funds available for natural resource work. Finally, as more natural resource issues become global in perspective the need for doctoral degrees is expected to rise as a Ph.D. is required for most international consulting assignments (Cubbage et al. 1999).

A study recently completed by Goeker et al. (1999) revealed that certain areas within all agricultural and natural resource disciplines will face greater demands for employees than the probable supply. These areas include specialists in management and finance, recreation, and water quality. Their conclusions are further supported by the placement data for the 1997-1998 academic year. Of the 61 forestry doctoral graduates for whom information was provided, 100 percent were employed. More than 90 percent of the doctoral graduates in other renewable natural resource disciplines were placed (National Association of Professional Forestry Schools and Colleges 1999b).

Another factor that will enhance employment opportunities for doctoral graduates is the aging federal government and university workforce. Many analysts note that a large percentage of the personnel within federal agencies and universities will be retiring within the next ten years. The U.S. Department of Labor, Bureau of Labor Statistics (2000) reports that obviously this will result in a number of openings for natural resource scientists, particularly foresters. At a recent seminar on personnel requirements of the major federal resource agencies, officials reported that over the next 5 years, the U.S. Geological Survey will experience 43 percent turnover, U.S. Forest Service 42 percent, and EPA 47 percent (80 percent of these being employees with advanced degrees). Within the Forest Service, projections of new employees with Ph.D.'s include 1900 within the national forest system and 500 in research during the next 5 years (Burns 2000). The USDA Forest Service notes in its recruitment information that

“... due to the active hiring in the 1960s and 1970s, many Forest Service employees are reaching retirement age. In addition, we believe that the bulk of the employment reductions are behind us and some disciplines should grow--especially those related to conservation, wildlife, and communications. As a result, we expect that employment opportunities

will increase over the next couple years. Over the past 5 years, even with our sharp reductions, we hired between 600 to 800 new employees to permanent positions each year. Over the next couple years we expect to exceed 1,000 new permanent hires each year.” (USDA Forest Service 2000).

Employment opportunities within universities are likely to increase as well. In fact, employment opportunities for faculty are projected to increase faster than the average for all occupations for the next decade (U.S. Department of Labor, Bureau of Labor Statistics 2000). This is due to expected increases in university enrollment due to demographic changes as well as the increasing number of faculty retirements during this period. More than 31 percent of all forest science faculty (and more than 52 percent of full professors) in the U.S. are 55 years or older. Similarly, 31 percent of all natural resources faculty and 50 percent of all full professors are at least 55 years of age. As a result, most natural resources and forestry departments will be facing a need for new Ph.D. graduates to fill faculty vacancies in the near future. The UT Department of Forestry, Wildlife and Fisheries provides an excellent example of this trend. Seven of the 20 full-time Ph.D. faculty in the department have been hired since 1995 due primarily to retirements. Three more retirements are expected to occur by 2005.

#### D. Societal Need

The increased national interest in natural resource management and the influence of human-impacts on the environment have resulted in a strong demand for natural resource graduates at all degree levels who can integrate a wide range of specialties to address resource management. A recent survey of employers of natural resource professionals identified several key skills needed for long-term success in the field of resource management. Most of these skills emphasized an integrated approach to natural resources and are major components of the proposed Ph.D. program (understanding of ecosystem-level planning, innovative approach to forest management, understanding of the requirements for a healthy ecosystem, ability to work in teams) (Sample et al 1999).

The natural resources of Tennessee have been the focus of several a major policy debates for many segments of the population. Concern over insect outbreaks, water quality, harvesting practices, chip mills, exotic species, reintroduction of species, and aquaculture have been highlighted in the news media within the states and the subjects of numerous policy debates in the state legislature. This interest level can be attributed to the importance of the state’s resources to several major economic sectors within the state and the extent to which state residents utilize these resources. A greater percentage of Tennesseans participate in forest-based wildlife recreation than any other state in the region (U.S. Fish and Wildlife Service 1998). As a consequence, providing the state with a doctoral training and research program aimed at enhancing the management of these resources is

critical. As the only research-based academic program in forestry, wildlife and fisheries in Tennessee, and as the flagship institution in the state, UT should become a national leader in providing doctoral candidates in natural resources.

E. Desegregation

Minorities are seriously underrepresented in the agriculture and natural resources fields (Valdez 1995). Less than 1% of the associate degrees in agriculture and natural resources granted nationally in 1990-1991 were conferred to African Americans (reviewed in Valdez 1995). The USDA Wildlife Services Workforce Plan (1998) reported, "And while Wildlife Services has tried to diversify its workforce, a significant diversity gap in the pool of qualified individuals from which to pull, has contributed to the program's inability to reflect US labor force changes."

We can reverse this low minority representation at the undergraduate level by enhancing the natural resource education of minorities at the PhD level. Wyche and Frierson (1990) describe approaches used to reach minority students. One of the biggest obstacles to higher minority enrollment in the sciences has been the lack of suitable minority Ph.D. mentors. Most of the minority students that continue in graduate school come from Historically Black Colleges and Universities (HBCUs). However, very few if any HBCUs have doctoral programs in Natural Resources. We are in a prime position to provide mentors and train more minority students at the doctoral level. In the Department of Forestry, Wildlife and Fisheries we have faculty members who have worked at or with HBCUs (Alabama A&M, Delaware State, Florida A&M Universities) and have had one previous employee recently hired at a nearby HBCU (Tennessee State University).

IV. Estimated Program Size

A. Estimated Headcount Enrollment, FTE's, and Graduates for New Program

Program Year	Full-Time Headcount	Part-Time Headcount	Total ETE	Total Graduates
Year 1	6	0	6.0	0
Year 2	10	0	10.0	2
Year 3	10	1	10.5	1
Year 4	12	2	13.0	4
Year 5	11	3	12.5	4

B. Basic Assumptions Used in Estimating Size of Program

Enrollment and graduation totals were estimated based on the following assumptions:

1. The initial enrollment estimates were based on 2 of the 6 doctoral advisees of departmental faculty transferring to the Natural Resources Ph.D. program and 4 new doctoral students enrolling as part of the USDA IFAFS grant described in Section IX.
2. Year 2 estimates are based on an additional 3 doctoral students enrolling as part of the USDA IFAFS grant and one additional student enrolling independently or on other support.
3. Two additional full-time students will enroll in year 3 and three in years 4 and 5.
4. One part-time doctoral student will enroll in the program annually, beginning in year 3, as part of the USDA Forest Service Forest Inventory and Analysis Unit relocating to Knoxville.
5. Two of the three year 1 transfer students will graduate at the end of year 2, the third student will graduate at the end of year 3.
6. Average tenure of doctoral students will be four years.
7. The program will experience an initial large cohort of doctoral students due to the IFAFS funding, but by year 5 enrollment will stabilize at 11-12 student FTE's and 3 graduates per year.

C. No Unnecessary Duplication/Location of Comparable Programs in Tennessee

There are no Ph.D. programs in Natural Resources in Tennessee at this time. In fact, the Department of Forestry, Wildlife and Fisheries administers the only undergraduate or graduate degrees in forestry in the state.

V. Faculty Currently Employed

A. Faculty Currently Employed in Department of Forestry, Wildlife and Fisheries.

Faculty currently employed who will be involved in teaching or advising doctoral students are listed below.

Name	Degree	Specialization	Years Teaching	Years At UT	FT/PT
Brian H. Bond	Ph.D.	Forest Products	3.0	3.0	FT
David S. Buckley	Ph.D.	Regeneration Forest Ecology	2.0	2.0	FT
David A. Buehler	Ph.D.	Avian Ecology and Management	11.0	10.0	FT
Joseph D. Clark	Ph.D.	Large Carnivore Ecology	9.0	9.0	FT
Wayne K. Clatterbuck	Ph.D.	Forest Management Hardwood Silviculture	5.0	5.0	FT
Boyd L. Dearden	Ph.D.	Computer and Systems Management	27.0	27.0	FT
J. Mark Fly	Ph.D.	Wildland Recreation Human Dimensions	18.0	8.0	FT
Craig A. Harper	Ph.D.	Habitat Management	2.5	2.5	FT
Ron L. Hay	Ph.D.	Silviculture	34.0	28.0	FT
Tom K. Hill	Ph.D.	Fisheries Management Aquaculture	23.0	23.0	FT
Donald G. Hodges	Ph.D.	Forest Economics Forest Management	11.5	1.5	FT
George M. Hopper	Ph.D.	Forest Biology	17.0	17.0	FT
Sammy King	Ph.D.	Wetland Ecology	0.5	0.5	FT
Steven A. Knowe	Ph.D.	Biometrics	1.0	1.0	FT
William Minser	M.S.	Wildlife Management	29.0	29.0	FT
William Moschier	M.S.	Forest Products	27.0	27.0	FT
Lisa I. Muller	Ph.D.	Deer Ecology and Management	4.5	1.5	FT
David M. Ostermeier	Ph.D.	Forest and Natural Resource Policy	27.0	27.0	FT
Michael Pelton	Ph.D.	Large Carnivore Ecology	33.5	33.5	PT
Scott E. Schlarbaum	Ph.D.	Forest Genetics	17.0	17.0	FT
Richard J. Strange	Ph.D.	Fisheries	23.0	23.0	FT
Frank van Manen	Ph.D.	Wildlife and Landscape Ecology	4.0	4.0	FT
Siquan Wang	Ph.D.	Forest Products	16.0	4.0	FT

J. Larry Wilson	Ph.D.	Fisheries Management Aquaculture	30.0	30.0	FT
Paul M. Winistorfer	Ph.D.	Forest Products	15.0	15.0	FT
Timothy M. Young	M.S.	Forest Products	15.0	15.0	FT

**B. New Faculty Required**

Two new faculty members will be needed in years 4 and 5 of the program to enhance the graduate program of the department once the doctoral program is established and functioning. One-quarter time of a scientist will be required beginning in year 3 to assist in teaching graduate courses. A number of retired faculty from FWF continue to assist in teaching and advising graduate students. The one-quarter time appointment will allow these individuals to continue to contribute to the department's research and teaching program. The expertise of the faculty members to be hired will be based on the needs outlined in the department's strategic plan which identified six needs to be filled. These grant competitive faculty will increase extramural funding to support the doctoral program. The specific area of research and teaching will be determined by the primary demands of potential students and research funding agencies at the time of hiring.

<b>Number of Faculty Needed</b>	<b>Highest Degree Earned</b>	<b>Anticipated Rank/Experience Desired</b>	<b>Area of Degree Specialty</b>	<b>Year of Program to be Employed</b>	<b>FT/PT</b>
one	Ph.D.	Assistant/Associate Professor	Forestry	4	FT
one	Ph.D.	Assistant/Associate Professor	Wildlife	5	FT

**VI. Administration and Organization of Proposed Program**

There are no administrative needs associated with establishing the proposed program. The FWF Department's current structure of one Head and one Associate Head will serve as the administrative structure for the Natural Resources Ph.D. program. Curriculum matters will be considered by the department's Student Advisory Committee and admission decisions will be administered under the present administrative structure for M.S. students. Two graduate coordinators – one for Forestry and one for Wildlife and Fisheries – will continue to serve as liaisons with Graduate Admissions and communicate the departmental admission decisions to the Graduate School.

## VII. Library Resources

The UT Libraries have a collection of more than 1 million titles and 1.98 million volumes to support faculty and student research. In addition to the book collection, the UT libraries contain approximately 14,000 serial titles and more than 2.3 microfilm materials. The collection is housed in the John C. Hodges Library and four branch locations. The Webster Pendergrass Agriculture Veterinary Medicine Library is the branch of most interest to the proposed program and was established in 1880. The Library currently contains nearly 130,000 volumes and subscribes to 2,000 serials and journals. Its collection includes all documents received from the U.S. Department of Agriculture through the U.S. Government Documents Depository Library Program. Pendergrass Library is open 86 hours each week during Spring and Fall semesters.

The FWF Department has maintained an active graduate and faculty research program for the last 30 years and the addition of the doctoral program is not expected to increase the demand for library resources. However, a donor has agreed to make a \$10,000 gift to the university libraries to support the Ph.D. in Natural Resources once approved. The donor's letter can be provided on special request. In addition to the increased funds, a number of special resources are available in the UT or Pendergrass collections including databases, catalogs, maps, slide sets, videotapes, and compact discs in support of instruction and research. Databases of particular importance to the Natural Resources Ph.D. program include Agricola, Biological Abstracts, CAB Abstracts, COMPUSTAT, Dissertation Abstracts, EconLit, EPADOC, Fish and Fisheries Worldwide, General Sciences Index, Web of Science, and Wildlife Worldwide. Access to library resources not held by UT is possible through Interlibrary Services.

## VIII. Other Support Resources

No additional support resources, space, or personnel will be required for the program beyond that provided by external funding.

## IX. Costs Estimates and Funding Sources

### A. Estimates of Costs

The estimates of costs generated by the new program entail the addition of one one-quarter time faculty member in year 3 and two new full-time faculty members in years 4 and 5 as outlined above. The cost of the new full-time faculty members was based on salary and benefits totaling \$79,950 and an initial start-up fund of \$20,000. The one-quarter time faculty will require an annual cost of \$20,000 for salary, benefits, and teaching research budget.

In addition to the faculty costs, the program will also require funding for two (2) doctoral-level assistantship beginning in year 2 of \$15,000 per assistantship and laboratory equipment upgrades for years 3-5 of \$25,000.

ESTIMATE OF NEW COSTS						
Compensation		Year 1	Year 2	Year 3	Year 4	Year 5
Administrative Compensation	Salary					
	Benefits					
	Total					
Faculty Compensation	Salary			\$15,385	\$76,885	\$138,385
	Benefits			4,615	23,065	41,515
	Total			20,000	99,950	179,900
Clerical/ Support Staff Compensation	Salary					
	Benefits					
	Total					
Library						
Equipment				25,000	25,000	25,000
Travel						
Other Start-up Funds					20,000	20,000
Graduate Assistantships			30,000	30,000	30,000	30,000
<b>TOTAL</b>			\$30,000	\$75,000	\$174,950	\$254,900



## B. External Funding Support

External funding for the doctoral program has been secured for the first four years of the program through the USDA Initiative for Future Agricultural and Food Systems (IFAFS). The IFAFS funding provides assistantships, travel and equipment, and notebook computers for seven doctoral students. Additional support will be sought through funding sources such as federal and state agencies (U.S. Department of Agriculture, USDA Forest Service, Fish and Wildlife Service, National Science Foundation, Tennessee Wildlife Resources Agency) and private foundations (Margaret Shackleford Charitable Trust, National Wild Turkey Federation). The department has led all UTIA units in extramural funding for the last four years and exceeded \$1.2 million in grant expenditures in 2000.

The department currently has \$4.56 million in grant support. Departmental faculty members have been successful in the past in securing adequate funds to support doctoral students in other programs across campus (Animal Science, Ecology, Plant and Soil Science). Establishing a doctoral program within the department is likely to enhance the competitiveness of faculty in competing for these funds on a national level.

## X. Costs/Productivity of Recently-Initiated Programs

Only two new degree programs initiated at UT fall within the time frame reviewed for this proposal. The first program is the Bachelor of Science degree program in Computer Engineering that was approved by THEC in Fall 1999 and began in Fall 2000. It is too new to have any available data.

The second program is the MArch program in Architecture, that was approved by THEC in August 1992 and began Fall 1994. The proposal's cost estimates were not adjusted for inflation, nor did they include Summer School (which includes some required MArch coursework). This MArch program has attracted very good students. The cumulative GRE score for students enrolled in the program has averaged 1815.

Projected and Actual Costs and Student number are provided below.

### Projected Costs (from 1992 proposal)

<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
\$146,050	\$151,250	\$171,350	\$263,780	\$276,380

Actual Costs

1994	1995	1996	1997	1998
\$99,525	\$177,824	\$199,680	\$186,463	\$203,973

Note: Actual costs in year 6 (1999) totaled \$200,548.

Projected Enrollments/Graduations (from 1992 proposal)

	Year 1	Year 2	Year 3	Year 4	Year 5
Entering Students	6	9	8	8	8
Enrollment	12	21	24	24	25
Graduates	0	5	5	8	10

Actual Enrollments/Graduations

	1994	1995	1996	1997	1998	1999	2000
Entering Students	7	12	9	14	7	7	14
Enrollment	7	19	23	24	21	21	27
Graduates	0	0		4	5	6	8

**XI. Consultants**

The original assessment of the need for a Ph.D. within the Department of Forestry, Wildlife and Fisheries was conducted by an ad hoc committee comprised of Drs. Buehler, Hodges (chair), Knowe, and Wilson (Assistant Dept. Head). After presenting their findings to the entire faculty, the committee was expanded to include Drs. Muller, Schlarbaum, and Strange and developed the original plan and proposal for the Ph.D. in Natural Resources.

Three individuals were identified by the Department of Forestry, Wildlife and Fisheries faculty who had experience as administrators in similar departments with doctoral programs and could serve as consultants. These individuals are listed below. Their biographical sketches are attached in the Appendix.

Dr. Frederick W. Cabbage  
Professor and Head  
Department of Forestry  
North Carolina State University  
Raleigh, NC

Dr. Theodore E. Howard  
Associate Professor and Chair  
Department of Natural Resources  
University Of New Hampshire  
Durham, NH

Dr. Daniel E. Keathley  
Professor and Chair  
Department of Forestry  
Michigan State University  
East Lansing, MI

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