

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

NAME: Mark V. Lomolino

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:	EFB899 13	Masters Thesis Research	1	1	
FALL:	EFB497 01	Geog/Humans-Biogeog of Humanty	1	1	
	EFB797 12	Geog/Humans-Biogeog of Humanty	1	1	
	EFB899 13	Masters Thesis Research	1	1	
SPRING:	EFB483 01	Mammal Diversity	4	57	4
	EFB495 30	Undergrad Exp/Coll Teach	2	1	
	EFB796 12	Biodiversity of Mammals	4	1	
	EFB899 13	Masters Thesis Research	3	1	
	EFB899 13	Masters Thesis Research	1	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>
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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>
EFB 211	Diversity of Life	2

II. STUDENT ADVISING

- A. Number of undergraduates for whom you are the student's official advisor _17_ and unofficial advisor _____
- 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

Katherina Bendz, Ph.D., August, 2005 to present
Natasha Karniski, MS, August 2009 to 2014

CO-MAJOR PROFESSOR

Kristin Haynes, Ph.D. August 2013 to present

MEMBER, STEERING COMMITTEE (other than those listed above)

Tim McCoy
Chelby Kilheffer
Scott Bequin
Lindsay Scales
Lucas Negoita – SU
Jessica McCordic – SU

CHAIRMAN OR READER ON THESIS EXAMS, ETC.

Chair of Defense Committee – Scott Grieco

Co-advisor, Co-tutor and Reader, International Students

Roberto Rozzi, Ph.D. Spring 2014 - Palaeobiogeography and evolution of insular bovids: ecogeographic patterns of body mass variation and morphological changes – Sapienza, Universita di Roma.
Alexandra van der Geer, Ph.D. Spring 2014 - The impact of isolation: evolutionary processes in Hoplitomeryx. Utrecht University, The Netherlands.

III. RESEARCH COMPLETED OR UNDERWAY

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

Island Biogeography Theory and Practice – 10%
Soundscape Ecology – 10%

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)

PI - NSF – Of Mice and Mammoths: Toward a General Theory of Body Size Across Space and Time
requested \$420,681, received partial funding \$100,000 for initial period of grant; August 2010 to 2015.

International Collaborator – ISOLARIO - Island biodiversity and cultural evolution: examples from the Eastern Mediterranean, Madagascar, Mauritius and Philippines during the past 800,000 years. European Union and Greek national funds through the Operational Program Education and Lifelong Learning of the National Strategic Reference Framework (NSRF)-Research Funding Program THALIS-UOA. Duration 3 years.

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

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

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

Lomolino, M. V., and R. Field. 2014. Re-articulation and re-integration of publications: monographs in biogeography. *Frontiers of Biogeography* 6.2 :1-3.

B. Non-refereed Publications

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

The Silence of Biogeography. Soundscape Ecology Workshop and Retreat, Arizona, November, 2013.

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.

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

American Society of Mammalogists

The International Society of Biogeography

International Union for the Conservation of Nature

3. Other Professional Activities

a. Editorial activity

Journal (s)

Responsibility

Other (books, symposia, etc.)

b. Reviewer

Journal(s)

No. of manuscripts

BioScience

1

Ecology Letters

1

Global Ecology and Biogeography

2

Journal of Biogeography

2

Journal of Mammalogy

1

Agency

No. of proposals

Grant Renewal Review for Center of Macroecology, Denmark

Other

c. Participation (workshops, symposia, etc.)

Name of workshop, etc.

Date

Place

Soundscape Ecology -Workshop Organized by B. Pijanowski, AZ 2013

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 Graduate Coordinator Chair, Fall, 2013.

Freshman and Transfer Student Orientation/Advising – Summer, 2013

Accepted Students Open House, Fall 2013, Spring 2014.

B. College-level

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 I have continued to teach courses that emphasize fundamental biological, geological and geographic factors that influence biodiversity, and challenge students to develop an integrative understanding of relevant patterns and to articulate this in writing (essay form exams that I grade myself). The mammal diversity course has now grown to approximately 60 students. This course continues to receive excellent reviews from students. I also continue to offer a series of graduate seminars and courses on various topics in conservation biology and biogeography, including a new seminar in Biogeography of Humanity, which I hope to develop into an upper division and graduate course in the near future.

Department/College My service to the department and college has begun to re-expand, including serving as coordinator of the graduate program, serving on graduate student committees for ESF, SU and international universities, meeting with prospective students and job candidates, hosting accepted student receptions and freshman/transfer orientation advising, serving on graduate student committees and as chair of exam and defense committees for the College.

Professional Development I have developed my international network of colleagues and research programs in the areas of biogeography, ecology and macroecology. As a result, I have begun to publish with new collaborators, develop new proposal and received invitations to give guest lectures, keynote addresses and serve as external evaluator of faculty and research programs. I served in this capacity of an external evaluator for renewal of five year funding for Denmark's Center for Macroecology and Climate, which also provided opportunities for new collaborations including a new program of research on long-distance movements as adaptations to climate change for North American wildlife. I have also begun a new line of research on Soundscape Ecology, which is an emerging discipline focusing on the spatial and temporal variation in the sounds of nature. We are just about to submit our first manuscript on this subject ("The Silence of Biogeography") to the Journal of Biogeography as an invited guest essay, and will prepare a manuscript to be submitted to NSF's competition for macrosystem studies later this year.

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)

In teaching, I will continue to develop my current course offerings, including continuing to teach courses in Mammal Diversity and in Biogeography, along with courses on a variety of topics related to conservation biology and biogeography, including a new course in The Biogeography of Humanity.

In research, I am continuing to develop collaborations with a macroecologist at Brown University and with paleoecologists from Italy, Greece and the Netherlands; these studies focus on evolutionary and geographic variation of body size of non-native, introduced mammals, and a related study of body size variation and potential anthropogenic downsizing of elephants. Ultimately, we plan to combine these research activities with development of an international course on the ecology, evolution and conservation of island life to be taught in alternate summers at sites in the Mediterranean and Caribbean or Northeastern North America.

New research collaborations also includes that with Bryan Pijanowski from Purdue University, where he has assembled a diverse team of biologists, acoustic ecologists and others to explore the ecological and geographic aspects of sounds in nature – an emerging field called Soundscape Ecology.

In service, I will continue advising undergraduate and graduate students and contribute to development of the majors in Conservation Biology and Wildlife Sciences, and increase my contributions to departmental and college-wide service.

In service to professional societies, I continue to contribute as a member of the editorial board, founder and past-president of the International Biogeography Society, and have worked with my colleagues to establish a new series of monographs and expanded reviews in biogeography.

B. PROJECTED ACTIVITIES FOR NEXT YEAR

1. Summer 2014

a. Course(s) to be offered

b. Proposed research activity

Writing manuscripts on body size evolution in insular mammals, soundscape ecology, and a general review of theory in island biogeography.

c. University, professional society, and public service

2. Fall Semester 2014

a. Course(s) to be offered

Sabbatical Leave ---

b. Proposed research activity

Sabbatical Leave ---

Writing manuscripts on body size evolution in insular mammals, soundscape ecology, and a general review of theory in island biogeography.

Revising Biogeography text for its 5th edition.

c. University, Professional society, and public service

see above, Service

3. Spring Semester 2015

a. Course(s) to be offered

EFB 483 Mammal Diversity

EFB 683 Biodiversity of Mammals

b. Proposed research activity

see above, Research

c. University, professional society, and public service

see above, Service