

ANNUAL REPORT: June 1, 2014 – May 31, 2015
(i.e., Summer 2014, AY 2014-2015)
DEPARTMENT OF ENVIRONMENTAL AND FOREST BIOLOGY
SUNY-ESF

*****PLEASE DO NOT INSERT TABLES FOR ANY CATEGORIES*****

NAME: Stewart Diemont

I. INSTRUCTIONAL ACTIVITIES

1. Regular Course Offerings

	Course No.	Title	Credit Hrs.	No. Students	No. of Lab. Sections
SUMMER:					
FALL:					
	EFB 496	Restoring Ecosystems: Princ. & Prac.	4	8	
	EFB 796	Restoring Ecosystems: Princ. & Prac.	4	3	
	EFB 496	Princ. of Restoring Ecosystems	3	5	
	EFB 796	Princ. of Restoring Ecosystems	3	<u>6</u>	
				22	
	EFB 518		4	18	1
SPRING:					
	EFB 120	Global Env/Evol. Human Soc.	3	119	

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 496 and EFB 796, Restoring Ecosystems, included several service learning components. Students worked with the community members from the village of Lacanja Chansayab, Mexico on a biocultural restoration project; they created a Lacandon Maya field guide that has been adopted used in local school to help incorporate Lacandon Maya TEK into the standard education. With a faculty member at El Colegio de La Frontera in San Cristobal de Las Casas, they worked on siting neighborhood-level natural wastewater treatment systems for the city of San Cristobal de Las Casas, Mexico, a community that currently does not have wastewater treatment. This project also included design of a rainwater capture system and wetland restoration design.

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

	Course No.	Title	Credit Hrs.	No. Students
FALL:				
	EFB 495	Undergraduate Teaching	1	1
	ENS 899	Master's Thesis Research	3	1
	EFB 899	Master's Thesis Research	1	1

	EFB 999	Doctoral Thesis Research	1	1
	EFB 999	Doctoral Thesis Research	6	1
	EFB 999	Doctoral Thesis Research	12	1
	ENS 999	Doctoral Thesis Research	1	2
SPRING:	EFB 495	Undergraduate Teaching	1	1
	ENS 798	Problems/Env Sci	6	1
	ENS 899	Master's Thesis Research	1	2
	ENS 899	Master's Thesis Research	3	1
	ENS 899	Master's Thesis Research	8	1
	ENS 999	Doctoral Thesis Research	1	3
	EFB 899	Master's Thesis Research	1	1

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

Forest Sustainability and Today's Maya in Mesoamerica. *In* Sustainability, a Workshop for the Science Teachers Association of New York State, State University of New York, Cortland, February 28, 2015.

Ecosystem Health and Restoration in Mayan Communities and Syracuse. *In* ESF in the High School Webinar on Ecological Engineering, SUNY ESF, February 19, 2019

4. Guest Lecture Activities

<u>Course No.</u>	<u>Title</u>	<u>No. of Lectures</u>
EFB 202	Ecological Monitoring and Biodiversity Assessment	1 (assisted with project evaluations)

II. STUDENT ADVISING

A. Number of undergraduates for whom you are the student's official advisor 14 and unofficial advisor 1 (Honor's Thesis)

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

Tomasz Falkowski, PhD, EFB-Ecology, May 2014

Isaias Martinez, PhD, GPES-Environmental and Community and Land Planning, August 2012

Eli Arnow, MS, GPES-Ecosystem Restoration, August 2012

Shruti Mokashi, PhD, GPES-Environmental and Community and Land Planning, August 2012

Eugene Law, MS, GPES-Ecosystem Restoration, August 2012

Samantha Steele, MS, GPES-Ecosystem Restoration, and MS, Maxwell School, Public Administration, August 2014

Hayley Kopelson, MPS, GPES-Environmental and Community Land Planning, completed May 2015

Kopelson, H.H., 2015. Urban Forestry and Green Space Design in Syracuse, NY. MPS Project Report, Graduate Program in Environmental Science, Environmental and Community and Land Planning, SUNY ESF.

CO-MAJOR PROFESSOR

Mariana Nava Lopez (with Myrna Hall), PhD, GPES-Water and Wetland Resource Studies, January 2010

Austin Arrington (with Robin Kimmerer), MS, GPES-Ecosystem Restoration, January 2015

Jonas Hamberg (with Karin Limburg), MS, GPES-Ecosystem Restoration, August 2013

Hamberg, L.J., 2015. Factors of Loss and Restoration of *Vallisneria Americana* in the Hudson River Estuary. MS Thesis, Graduate Program in Environmental Science, Ecosystem Restoration, SUNY ESF.

Frances Knickmeyer (with Rick Smardon), MS, GPES-Water and Wetland Resource Studies, completed May 2015

Knickmeyer, F.B., 2015. The Impact of Large Storms on Coastal Wetlands of the United States. MPS Project Report, Graduate Program in Environmental Science, Water and Wetland Resources Studies, SUNY ESF.

Nathan Barlet (with Wendong Tao), MS-Peace Corps, ERE-Ecological Engineering, completed May 2015

Barlet, N.T., 2015. Emergent Microbial Food Webs in Ecological Treatment Systems for Wastewater: Insight from Stable Carbon Isotopes, MS Thesis, Ecological Engineering Program, Department of Environmental Resources Engineering

MEMBER, STEERING COMMITTEE (other than those listed above)

Juliana Quaresma (Luzadis), PhD, Graduate Program in Environmental Science, August 2013

Catherine Landis (Leopold and Kimmerer), PhD, EFB-Ecology, August 2009

Ehsan Mazinani (Tao), MPS, Environmental Resources Engineering, Ecological Engineering, completed May 2015

Mazinani, E. Phosphorus Recovery from Anaerobically Digested Dairy Manure (ADDM) Filtrate for Struvite Fertilizer Production. MPS Project Report, Environmental Resources Engineering, Ecological Engineering, SUNY ESF.

CHAIRMAN OR READER ON THESIS EXAMS, ETC.

Yolanda Gonzalez (Potteiger), MS, GPES-Environmental and Community Land Planning, completed May 2015, Thesis Examiner

Gonzales, Y., 2015 The Discourse of Obesity and Public Health in Planning and Participation in New York City Gardens. MS Thesis, Graduate Program in Environmental Science, Environmental and Community and Land Planning, SUNY ESF.

Angela Stires (Endreny), MS, Environmental Resources Engineering, Ecological Engineering, Thesis Examiner
Suzanne Greenlaw (Kimmerer), MS, EFB Ecology, Thesis Examiner

Anayo Ukuani (Tao), Ph.D., Environmental Resources Engineering, Doctoral Candidacy Examiner

Stacy Mack, Ph.D., Forest and Natural Resources Management, Doctoral Candidacy Chair

III. RESEARCH COMPLETED OR UNDERWAY

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

Itza Maya and Mopan Maya agroforestry fire use and ecosystem health (1%)

Social, ecological, and religious dimensions of sacred groves in Maharashtra, India (1%) with Shruti Mokashi, PhD advisee

Fire, field restoration, and traditional ecological knowledge in New York: Ecosystem services from four edible herbaceous species (2%) with Eugene Law and Eli Arnow, MS advisees

Zapotec agroforestry and ecosystem health in Oaxaca, Mexico (1%) with Isaias Martinez, Ph.D advisee

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)

Diemont, S.A.W. and L. Quackenbush. EAGER: Understanding the potential role of Mayan traditional ecological knowledge for ecological engineering of forest restoration in Mexico. National Science Foundation. \$100,000 (current year \$5,000), 5/1/12-12/31/15. Supports Tomasz Falkowski.

Klossner, R. (PI), S.A.W. Diemont S.A.W. City of Syracuse creekwalk landscaping design. Spanfelner Fund/Central New York Community Foundation, \$50,000, 12/1/12-12/1/16. Senior personnel.

Faust, B.B. (PI), A. Anaya, V. Suarez Aguilar, S. Jimenez, F. Bautista, D. Leonard, S.A.W. Diemont. Research on irrigation and drainage functions of Maya canals at Cauich, Campeche, Mexico. National Geographic, \$19,837, 5/1/14-4/30/15. Senior personnel

Limberg, K. (PI), S.A.W. Diemont, Cohen, J., Beier, C. Restoring ecosystem integrity and ecosystem services to Jamaica Bay, NY: A research planning workshop, SUNY 4E Network of Excellence, \$6343, 3/1/14-2/28/15. Senior personnel

Advisees working with me who have received research support directly:

Falkowski, T. Comparing tropical forest restoration success of conventional ecological engineering design with indigenous agroforestry management in the Montes Azules region of Chiapas, Mexico. National Geographic, \$4,999.

Falkowski, T. Lacandon Maya Agroforestry for Tropical Forest Restoration and Community Resilience in Chiapas, Mexico. Tropical Social Forestry Fund, \$2000.

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

Diemont, S.A.W., P. Hirsch. CNH-S: Green Fire?: Carbon sequestration potential of Mayan fire regimes, local decision-making, and implications for policy. National Science Foundation, \$499,684, *submitted November 18, 2014.*

Kimmerer, R., S.A.W. Diemont, C. Beier, E. Folta, J. Manno. Sowing synergy: A graduate program to integrate indigenous and scientific knowledge for sustainability. US Department of Agriculture National Institute of Food and Agriculture, \$750,000, *submitted March 19, 2015.*

Hirsch, P., S.A.W. Diemont, K. Friedman, J. Owley, K. Shockley. FEW- Towards re-integration at the food, energy, water nexus: Identifying barriers, developing pathways, navigating complexities. National Science Foundation, \$98,273, *submitted March 30, 2015*

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

Diemont, S.A.W., K. Limburg, S. Findlay, J. Hamberg. Modeling *Vallisneria americana* in the Hudson River Estuary with restoration ecology and citizen science (Pre-proposal). Sea Grant New York, \$115,663.

Baines, S. (PI), K. Limburg (Co-PI), McElroy (Co-PI), S.A.W. Diemont, Cohen, J., Beier, C. 4E Network: Ecosystem

services in Jamaica Bay -- a model ecosystem in an urban context, SUNY 4E Network of Excellence, \$100,000. Senior personnel.

Diemont, S.A.W. Quantifying the Value of the Visit: How Birds, Insects, and Humans Use Green Infrastructure in Syracuse, NY. USDA Forest Service, \$100,000.

Diemont, S.A.W., R. Briggs. Soil black carbon sequestration from prescribed forest burning (Pre-proposal). USDA – McIntire-Stennis Program.

Potteiger, M., S.A.W. Diemont, Emery, M. Provisioning Ecosystems: linking culture practices, urban forests, and public health (Pre-proposal). USDA – McIntire-Stennis Program.

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

Barlet, N.T., S.A.W. Diemont, M.A. Teece, K.L. Schulz, 2015. Emergent microbial food webs in ecological treatment systems for wastewater: Insight from stable carbon isotopes. *Ecological Engineering* 78: 62-71.

Beutel, M.W., S.A.W. Diemont, S., D. Reinhold, 2015. The 13th annual conference of the American ecological engineering society: Ecological engineering and the dawn of the 21st century. *Ecological Engineering*, 78: 1-5.

Falkowski, T.B., I. Martinez-Bautista, S.A.W. Diemont, 2015. How valuable could traditional ecological knowledge education be for a resource-limited future?: An emergy evaluation in two Mexican villages. *Ecological Modelling* 300: 40-49.

Falkowski, T.B., S.A.W. Diemont, A. Chankin. Lacandon Maya traditional ecological knowledge and rainforest restoration: Soil fertility beneath six agroforestry system trees. *Ecological Engineering*, *submitted May 29, 2015*.

Nava-López, M., S.A.W. Diemont, M. Hall, V. Avila-Akerberg. Buffer zone and landscape influences on water quality in a watershed near Mexico City: Implications for riparian ecosystem services management. *Environmental Management*, *submitted April 29, 2015*.

B. Non-refereed Publications

Diemont, S.A.W. and A. Chankin, eds. 2014. *Guia del Campo Lacandon / Lacandon Field Guide*, Edition 1, San Cristóbal de Las Casas, Mexico, 120 pp.

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

Law, E.P., S.A.W. Diemont, T. Toland, V. Luzadis. Emery, people, and saving the rain: A sustainability analysis of green infrastructure in Syracuse, New York. American Ecological Engineering Society 14th Annual Meeting, Charleston, SC, June 9, 2014.

Falkowski, T.B., S.A.W. Diemont. Traditional ecological knowledge and forest restoration: Lacandon Maya agroforestry system trees. American Ecological Engineering Society 14th Annual Meeting, Charleston, SC, June 9, 2014.

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

Diemont, S.A.W., The Sound of Sustainability: What I've heard from the people and the land of Mesoamerica, Earth Lecture Series, SUNY ESF, March 4, 2015, 25.

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.

Municipality of San Cristobal de Las Casas, Chiapas, Mexico. Natural wastewater treatment plant system design and siting, rain water capture, and wetland restoration.

Village of Lacanja Chansayab, Chiapas, Mexico. Biocultural restoration project: Creating a Lacandon Maya field guide for educating children about their own traditional ecological knowledge.

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)

Executive Committee, Past-President, American Ecological Engineering Society

2. Professional Society Membership

American Ecological Engineering Society (since 2001)

3. Other Professional Activities

a. Editorial activity

Journal (s)

Ecological Engineering

Other (books, symposia, etc.)

Responsibility

Guest Editor, Special Issue, with Marc Beutel

b. Reviewer

<u>Journal(s)</u>	<u>No. of manuscripts</u>
Geoforum	1
Restoration Ecology	1
Biological Conservation	1
Ecological Engineering	1

<u>Agency</u>	<u>No. of proposals</u>
National Science Foundation	1

Other

Proceedings of the 8th Biennial Emergy Conference 1

c. Participation (workshops, symposia, etc.)

<u>Name of workshop, etc.</u>	<u>Date</u>	<u>Place</u>
Assessing Ecosystem Services in Jamaica Bay	January 16 and 17, 2015	SUNY – Stony Brook
Facilitative Leadership for Collaborative Team Research Workshop	February 6 and 7, 2015	SUNY – ESF

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

D. Foreign Travel (Where, When, Purpose)

Chiapas and Oaxaca states in Mexico, various locations, June 29 – August 24, 2014. NSF-supported research on traditional ecological knowledge (TEK) of the Maya, working with doctoral students Tomek Falkowski and Isaias Martinez and undergraduate student Wyatt Wesner. Worked with Martinez on Zapotec TEK in Oaxaca. Taught ESF course EFB 496/796 Restoring Ecosystems: Principles and Practice August 14 – 24, 2014/14 (9 undergraduate students and 2 graduate students), Chiapas, Mexico.

VII. ADMINISTRATIVE AND SERVICE RESPONSIBILITIES (include committee participation)

A. Department-level

Assessment Committee, Environmental Biology Undergraduate Program

B. College-level

Graduate Program in Environmental Science, Ecosystem Restoration, Area Leader
Center for Native People and the Environment, Advisory Board
Faculty Governance Awards Committee
Faculty Governance Library Committee
Strategic Planning Committee, Relationships between Humans and the Environment
Adviser, Society for Ecological Restoration Club

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.

Our Students

I worked considerably this year on course development and modifications for all three of my major courses, and I advised 12 graduate students; they disseminated their work, won awards, worked internationally, and 4 completed their studies. I offered EFB 518 Systems Ecology for the first time, a course with a 25-year history at ESF. I developed a new syllabus with updated readings and software, added a new field component at Cranberry Lake Biological Station, and experimented with many new teaching techniques during both lecture and laboratory, including systems ecology in the field near ESF, in-class design exercises, and modeling races. EFB 120 Global Environment I was teaching for the second year. Based on student feedback, this year I decided to un-“flip” the classroom. I still incorporated non-traditional classroom experiences. 120 students visited the South Side urban ecosystem, and they examined soils at Oakwood Cemetery. Every class I tried to include classroom activities, such as creating a human systems diagram and a poster session of the global environment as they understood it. I also added a design component to the course. I wanted students to think about not only the problems, but how they can solve the problems. I changed course deliverables to make them more consistent throughout the semester to keep student involvement consistent. Feedback about these changes was generally positive. Although I have taught ecosystem restoration for seven years, I changed the textbook and revised course content to enhance learning in restoration techniques beyond ecological engineering. For example, in the field component of the course in Mexico, we conducted wildlife restoration through protected sea turtle egg collection and nest creation. This year 11 ESF students accompanied me to Chiapas, Mexico for the 10-day field component of Restoring Ecosystems: Principles and Practice. My graduate students were very successful this year. Of the graduate students who studied with me as adviser or co-adviser, four students graduated (two MS, two MPS). Two Ph.D. students passed their Candidacy Exam. Two graduate students had peer-reviewed papers published with me. One other student submitted her first manuscript for peer-review. Currently, five students are preparing with me additional manuscripts for submission. Four students presented their work at international conferences, and one student presented his work at a regional conference. One student received a National Geographic Young Explorers Award. Four graduate students working with me conducted research internationally (three in Mexico and one in India). Another MS student completed his Peace Corps service in Jamaica. One undergraduate student also worked with me in Mexico this summer.

Department/College

I worked toward maintaining and improving ESF in a number of ways. I began working with the committee on assessment for the Environmental Biology major. We considered current assessment methods and revised places in the curriculum where assessment would take place. At the college level, I continue to serve as the Area Leader for the Ecosystem Restoration area for the Graduate Program in Environmental Science (GPES), a position for which I make decisions on applications, help determine funding, and serve on the GPES leadership committee. I am also a member of three other college committees, the Faculty Governance Awards Committee, Faculty Governance Library Committee, and the Advisory Board for the Center for Native People and the Environment (CNPE). As a member of the Awards Committee I helped make recommendations about Chancellor's Awards, Distinguished Professorships, and Honorary Degrees/Commencement Speakers. With the Library Committee I helped make recommendations about the library resources allocations and faculty communication. As a member of the Advisory Board for the CNPE I helped advise

about the hiring of the new Assistant Director for the CNPE. I was also actively involved in the college strategic planning by serving on the committee which considered research questions about human's relationship with nature. With ESF students we also founded the Society for Ecological Restoration Student Chapter at ESF, for which I am Adviser.

Self Professionally

I continue to move forward with my research into indigenous ecosystem management and restoration. This work is taking place in New York, where I have an active research experiment looking at fire and restoration of field using native edibles, and internationally, where I have two experimental sites in Mexico (one in Oaxaca and one in Chiapas). I submitted proposals related to both traditional prescribed burning and Native American student education to the USDA. I submitted other proposals related to traditional ecological knowledge in Mexico (TEK) to NSF and with students to National Geographic and to CONACYT (Mexican NSF). I wrote several papers this year related to this topic. One paper published in Ecological Modelling that compares TEK education to scientific education, finding that natural field education could improve the sustainability of our education without sacrificing embodied energy; I submitted another paper that details soil fertility related to indigenous agroforestry system trees in Mexico. These papers come from work funded by NSF to look at TEK and ecological engineering in Mexico; we are preparing three other papers that detail nematode populations in these systems, compare bird populations to other non-TEK systems, and that describe the results of an experiment comparing government to TEK restoration, respectively. I also published two papers in Ecological Engineering that consider how natural systems could be incorporated into sustainable designs. This summer I will continue the work I began a few years back looking at Itza Maya (in Guatemala) and Mopan Maya (in Belize) ecosystem management. *I am working toward a framework of sustainable ecosystem design and restoration that is based on knowledge and perspectives from indigenous systems.* This work requires transcending typical disciplinary boundaries. In part to better learn how to work across disciplines, I participated in two SUNY workshops which transcended disciplines, one related to Jamaica Bay and one specifically looking at collaborative team research. Both these workshops led to further collaboration and grant applications, the latter to NSF.

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 will continue to improve my courses so that students learn about the problems of the world, how to analyze them, and how to restore ecosystem health. I see my three courses (Global Environment – the problems, Systems Ecology – analyzing in detail, and Restoring Ecosystems – restoring ecosystem health) as doing these things; each course includes some of each, but is naturally weighted in this way. Specifically, this year I will evaluate and update the final projects in these courses so that students clearly gain this knowledge and these skills from the final projects. I will also evaluate the grading and rubrics for Global Environment to regulate grading among different graders.

As part of my service and for service learning I will continue to work with communities in Mexico for ecosystem restoration through the Mayan field guide and will continue to work with San Cristobal de Las Casas, Mexico to restore rivers through natural wastewater treatment. At the college I look forward to how the strategic planning will develop ESF and will participate in that planning; I will also continue my work on several college committees and as Area Leader of Ecosystem Restoration in GPES.

I will continue research in southern Mexico, Guatemala, and Belize. This summer we will continue sampling the long-term restoration experiment in Chiapas, Mexico and will set up another agroforestry experiment in Oaxaca, Mexico. I will talk with Itza Maya community members in San Jose, Guatemala and Mopan Maya community members in Santa Elena, Belize, and visit agroforestry systems, to consider next steps for restoration research in these communities. We

will continue work in the native plants and prescribed burn experiment in Elizaville, New York. This year we will set up educational gardens. We will conduct deep soil samples looking at black carbon in Mayan systems in southern Mexico to better understand carbon sequestration. Throughout the year I will analyze data, prepare manuscripts, and write proposals to fund this work.

B. PROJECTED ACTIVITIES FOR NEXT YEAR

1. Summer 2015

a. Course(s) to be offered

b. Proposed research activity

Work with Mayan communities in southern Mexico, Guatemala, and Belize looking at TEK and restoration. Set up long-term agroforestry research site with Zapotec in Oaxaca, Mexico. Sample experimental plots in Chiapas, Mexico and Elizaville, New York.

c. University, professional society, and public service

Municipality of San Cristobal de Las Casas, Chiapas, Mexico. Natural wastewater treatment plant system design and siting.

Village of Lacanja Chansayab, Chiapas, Mexico. Biocultural restoration project: Creating a Lacandon Maya field guide for educating children about their own traditional ecological knowledge.

2. Fall Semester 2015

a. Course(s) to be offered

*EFB 496/796 Restoring Ecosystems: Principles and Practice (4 credits, 12 students)

*EFB 496/796 Principles of Ecosystem Restoration (3 credits, ~10 students)

EFB 518 Systems Ecology (4 credits, ~15 students)

*Taught together

b. Proposed research activity

Continue working on experimental agroecological restoration site in Elizaville NY. Analyze data and soil from Mesoamerica research. Write manuscripts and proposals. Prepare for sampling of soil for black carbon in Mexico. Conduct sampling of soil black carbon in Mexico.

c. University, Professional society, and public service

Graduate Program in Environmental Science, Ecosystem Restoration, Area Leader

Center for Native People and the Environment, Advisory Board

Faculty Governance Awards Committee

Faculty Governance Library Committee

Strategic Planning Committee, Relationships between Humans and the Environment

Adviser, Society for Ecological Restoration Club

3. Spring Semester 2016

a. Course(s) to be offered

EFB 120 Global Environment (3 credits, ~120 students)

b. Proposed research activity

Analyze data and soil from Mesoamerica research. Analyze data and biomass from NY agroecological restoration research. Write manuscripts and proposals.

c. University, professional society, and public service

Graduate Program in Environmental Science, Ecosystem Restoration, Area Leader
Center for Native People and the Environment, Advisory Board
Faculty Governance Awards Committee
Faculty Governance Library Committee
Strategic Planning Committee, Relationships between Humans and the Environment
Adviser, Society for Ecological Restoration Club