

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

NAME: Robin Wall Kimmerer

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 307	Field Ethnobotany	3	15	
FALL:	EFB 496	Plants and Culture	3	27	
	EFB 497	UMEB Seminar	1	7	
SPRING:	EFB 305/NAT300	Indigenous Issues and the Environment	3	33	
	EFB 605	Indigenous Issues and the Environment	3	7	
	EFB 446	Ecology of Mosses	3	23	1
	EFB 646	Ecology of Mosses	3	1	1
	EFB 497	UMEB Seminar	1	7	
	EFB 498	Research Problem in EFB	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. EFB courses currently listed with service-learning components include: 416/6/1, 486, 518, 521, 532, 446/646.

Service Learning is a component of 3 of my classes. In EFB 446/646, the Ecology of Mosses, the students are responsible for developing an outreach program to communicate their growing knowledge of bryophytes to a public audience. This year they chose to present an educational program of field walks, brochures and demonstrations for the community during the campus Earth Week. In EFB 305/605/NAT300 the students hosted a public forum on Indigenous Issues and the Environment which highlighted natural resource controversies with indigenous stakeholders including Tar Sands development, hydraulic fracturing and Onondaga Lake restoration. The UMEB seminar EFB 497 conducted a 4 part outreach program of environmental science education at the Onondaga Nation School.

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 College Teaching Experience	1	1

EFB 899	Masters Thesis Research	4	4
EFB 999	PhD Thesis Research	1	1

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

Initiated, implemented, taught and directed “Native Earth” summer camp for Native American youth Aug 10-20, 2011

4. Guest Lecture Activities

Course No.	Title	No. of Lectures
CLL 490	Literature of Nature	1
EFB	The Diversity of Life	2 lectures, 1 lab
EFB 797	Graduate seminar	1

II. STUDENT ADVISING

A. Number of undergraduates for whom you are the student’s official advisor 26 and unofficial advisor 2

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

1. James Costello MS started 9/01
2. Keith Bowman, PhD, started 9/04
3. Jennifer Gillrich, MS, started 9/04
4. Meredith Kane MS, started 9/09
5. Suzanne Greenlaw, MS started 9/09

CO-MAJOR PROFESSOR

Catherine Landis with Don Leopold

MEMBER, STEERING COMMITTEE (other than those listed above)

Sarah Kelsen
 Jessica Gale
 Birgitte Everingham, Trent University, Ontario
 Brian Scavone, Prescott College, Arizona
 Val Goodness, SUNY Buffalo

CHAIRMAN OR READER ON THESIS EXAMS, ETC.

Bonnie Gale, Landscape Architecture

III. RESEARCH COMPLETED OR UNDERWAY

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

- 1) Ethnobotanical resources of post-agricultural forests in New York State, with graduate student Meredith Kane. 5%
- 2) Menominee Ethnobotany Project, 1%
- 3) Traditional knowledge and climate change resilience in Potawatomi communities 1%

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)

- 1) National Science Foundation, Undergraduate Mentoring in Environmental Biology, \$600,000 June 2006-August 2012 supports Meredith Kane
- 2) United States Department of Agriculture, Multicultural Scholarship Program, \$200,000. supports 5 undergraduates, May 2012-May 2016.
- 3) National Science Foundation, Summer Science Camp for Native Youth, \$147,000, August 2009-August 2013
- 4) United States Forest Service, Traditional Knowledge of Black Ash Ecology, \$47,000. Supports Suzanne Greenlaw. 2009-2011
- 5) Onondaga Lake Partnership Minigrant: Environmental education with Onondaga Nation Youth \$5000
- 6) Tribes and Climate Change: engaging northeastern indigenous nations. US Forest Service \$60,000 2011-2014
- 7) National Science Foundation, UMEB Supplement for Native Earth Youth Camp \$45,460 5/2012-5/2013

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

- 1) USDA Higher Education Challenge Grant, Learning From the Land: a cross-cultural partnership in forest stewardship education for climate change adaptation in the Northern Forest \$700,000 with College of the Menominee Nation. 2012-2015

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

- 1) National Science Foundation IGERT: Helping Forests Walk: Engaging scientific and traditional ecological knowledge to build resilience in cultural landscapes facing environmental change. \$3,092,000.
- 2) USDA NIFA "Measuring and Modeling the Impacts of tribal and conventional forestry strategies in the face of global change" with Smithsonian Institution and College of the Menominee Nation, \$7,000,000
- 3) Guggenheim Foundation, "Farewell to Maples: climate change and indigenous knowledge" \$55,000.
- 4) National Science Foundation, Research Network for Sustainable Freshwater Ecosystems. In collaboration with J. Atkinson and others, SUNY Buffalo.

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

- 1) **Searching for Synergy: integrating traditional and scientific ecological knowledge in environmental science education. Journal of Environmental Studies and Sciences. In review.**
- 2) **The Fortress, the River and the Garden: finding common ground between scientific and traditional ecological knowledge. Invited chapter submission.**

B. Non-refereed Publications

- 1) "Wildflowers on the Verge" Plank Road magazine in press
- 2) "Braiding Sweetgrass" book, in press from Milkweed Editions, scheduled release date fall 2012

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

- 1) Native American and Indigenous Studies Association, Annual Meeting "Finding Common Ground between Scientific and Traditional Ecological Knowledge", June 9-11. 2011 Sacramento, CA
- 2) Intertribal Timber Council Annual Meeting. "Restoring Reciprocity". June 14, 2011. Carleton, MN
- 3) Indigenous Knowledge of the Northeast conference, "Revitalizing Indigenous Plant Knowledge", University of New Hampshire, 9/23/11, Durham, NH
- 4) Restoring Reciprocity", Indigenous Women's Science Network. 11/10/11 Minneapolis, MN

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

- 1) "Restoration and Reciprocity". Adirondack Center for Writing. ECHO center, Burlington, VT 9/27/12, 30
- 2) "Returning the Gift". Remarks for the Spring Creek Project for Nature, Philosophy and the Written Word, environmental ethics gathering for the "Blue River Declaration", 120
- 3) "Becoming Indigenous to Place", St. Olaf's College, Visiting Scholar 3/25-27 Northfield MN, 50
- 4) "Earth Stewardship". Young Biologists Club, Sacred Heart School, 2/16/12 40
- 5) Syracuse Botanical Club, Introduction to Moss Identification, 3/5/11
- 6) "Revitalizing Traditional Plant Knowledge", Northwest Indian College, Bellingham WA.3/21/12
- 7) "Finding Common Ground between Indigenous and Scientific Knowledge", Humboldt State University, Arcata, CA 3/22/12, 50
- 8) Environmental Sustainability Roundtable, Humboldt State University, Arcata, CA 3/23/12, 10
- 9) Finding Common Ground between Indigenous and Scientific Knowledge", Cornell University, Ithaca, NY

V. PUBLIC SERVICE

A. Funded Service (include consulting activities)

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

- a) University of Wisconsin, consultant/advisor to POSOH indigenous environmental education project
- b) College of the Menominee Nation, curriculum development

2. Industrial and Commercial Groups, etc.

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

- 1) Orion Society, Board of Directors
- 2) Oregon Museum of Science and Industry, advisor to Generations of Knowledge Project
- 3) Fabius Pompey School District, presenter at career Fair 12/8/11
- 4) Reviewer and Judge, John Burroughs Medal Award Committee 2011/12
- 5) Neighbors of the Onondaga Nation
- 6) Great Law of Peace Education Center Initiative
- 7) Haudenosaunee Environmental Task Force

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)

- 1) Indigenous Women's Science Network, founding member, participant in Wisdom of the Elders video project
- 2) Session organizer, Northeast Natural History Conference, Syracuse NY 4/12

2. Professional Society Membership

- 1) American Indian Science and Engineering Society
- 2) Native American and Indigenous Studies Association
- 3) Wordcraft Circle
- 4) Central New York Native American Consortium
- 5) Indigenous Womens Science Network

3. Other Professional Activities

a. Editorial activity

Journal (s)

Responsibility

Other (books, symposia, etc.)

b. Reviewer

Journal(s)

No. of manuscripts

Journal of Forestry

1

Agency

No. of proposals

Other

- 1) American Indian Science and Engineering Society, GeoSciences Project, Grants Review
- 2) Reviewed manuscript for Syracuse University Press. Mary Hood, "Seasonal Roads"

c. Participation (workshops, symposia, etc.)

Name of workshop, etc.

Date

Place

- 1) "The Eye of the Storm" gathering of environmental philosophers, 9/29-10/2/11 Andrews Experimental Forest, Blue River, Oregon
- 2) "Sovereignty Symposium" SU Center for Indigenous Law and Governance, 11/18/11
- 3) Featured speaker in video project for "Voices from the Forest" video under contract for Earth Summit 2012

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

- 1) Willow workshop, 11/5-11/6 2011
- 2) Shagamekwe Aboriginal Plant Medicine workshop 5/25-5/30/12
- 3) Traditional Knowledge Elders Gathering, Trent University, Peterborough ON 2/11-12/12

D. Foreign Travel (Where, When, Purpose)

VII. ADMINISTRATIVE AND SERVICE RESPONSIBILITIES (include committee participation)

A. Department-level

Peer classroom evaluation for Promotion and Tenure Committee
Mentor for junior faculty member

B. College-level

- 1) Presentation to New Visions Program, visiting students 10/18/11
- 2) Advisor to Primitive Pursuits student organization
- 3) Hiawatha Institute for Indigenous Knowledge, ESF liaison
- 4) CSTEP Mentor
- 5) SU Native Student Outreach Day, Fall 11/2/11
- 6) SU Native Student Outreach Day, Spring 4/21/12
- 7) Environmental Studies Promotion and Tenure Committee, external member 2012
- 8) Director, Center for Native Peoples and the Environment
- 9) Acting Director, Cranberry Lake Biological Station

C. University-wide, including Research Foundation

1)

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.

Contributions to our students

My major and most rewarding contributions during 2011-12 have been to our students, through my central focus on the scholarship of teaching. I have taught 6 distinct courses and contributed to development of the new Diversity of Life course. I am pleased to be able to create innovative, interdisciplinary courses which broaden the scope of ideas and perspectives available to our students. Excellent student evaluations indicate that they appreciate the content and character of these offerings. I have participated in 3 professional education workshops in order to advance further development of my Plants and Culture class. In my capacity as Director of the NSF Undergraduate Mentoring in Environmental Biology Program, as a CSTEP mentor, an Honors advisor, undergraduate research advisor I have helped to mentor the academic, personal and professional development of 10 promising undergraduates this year in addition to my assigned advisees. All students completing the UMEB program presented research posters at the Spotlight on Research. I also serve as advisor to a student organization. I have contributed to teaching in diverse outreach settings and through a wide array of invited public presentations around the country. In addition to guiding my own graduate students, I have been invited to serve on the graduate committees of students at 3 other universities. A highlight of my contributions to our ESF students is the successful funding of a proposal to the USDA Multicultural Scholars Program which will support a full 4 years of fellowship and enrichment activities for 5 new students.

Contributions to Department and College:

I have served as founder and Director of The Center for Native Peoples and the Environment in 2011-12 which has brought significant positive attention to the College's leadership role in incorporating traditional ecological knowledge in environmental education and research. I'm particularly proud of the contributions of the Center as an emerging

change agent in broadening the scientific dialogue to include traditional ecological knowledge. Our efforts have been rewarded with a significant private donation that supports the ongoing development of the Center. The many activities of the Center include a summer community environmental internship program at Onondaga Nation and at Tuscarora nation. The Center continues to develop and present the “Native Earth Environmental Youth Camp” with funding from the National Science Foundation. The camp has been a focal point for wide-ranging collaborations with 8 different indigenous nations in the region. The impact of the Center can be seen in the number of invited presentations and collaborations on traditional ecological knowledge requested from around the country. The validity of using TEK as a partner to ecological science in education and research is gaining traction through our efforts. The successful development of the Center has created a platform from which grant proposals have developed. The momentum behind this endeavor is reflected in the submission of 5 major collaborative grant proposals during the past year, with partners as diverse as the Smithsonian Institution and the US Forest Service, as well as several smaller initiatives. I served as the PI for the revision and development of this year’s resubmitted IGERT proposal with an interdisciplinary group of collaborators. Unfortunately, that proposal was not successful, but we are developing a collaborative initiative to advance those goals through other programs.

Contributions to Professional Growth

In addition to the contributions of traditional knowledge to environmental education and research, that I hope my work has made, I am increasingly involved in initiatives which incorporate my writing and speaking on indigenous knowledge systems, into the arena of environmental ethics and philosophy. I was honored to be invited to national gathering of leading environmental philosophers and to contribute to the creation of the “Blue River Declaration” an ethical manifesto on our moral obligation to the future in a time of climate change. I have also been invited to participate in several video projects and to deliver a TED talk on this subject this summer. Working in this interdisciplinary arena of public dialogue and engaging teaching tools outside of my academic experience has been both challenging and rewarding, contributing to professional growth in new directions which can benefit my creative capacity as an educator and writer.

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)

B. PROJECTED ACTIVITIES FOR NEXT YEAR

1. Summer 2012

a. Course(s) to be offered

EFB 337 Field Ethnobotany

b. Proposed research activity

Haudenosaunee Perspectives on Climate Change

c. University, professional society, and public service
Center for Native Peoples and the Environment leadership

2. Fall Semester 2012

a. Course(s) to be offered
EFB 497 Plants and Culture

b. Proposed research activity
develop collaborative IGERT proposals and others

c. University, Professional society, and public service
Center for Native Peoples and the Environment leadership

3. Spring Semester 2013

a. Course(s) to be offered
EFB 446/646 Ecology of Mosses
EFB 305/605 Indigenous Issues and the Environment

b. Proposed research activity
complete Forest Service climate change research with tribes
develop continued proposals for climate change and indigenous knowledge

c. University, professional society, and public service
Center for Native Peoples and the Environment leadership