

ANNUAL REPORT: June 1, 2011 – May 31, 2012
(i.e., Summer 2011, AY 2011-2012)
DEPARTMENT OF ENVIRONMENTAL AND FOREST BIOLOGY
SUNY-ESF

NAME: _____

I. INSTRUCTIONAL ACTIVITIES

1. Regular Course Offerings

	<u>Course No.</u>	<u>Title</u>	<u>Credit Hrs.</u>	<u>No. Students</u>	<u>No. of Lab. Sections</u>
SUMMER:	EFB 202	Ecol. Monitoring & Biodiversity Assess	3	139	2
FALL:	EFB 102	General Biology I Laboratory	1	269	14
	EFB 132	Freshman Orientation Seminar	1	105	2
SPRING:	EFB 103	General Biology II Laboratory	1	171	10

NOTE: PLEASE INDICATE WHICH COURSE(S) HAD A SERVICE-LEARNING COMPONENT AND BRIEFLY EXPLAIN THE NATURE OF THIS COMPONENT. For examples of service-learning in courses, see: <http://www.esf.edu/students/service/courses.htm>. Service-learning is a form of structured experiential education in which students engage with the community to be active learners, to enrich their sense of civic responsibility, and to explore practical application for course content. Faculty oversight, reflective thinking, and reciprocity are key components of service-learning. EFB courses currently listed with service-learning components include: 416/6/1, 486, 518, 521, 532, 446/646.

2. Non-Scheduled Course Offerings (e.g., 496, 899, 999)

<u>Course No.</u>	<u>Title</u>	<u>Credit Hrs.</u>	<u>No. Students</u>
EFB 495	Undergraduate Exp/Coll Teaching	2	24
EFB 498	Research Problems/Env&For Bio	2	1

3. Continuing Education and Extension (short courses, workshops, etc.)

4. Guest Lecture Activities

<u>Course No.</u>	<u>Title</u>	<u>No. of Lectures</u>
CSTEP	Writing laboratory reports (Sept 22).	1 (1 hr)

II. STUDENT ADVISING

- A. Number of undergraduates for whom you are the student's official advisor **30** and unofficial advisor **3** including 1 CSTEP advisee.
- B. Graduate Students: (Name, degree sought, starting date, month & year; if a degree was completed, please give date and full citation for the thesis or dissertation).

MAJOR PROFESSOR

Terrence McKiernan, MS, started 9/11 – withdrew 1/12.

CO-MAJOR PROFESSOR

John Wiley, PhD, (with C. Beier), started 6/09.

MEMBER, STEERING COMMITTEE (other than those listed above)

Keith Bowman
James Costello
Kalie Gerenser
Jennifer Gillrich
Hua Cai
Lindsay Nystrom
Meredith Kane
Mary Penney

CHAIRMAN OR READER ON THESIS EXAMS, ETC.

Portia Osborne, MS Thesis Examiner
Frances More, MS Thesis Examiner
Huiran Jin, Chair, PhD Candidacy Examination Committee

III. RESEARCH COMPLETED OR UNDERWAY

- A. Departmental Research (unsupported, boot-legged; title - % time spent)
I continued to monitor three unfunded, experimental trials to restore native forest understory wildflowers using volunteer labor and undergraduate students. This spring Courtney Klunder assessed the success of four years of seed sowing trials as an independent research experience.
- B. 1. Grant-supported Research (source, subject, amount - total award and current year, award period starting and ending dates; list graduate research assistants supported by each grant)
- National Science Foundation, "Integrated Knowledge-Based Experiences for First-Year Biology and Chemistry Laboratories," (with N. Abrams, E. Hogan and V. Luzadis), \$193,290, June '12 – May '15, grad assistant TBA.

2. Research Proposals pending (include information as in B.1., above).

3. Research Proposals submitted, but rejected (include information as in B.1, above)

McIntire-Stennis, "Effects of microhabitat variation on arboreal arthropod communities in northern hardwood forests – building toward fully-integrated canopy research," (with S. Teale).

McIntire-Stennis, "An holistic approach to educating forest ecosystem scientists: management of second growth northern hardwood forests for sustainability and late-successional habitat,"(with J. Castello and R. Davis).

IV. PUBLICATIONS (Full bibliographic citation, i.e., do not use "with Jones," or "Jones, et al."; please list only publications published, in press, or actually submitted during this reporting period --- **do not list manuscripts in preparation**).

A. Refereed Publications

Keeton, W.S., A.A. Whitman, G.G. McGee and C.L. Goodale. 2011. Late-successional biomass development in northern hardwood-conifer forests of the northeastern United States. *Forest Science* 57:489-505.

B. Non-refereed Publications

C. Papers Presented at Science Meetings (give title, date, occasion, and location)

Klunder, C and G. McGee. "Forest herb community restoration in post-agricultural second-growth forests in Central New York." April 16, Northeast Natural History Conference, Syracuse (poster).

D. Public Service Presentations (lectures, seminars, etc. to and for the public; give group or occasion, date(s), and attendance)

Bryant & Stratton General Ecology Class, Winter Botany Hike at Highland Forest, Feb. 11, ~30 attending

V. PUBLIC SERVICE

A. Funded Service (include consulting activities)

1. Government Agencies (Federal, State, Local):

Northeastern States Research Cooperative, Theme I, University of Vermont, Burlington.

2. Industrial and Commercial Groups, etc.

B. Unfunded Service to Governmental Agencies, Public Interest Groups, etc.

Biology in the Classroom, with Solvay School District through ESF Outreach.

VI. PROFESSIONAL DEVELOPMENT

A. Professional Honors and Awards (for teaching, research, outreach, etc.)

B. 1. Activities in Professional Organizations (offices held, service as chairman, member, participant or consultant)

2. Professional Society Membership
Association for Biology Laboratory Education

3. Other Professional Activities

a. Editorial activity

<u>Journal (s)</u>	<u>Responsibility</u>
<u>Other (books, symposia, etc.)</u>	

b. Reviewer

<u>Journal(s)</u>	<u>No. of manuscripts</u>
Canadian Journal of Forest Research	1
<u>Agency</u>	<u>No. of proposals</u>
Northeastern States Research Cooperative	12 (primary reviewer for 2)
<u>Other</u>	

c. Participation (workshops, symposia, etc.)

<u>Name of workshop, etc.</u>	<u>Date</u>	<u>Place</u>
ESF Graduate Assistant Colloquium, "Teaching Strategies for Evaluating Written Work,"	8/25, w/	
D. Jager		

C. Further Education/Re-training Undertaken, Leaves, Workshops, etc.

D. Foreign Travel (Where, When, Purpose)

VII. ADMINISTRATIVE AND SERVICE RESPONSIBILITIES (include committee participation)

A. Department-level

EFB Curriculum Director (beginning 1/1/12)
ENB Curriculum Coordinator (beginning 1/1/12)
EFB Course, Curriculum and Assessment Committee
Coordinator, Freshman Pre-Orientation Adirondack Experience

B. College-level

Chair, Faculty Governance Committee on Student Life
Academic Integrity Hearing Committees (participated in two separate hearings)
ESF Learning Community Management Team
Faculty Governance ad hoc committee to propose course withdrawal policy
Search Committee – Assistant Librarian

C. University-wide, including Research Foundation

VIII. SUMMARY OF SIGNIFICANT ACTIVITIES AND ACCOMPLISHMENTS DURING THIS REPORTING PERIOD, ESPECIALLY THOSE MOST NOTEWORTHY AND RELATIVE TO THE COLLEGE'S AND DEPARTMENT'S MISSION. One paragraph on each of the following would be most helpful:

this past year, what have you done for our students, department/college, and self professionally? NOTE: The information in this section (along with the supporting specific information elsewhere in this report) should be your strongest case for being considered for a discretionary raise, which I'll continue to award based on your contributions to the department and college this reporting period.

This year I continued to coordinate, administer and teach multiple sections of the General Biology labs and two three-week sessions of EFB202 at Cranberry Lake. I believe the instruction and administration of these courses continue to improve. For the General Biology labs I'm finding the right balance between the reinforcement of Fierke's and Whipps' lecture content, development of laboratory and writing skills, and application and practice of the scientific method. Neal Abrams, Betsy Hogan, Valerie Luzadis and I received a three-year NSF-TUES (Transforming Undergraduate Education in Science) grant to pilot an experimental section of freshman students that integrates instruction and skills development in General Chemistry Lab, General Biology Lab and Writing in the Environment. This spring we began to administer and develop lessons for this section. Over the next three years we will be testing various pedagogical approaches to improve student abilities to contextualize and synthesize information across disciplines and improve attitudes towards learning in STEM disciplines. As an extension of the General Biology lab instruction, I have also begun collaborating with a teacher from the Solvay school district, along with Melissa Fierke and Chris Whipps, to develop the General Biology sequence as an ESF in the Classroom offering. This last year I worked to increase expectations and enhance the educational experience for the 24 undergraduate teaching assistants in my general biology laboratories. I increased the credit hour load from one to two credits and invited the undergraduates to take on greater roles in weekly instruction. This has paid dividends. I have observed gains in self-confidence and leadership tendencies for many of these students, and the laboratory teaching atmosphere was more collaborative between undergraduate and graduate assistants. Late last summer I again collaborated with staff at the AEC to offer a five-day Pre-Orientation Adirondack Experience for eleven EFB and FNRM students. Students participated in a day-long canoe/bushwhack, whitewater rafting, a High Peak ascent, and a couple evenings around campfires having thoughtful discussions with two student orientation leaders regarding their transition to ESF.

I continued serving on the EFB Course, Curriculum and Assessment Committee (CCAC), which this year facilitated proposals of several new courses and/or descriptions for professional internship experience, independent research and research apprenticeships; proposed the Environmental Biology and Biotechnology minors; clarified departmental field credit requirements; began revamping the advising procedures and tracking for students in the pre-health professions; continued with ongoing coordination of the departmental assessment plans; and assisted Beth Folta in the redesign of the NH&I curriculum. In January I began serving as the department's Undergraduate Curriculum Director and the Curriculum Coordinator for ENB. In this capacity I have begun to dedicate substantial effort to coordinating student recruitment events with Admissions; developing orientation materials and programs for freshmen and transfer students; updating curriculum plan sheets, directed elective lists and the student handbook; facilitating petitions; coordinating advising; serving as the department's representative on the Academic Standards Review Committee; and compiling and summarizing ENB assessment data. This year I also became involved in Faculty Governance and chaired the new Committee on Student Life, which initiated a review of the current ESF policies and procedures on Academic Integrity and a faculty survey of involvement and understanding of current procedures. The committee worked closely with the Judicial Affairs Coordinator to identify means to improve the academic integrity procedures and faculty participation in those procedures. The committee also prepared for the Associate Provost for Assessment a report summarizing the results of the 2011 ESF National Survey of Student Engagement. I served on the ad hoc committee that proposed changes to the ESF course withdrawal policy, sat on two academic integrity hearing committees; and participated on the search committee that hired our new assistant librarian, Jessica Clemons.

IX. A. FUTURE PLANS, AMBITIONS, AND POTENTIAL CONTRIBUTIONS FOR YOUR OWN PROFESSIONAL DEVELOPMENT AND THE ENHANCEMENT OF THE PROGRAM IN ENVIRONMENTAL AND FOREST BIOLOGY (brief summary)

This year I intend to continue growing into the role of curriculum director. Apart from the various responsibilities of the position, I recognize an immediate need and benefit of updating Roy Norton's Undergraduate Advising Manual and making it available on-line for both students and advisors. Providing this resource will help reduce confusion of both students and advisors regarding departmental and college policies and procedures. Much of my time and energy this coming year will be dedicated to delivering and assessing outcomes for the integrated biology/chemistry labs. Neal Abrams, Betsy Hogan and I all believe that we can truly integrate our instruction in a manner that is engaging and challenging to students, takes advantage of the First Year Learning Community structure that already exists at ESF, and more thoroughly prepares students for upper-division coursework. With this NSF grant I can now take advantage of more professional development opportunities such as attending national science education conferences and workshops (e.g., Assoc. Biology Laboratory Education). This year I must dedicate more time to completing at least two manuscripts and preparing additional research proposals.

B. PROJECTED ACTIVITIES FOR NEXT YEAR

1. Summer 2012

a. Course(s) to be offered - EFB202 (2 sessions)

b. Proposed research activity – Coordinate NSF-TUES research w/ Abrams, Hogan and Luzadis.

c. University, professional society, and public service – Assist in organization of ESF Learning Community retreat; in conjunction with A. Lombard, develop next year's priorities for Student Life committee; coordinate pre-health advising/tracking system with S. Shannon.

2. Fall Semester 2012

a. Course(s) to be offered – EFB 102, EFB132, ESF 296 (integrated bio/chem lab).

b. Proposed research activity – initiate NSF-TUES research w/ Abrams, Hogan, Luzadis.

c. University, Professional society, and public service – Curriculum Direction, Chair of Student Life Committee.

3. Spring Semester 2013

a. Course(s) to be offered – EFB104, ESF296, 1-credit chem/bio/writing synthesis seminar (TBA).

b. Proposed research activity - continue NSF-TUES research w/ Abrams, Hogan, Luzadis.

c. University, professional society, and public service - Curriculum Direction, Chair of Student Life Committee.