

ANNUAL REPORT: June 1, 2013 – May 31, 2014
(i.e., Summer 2013, AY 2013-2014)
DEPARTMENT OF ENVIRONMENTAL AND FOREST BIOLOGY
SUNY-ESF

NAME: ALEXANDER WEIR

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	Ecological Monitoring & Biodiv	3	150	both sections on Fungi
	EFB 420	Internship Env. For. Biol.	3	1	
FALL:					
	EFB 210	Diversity of Life I	3	166	7
	EFB 420	Internship Env. For. Biol	3	3	
	EFB 440	Mycology	3	48	2
	EFB 640	Mycology	3	6	2
	EFB 495	Undergrad Exp. Coll. Teaching	3	1	
	EFB 798	Research Probs. Env. For. Biol	3	1	
SPRING:					
	EFB 420	Internship Env. For. Biol	3	2	
	EFB 500	Forest Biol Field Trip – Ireland	3	7	
	EFB 798	Research Probs. Env. For. Biol.	3	1	

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.

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>
Fall 2013				
	EFB 999	Doctoral Thesis Research	3	2
Spring 2014				
	ESF 499	Honors Thesis Research	3	1
	EFB 999	Doctoral Thesis Research	3	2

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>
Fall 2013	EFB 132	Freshman Orientation	2
Spring 2014	EFB 211	Diversity of Life II	1

II. STUDENT ADVISING

A. Number of undergraduates for whom you are the student's official advisor 15 and unofficial advisor 5

B. Graduate Students: (list 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

Lauren Goldmann, PhD, started January 2010

Matthew DaRin, PhD, started August 2013

Tiffany Deater, PhD, started August 2013

CO-MAJOR PROFESSOR

Ohnmar Myo Aung PhD, started May 2005 (Co-MP with Kevin Hyde, Mushroom Research Foundation, Chang Mai, Thailand).

MEMBER, STEERING COMMITTEE (other than those listed above)

Maureen Durkin, MS, Jonathan Cohen MP

CHAIRMAN OR READER ON THESIS EXAMS, ETC.

Judith Crawford, PhD, T. Nagatsagawa MP – Chair

Jeremy Hayward, PhD, Horton MP – Reader

Ricardo Joseph, PhD, Giner MP - Chair

III. RESEARCH COMPLETED OR UNDERWAY

A. Departmental Research (unsupported, boot-legged; title - % time spent)

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 - Macrofungi Collections Consortium - Grants to Advance Digitization of Biological Collections

Total Amount – Unknown

ESF Portion - \$34,000

3 Undergraduate students (Holly Faulkner, Stephen Grant, Kristin Carey) have been supported through this grant.

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

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

National Science Foundation – Microfungi Collections Consortium – Grants to Advance Digitization of Biological Collections

Total Amount – Unknown

ESF Portion – \$49,748

National Science Foundation – Great Lakes Digitization Coordination Network – Grants to Advance Digitization of Biological Collections

Total Amount – Unknown

ESF Portion - \$32,244

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

Goldmann, L., Weir, A., and Rossi, W. (2013). Molecular Analysis reveals two new dimorphic species of *Hesperomyces* (Ascomycota, Laboulbeniomycetes) parasitic on the ladybird *Coleomegilla maculate* (Coleoptera, Coccinellidae). *Fungal Biology* 117: 807-813.

Goldmann, L. and Weir, A. (submitted). Molecular analysis of *Chantransiopsis* and *Tetrameronycha*, provides further evidence of asexuality, and potential recognition of a new order within the Laboulbeniomycetes. Submitted to *Mycologia*, May 2014.

B. Non-refereed Publications

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

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

V. PUBLIC SERVICE

A. Funded Service (include consulting activities)

1. Government Agencies (Federal, State, Local):
2. Industrial and Commercial Groups, etc.

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

National Science Foundation – Grant Application Reviewer

Poison Control Center Consultant on Mushroom Poisoning (1 case fall 2013)

Continued Liaison with Central New York Mycological Society

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)

Mycological Society of America Distinctions Committee

2. Professional Society Membership

Mycological Society of America – Member

British Mycological Society – Member

International Mycological Association - Member

3. Other Professional Activities

a. Editorial activity

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

b. Reviewer

<u>Journal(s)</u>	<u>No. of manuscripts</u>
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Mycologia	1
Mycoscience	1
Fungal Diversity	1

<u>Agency</u>	<u>No. of proposals</u>
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NSF	1
<u>Other</u>	

c. Participation (workshops, symposia, etc.)

<u>Name of workshop, etc.</u>	<u>Date</u>	<u>Place</u>
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C. Further Education/Re-training Undertaken, Leaves, Workshops, etc.

D. Foreign Travel (Where, When, Purpose)

Moscow, Russia April 2014 – Meetings at Moscow State University to discuss Biological Station Exchange Program

Ireland, May 2014 – Overseas Field Trip with 7 EFB students

VII. ADMINISTRATIVE AND SERVICE RESPONSIBILITIES (include committee participation)

A. Department-level

Director, Cranberry Lake Biological Station 08/06 (see separate report for the Station)

Curator of the EFB Herbaria 09/03

Member, Field Programs Committee, EFB

Active Participant in EFB majors for Forest Health, Conservation Biology, Natural History and Interpretation, and Environmental Biology.

Member, Lowe-Wilcox Award Committee, Zabel Award Committee, Morrell Award Committee, Grober Graduate Fellowship Coordinator.

B. College-level

Director, Cranberry Lake Biological Station 08/06-

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 (**i.e., three paragraphs total**) 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 (when available), which I'll continue to award based on your contributions to the department and college this reporting period.

STUDENTS

This year I coordinated the required EFB 210 Diversity of Life I and taught about half the lectures for this course. I also contributed to both sections of the required EFB 202 Ecological Monitoring and Biodiversity Assessment at CLBS. I taught my regular Mycology offering (54 students) and offered an International Field Experience trip to Ireland in May (7 students). During April I made a visit to Moscow, Russia to talk about our Biological Station Exchange Program with Moscow State University. One idea arising from meetings at MSU was for joint overseas trips with students from both ESF and MSU including possible future trips to Ireland, Costa Rica, and Armenia. In light of these discussions we were joined on the recent Ireland trip by two representatives from Moscow State University who contributed greatly to the success of this year's program. I have continued to serve students in my capacity as Director of the Cranberry Lake Biological Station, answering many questions and queries throughout the year and dealing with programming, informational meetings, registration, budgeting, and day to day administration of the Station. This year I also accepted two new PhD students (Matt DaRin and Tiffany Deater), bringing my lab to a total of 3 PhDs at present. I also had two Honors students complete requirements during this academic year.

DEPARTMENT/COLLEGE

My major contribution to EFB/ESF this past year has been my leadership role as Director of the Cranberry Lake Biological Station. Enrollments at the Station are still rising and we ran at almost full capacity for the summer of 2013, with similar enrollments expected for the summer 2014 program. Both the teaching and research programs were successful with almost 200 undergraduate students present at the Station during the summer of 2013, and research groups from Indiana State University, Cornell University as well as our own Grober Research Fellow (graduate) and one Cranberry Lake Fellowship awardee (undergraduate) in residence. I also continued a fund-raising role in support of the Biological Station.

I have also continued to serve the department as Curator of the Herbaria and expended much effort in moving and cataloging damaged vascular plant specimens following the Illick Hall flood on 1st February 2014.

SELF

The addition of two new PhD students to the lab has helped to broaden my research focus while Lauren Goldmann, the existing PhD, has continued to work with me on manuscripts ahead of her PhD defense this coming fall. This year we published an important paper on dimorphic species on a ladybird beetle, and we have submitted another that reinforces the only known occurrence of asexuality in the Laboulbeniales, one of the most diverse groups of fungi. This phenomenon was first reported by us back in 2004. I am also continuing work with Professor Walter Rossi on new species of Laboulbeniales on Gerridae (Heteroptera) – a novel host group for these fungi. I am in the early stages of working on a generic overview of all known Laboulbeniales (150 genera, 2000 known species) and, toward that end, currently have an undergraduate student photographing taxa in my collection of these fungi from all over the world. This year I also played the lead role in a macrofungal digitization project funded by NSF and administered through the New York Botanical Garden. This involved supervision of 3 undergraduate students and we have, to date, completed digitization of more than 4000 specimens in the ESF Fungal Herbarium.

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)

I would like to further develop my teaching and research interests over the coming years. This is my last summer as Director of the Cranberry Lake Biological Station and my relinquishing this position will provide much additional time for research and teaching activities. I remain committed to our field programs here at ESF and plan on expanding my overseas offerings to allow our students to work in other parts of the world. This should also raise the profile for international offerings at the College and enable us to attract SUNY students from outside of ESF and others from further afield.

I continue with my research on insect-associated fungi with more manuscripts for submission this year and have initiated work on a generic level monograph based on both morphology and molecular datasets. With two new PhD students in my lab my research interests are broadening, and I look forward to manuscript preparation with these students in due course. I am very excited at the possibilities for further growth in teaching, and scholarship and research available here at ESF.

B. PROJECTED ACTIVITIES FOR NEXT YEAR

1. Summer 2014

a. Course(s) to be offered

EFB 202 Ecological Monitoring and Biodiversity Assessment (1 section, 75 students)
Section C – Fungal component

b. Proposed research activity

Manuscript preparation
On-going NSF funded digitization project

c. University, professional society, and public service

Director, Cranberry Lake Biological Station
Curator, EFB Herbaria

2. Fall Semester 2014

a. Course(s) to be offered

Major contribution to EFB 210 Diversity of Life I
EFB 440 – Mycology (51 students pre-enrolled)

b. Proposed research activity

Manuscript preparation
On-going NSF funded digitization project

c. University, Professional society, and public service

Director, Cranberry Lake Biological Station – finishing up 2014 season.

Curator, EFB Herbaria

3. Spring Semester 2015

a. Course(s) to be offered

Potential overseas courses to Costa Rica and Russia

b. Proposed research activity

Manuscript preparation
NSF funded digitization project

c. University, professional society, and public service

Curator, EFB Herbaria