ANNUAL REPORT: June 1, 2010 – May 31, 2011
(i.e., Summer 2010, AY 2010-2011)
DEPARTMENT OF ENVIRONMENTAL AND FOREST BIOLOGY
SUNY-ESF

NAME: Jacqueline L. Frair

I. INSTRUCTIONAL ACTIVITIES

1. Regular Course Offerings

	Course No.	Title	Credit Hrs.	No. Students	No. of Lab. Sections
SUMMER:	EFB 496	Wildlife Techniques	3	11	NA
	(*routinely offered course that has had experimental listing for too long, will work on changing it to a formal listing this fall*)				
FALL:	EFB 796 (sec 1)	Landscape Ecology	3	12	1
	(*received official listing approval by COI this past year*)				
SPRING:	EFB 491	Applied Wildlife Science	3	37	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.

- EFB 496 (Wildlife Techniques) has a service-learning component where students engage with both the NYS Department of Environmental Conservation and the general public on a long-term wildlife population survey at the Wilson Hill Wildlife Management Area. This annual "goose round-up" involves herding flightless (molting) geese into pens to affix or read existing leg bands. The goals are to collect biological data on the Canada geese populations and also to bring together as many people and organizations as possible at a conservation event to improve communication and understanding. Each year over 140 people participate in the drive, and this wildlife techniques class has been involved for the past 4 summers through my class. Students receive training on how to handle large numbers of birds, proper techniques of aging and sexing geese, as well as techniques for involving the public in conservation activities. In some years we participate in additional goose drives, such as one at Saranac Lake two years ago that gave a much more personal involvement of students with the public and even led to interviews with the press.

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

Course No.	Title	Credit Hrs.	No. Students
EFB 420 (sec 22)	Internship in EFB (fall)	3-5	4

EFB 420 (sec 21)	Internship in EFB (spr)	2-3	3
EFB 495 (sec 24)	Undergrad College Teaching Exp.	3	3
EFB 498 (sec 5)	Research Problems in EFB (fall)	1	1
EFB 498 (sec 5)	Research Problems in EFB (spr)	1-3	9
EFB 796 (sec 4)	Conservation Conversation (fall)	1	9
EFB 796 (sec 2)	Conservation Conversation (spr)	1	5
EFB 798 (sec 5)	Research Problems in EFB (fall)	6	1
EFB 898 (sec 5)	Professional Experience	3	1
EFB 899 (sec 5)	Masters Thesis Research (fall)	1-5	2
EFB 899 (sec 5)	Masters Thesis Research (spr)	4-6	3
EFB 999 (sec 5)	Doctoral Thesis Research (fall)	6-9	3
EFB 999 (sec 5)	Doctoral Thesis Research (spr)	1-7	3

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

   None this past year.

4. Guest Lecture Activities

Course No.	Title	No. of Lectures
EFB 132	Freshman Orientation Seminar	1
ESF 300	Introduction to GIT	1
EFB 796 (sec 1)	EFB Core Course	1

II. STUDENT ADVISING

A. Number of undergraduates for whom you are the student's official advisor _39__ and unofficial advisor _10__

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

- Allison Devlin, Ph.D., started Aug 2010
- Scott Warsen, M.S., started Jan 2010
- Michelle Peach, Ph.D., started Aug 2009, passed candidacy exam Apr 2011
- Sara Hansen, M.S., started Aug 2009
- Andrew MacDuff, M.S., started Aug 2009
- Robin Holevinski, Ph.D., started Aug 2007

CO-MAJOR PROFESSOR – none at the present time.

MEMBER, STEERING COMMITTEE (other than those listed above)

- Anna Harrison (FNRM), M.S. – defended Aug 2010, "The influence of landscape factors on long-term beaver occupancy"

- Angela Sirois (EFB), M.S. – defended Apr 2011, "Effects of habitat management on bog turtles (*Glyptemys muhlengergii*): a contrast of responses to management by two populations in Massachusetts, USA"
- Kevin Kapuscinski (EFB), Ph.D. – defended May 2011, "Comparative ecology of muskellunge and nearshore fish assemblages in the St. Lawrence and Niagara Rivers".
- David Williams (EFB), Ph.D. – defended June 2010, "Contact structure and scales of movement by white-tailed deer in central NY".
- Courtney LaMere (EFB), M.S.
- Elizabeth Hunter (EFB), M.S.
- Natasha Karniski (EFB), M.S.
- Michael Fishman (EFB), M.S.
- Brigham Whitman (EFB), M.S.

CHAIRMAN OR READER ON THESIS EXAMS, ETC.

Marvin Montefrio (ES), Ph.D. – chair of candidacy examination (Feb 2011)

III. RESEARCH COMPLETED OR UNDERWAY

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

- NY Bird diversity study (unsupported, 5% AY)
- Central East Slopes Elk and Wolf Study (ongoing collaboration, unsupported, 5% AY)
- Coyote genetics study (unsupported, 1% AY)
- Caribou Movements and Habitat Selection Study (ongoing collaboration, unsupported, 1% AY)
- Mentor Ossining High School student (Kim Snyder) for research project on coyote diets (1% AY)
- Mentor to Tim McCoy for marten diet study (1% AY)
- UMEB mentor to Erin Moody and Nory Alexander (1% AY)

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)

- Northern States Research Cooperative (USDA Forest Service), "Niche of the 'coy-wolf' and implications for biodiversity in northeastern forests", $40,045 ($23,783 for 2010-11 fiscal year), Jun 2010 – Dec 2011, provided partial support for Scott Warsen (M.S.). PI(s) J. Frair and M. Teece.
- NY State Department of Environmental Conservation (Federal pass-through – USFWS), "Non-harvest based assessment of river otter populations in New York", $160,538 ($41,446 for 2010-11 fiscal year), Apr 2010-Mar 2012, provided research support to Andrew MacDuff (M.S.). PI: J. Frair.
- USDA McIntire-Stennis Program, "Monitoring populations of elusive forest wildlife: a modern approach using noninvasive genetic techniques", $50,393 ($24,140 for fiscal year 2010-11), Aug 2009 – Aug 2011, supported R. Holevinski (Ph.D.). PI(s) J. Frair and C. Whipps.
- NY State Department of Environmental Conservation (Federal pass-through - USFWS), "Population Status and Foraging Ecology of Eastern Coyotes in NY State", $678,704 ($176,802K for 2010-11 fiscal year), Jan 2007 – Dec 2011, provided partial support for Sara Hansen (M.S.). PI(s) J. Frair and J.P. Gibbs.

Grant/fellowships procured by my graduate students:

- Panthera, "Population viability analysis, comparative ecology & genetics of jaguar (*Panthera onca*) in the Pantanal, Brazil", $12,000, Jan-Dec 2011. PI: A. Devlin.
- American Wildlife Conservation Association, "Estimation of eastern coyote abundance through distance sampling and vocalization surveys", $2,000, Jun-Aug 2010. PI: S. Hansen.
- Grober Fellowship, SUNY ESF, "The evolving niche of the 'coy-wolf' in northeastern forests and its role in regulating meso-predator release", $15,000, May-Dec 2010. PI: S. Warsen.
- Edna Bailey Sussman Fellowship, SUNY ESF, "Estimation of eastern coyote abundance through distance sampling and vocalization surveys", $5,880, May-Aug 2010. PI: S. Hansen.

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

- Northern States Research Cooperative (USDA Forest Service), "A critical test of the effectiveness of protected lands for conserving forest bird biodiversity and mitigating the effects of climate change", $90,799, PI(s) J. Cohen, J. Frair.
- Northern States Research Cooperative (USDA Forest Service), "Quantifying beaver impacts to northern forest diversity, productivity and structure at a landscape scale", $80,873, PI(s) J. Stella, E. Bevilaqua, J. Frair.
- Liz Claiborne Art Ortenberg Jaguar Research Grant Program (Panthera), "An assessment of indigenous communities influence on jaguar habitat in the Lacandon Forest, Chiapas, Mexico", $10,000, PI J. Frair.

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

- Institute of Museum and Library Services, "The Roosevelt Wildlife Collection Exhibition Project", $148,779, PI(s) J. Frair, R. Giegerich, D. Leopold, B. Boothroyd (proposal written by M. Fellows).

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

Leblond, M., Frair, J., Fortin, D., Dussault, C., Ouellet J.-P., and Courtois, R. In press. Assessing the influence of resource covariates at multiples scales: an application to forest-dwelling caribou faced with intensive human activity. Landscape Ecology.

Zuckerberg, B., Huettmann, F., and Frair, J. 2011. Proper data management as a scientific foundation for reliable species distribution modeling. Pages 45-70 *in* C.A. Drew, Y.F. Wiersma, and F. Huettmann, eds., Predictive Species and Habitat Modeling in Landscape Ecology, Springer, New York.

Frair, J., Fieberg, J., Hebblewhite, M., Cagnacci, F., DeCesare, N. and Pedrotti, L. (2010) Resolving issues of imprecise and habitat-biased locations in ecological analyses using GPS telemetry data. Philosophical Transactions of the Royal Society B, 365: 2187-2200.
** Listed among the top 10 most cited articles from the PTRSB from the year 2010 (http://rstb.royalsocietypublishing.org/site/misc/top_ten_2010.xhtml).

Fieberg, J., Boyce, M.S. Matthiopoulous, J., Hebblewhite, M. and Frair, J. 2010. Corrrelation and studies of habitat selection: problem, red herring, or opportunity? Philosophical Transactions of the Royal Society B, 365: 2233-2244

Beyer, H.L., Haydon, D.T., Morales, J.M., Frair, J., Hebblewhite, M., Merrill, E.H., Boyce, M.S., Mitchell, M. and Matthiopoulos, J. 2010. Habitat preference: understanding use versus availability designs. Philosophical Transactions of the Royal Society B, 365: 2245-2254.

Merrill, E., Sand, H., Zimmerman, B., McPhee, H., Webb, N., Hebblewhite, M., Wabakken, P. and Frair, J. 2010. Building a mechanistic understanding of predation with GPS-based movement data. Philosophical Transactions of the Royal Society B, 365: 2279-2288.

Morales, J.M., Moorcroft, P. R., Matthiopoulos, J., Frair, J. L., Kie, J. G., Powell, R. A., Merrill, E. H. and Haydon, D. T. 2010. Towards mechanistic links between animal movements and population dynamics. Philosophical Transactions of the Royal Society B, 365: 2289-2301.

B. Non-refereed Publications

"SUNY-Environmental Science and Forestry studies coyotes' impact on deer populations" Page 12, New York Hunting & Trapping, 2010-11 Official Guide to Laws & Regulations (vol 4, issue no. 1, October 2010).

Frair, J. and Gibbs, J.P. "The Roosevelt Wild Life Station: revitalizing a forgotten conservation legacy." Fair Chase, the official publication of the Boone and Crockett Club, Missoula, MT. Spring Issue 2011.

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

Papers presented by J. Frair
Frair, J. and Hebblewhite, M. "The impact of oil & gas development on ungulates: lessons from the west." *Invited presentation* for special session on "Biological Impact of Hydraulic Fracturing for Natural Gas" at The Northeast Natural History Conference, 8 April 2011, Albany, NY.

Papers presented by co-authors
Warsen, S. and Frair, J.L. "The biogeography of songbirds on islands in Cranberry Lake" 18th Annual Conference on the Adirondacks, sponsored by the Adirondack Research Consortium, 18-19 May 2011, Lake Placid, NY.

Holevinski, R.A., Frair, J.L., Batcheller, G. "Use of GPS clusters to estimate coyote kill rates of white-tailed deer"

- Northeast Fish and Wildlife Conference, 19 Apr 2011, Manchester, New Hampshire.
- The Wildlife Society annual conference, 4 Oct 2010, Snowbird, Utah.

Hansen, S.J.K., Frair, J.L., Gibbs, J.P., and Underwood, B.H. "Abundance estimation of coyote populations in New York State via vocalization surveys and distance sampling."

- Northeast Fish and Wildlife Conference, 19 April 2011, Manchester, New Hampshire.
- The Wildlife Society annual conference, 3 Oct 2010, Snowbird, Utah (poster presentation)

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

- Junior Café Scientifique at the Museum of Science and Techology, Syracuse, Sep 2010, 25 participants
- GIS Day at SUNY ESF, Oct 2010, 10 participants
- Erie County Federation of Sportmen's Clubs, Feb 2011, 450 participants

Research talks delivered by graduate students with J. Frair as co-author

- Steuben County Fair, Aug 2010 (poster on coyote foraging ecology)
- McGill University Wildlife Biology Class, Adirondack Ecological Center, Sep 2010
- NY State Trappers Convention, Herkimer, Sep 2010 (poster on coyote foraging ecology)
- Fur Takers of America Trapper's College, Milford, Indiana, Sep 2010
- Steuben County Rotary Sportsmen Dinner, Canisteo, Oct 2010
- Adirondack Park Visitor's Interpretive Center Volunteer Luncheon, Nov 2010
- Montezuma Wildlife Refuge, Jan 2011
- Victory Sportsmen Expo, Painted Post, Mar 2011
- New York Houndsmen Annual Meeting, Camden, Mar 2011
- Tioga County and surrounding Sportsmen Federations, Owego, Apr 2011
- New York State Trappers Association Annual Meeting, Delmar, Apr 2011
- Affiliated Conservation Clubs of Madison County, Madison, May 2011
- Camillus Middle School, Camillus, May 2011

V. PUBLIC SERVICE

A. Funded Service (include consulting activities)

1. Government Agencies (Federal, State, Local): none this year.

2. Industrial and Commercial Groups, etc.: none this year.

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

NY State Fish and Wildlife Management Advisory Board, SUNY ESF Science Advisor

- 29 Oct 2010 (day-long meeting)
- 29 Apr 2011 (day-long meeting)

NY State Biodiversity Conservation Advisory Committee, member

- 25 Feb 2011 (10-3:30 pm conference call)

VI. PROFESSIONAL DEVELOPMENT

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

- "Distinguished Teacher Award" – Undergraduate Student Association
- "2011 Student Chapter Advisor of the Year" – National Chapter of The Wildlife Society (to be received at annual meeting in fall 2011)

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

- Chair of an ad hoc committee of The Wildlife Society focused on the impacts of oil & gas development on wildlife in the eastern US (initiated May 2011).

2. Professional Society Membership

- The Wildlife Society, member of National, Northeastern Region, and NY State Chapters and

member of the College and University Wildlife Education Working Group
- The Society for Conservation Biology, lifetime member
- The Ecological Society of America, lifetime member

3. Other Professional Activities

a. Editorial activity – none this year.

Journal (s)	Responsibility

Other (books, symposia, etc.)

b. Reviewer

Journal(s)	No. of manuscripts
Journal of Wildlife Management	2
Ecological Applications	1
Wildlife Society Bulletin	1

Agency	No. of proposals
SUNY ESF Committee on Research	
- seed grant proposals	17
- McIntire-Stennis pre-proposals	21
- McIntire-Stennis full proposals	13

Other – none this year.

c. Participation (workshops, symposia, etc.)

Name of workshop, etc.	Date	Place
"Wildlife applications of Bayesian survival analysis using WinBUGS"	2 Oct 2010	The Wildlife Society Annual Conference, (Snowbird, Utah)
"Bayesian population analysis in WinBUGS"	1-5 Nov 2010	Patuxent Wildlife Research Center (Laurel, MD)

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

- ESF Teaching / Mentoring Colloquium, January 2011, Syracuse
- Hunter Education (DEC approved) – 12, 14, 16 April 2011

D. Foreign Travel (Where, When, Purpose)

- San Cristobal, Mexico, 28 Jul – 15 Aug 2010, develop contacts for research collaboration linking indigenous land use practices to ecosystem health (working with Stewart Diemont)

VII. ADMINISTRATIVE AND SERVICE RESPONSIBILITIES (include committee participation)

A. Department-level

- Wildlife Science, Curriculum Coordinator.
- Roosevelt Wild Life Station, Associate Director (November 2010 – present).
  - Wrote article highlighting station for Boone & Crockett Clubs "Fair Chase" magazine.
  - Gave presentation on the Station to Boone & Crockett Club annual meeting at the North American Wildlife and Natural Resources Conference (Kansas City, 16 Mar 2011).
- The Wildlife Society, Faculty Advisor to the Student Chapter.
- Wildlife Faculty Search Committee, member (search concluded summer 2010).
- Mentor to two UMEB students – Nory Alexander and Erin Moody.
- Coordinator of Betty Moore Chamberlaine and Ralph T. King department awards.
- Routinely participated in student receptions and personal meetings with prospective and accepted students.

B. College-level

- NY State Fish and Wildlife Management Advisory Board, Science Advisor for SUNY ESF (legislatively-mandated position).
- Faculty Governance Committee on Research (chair) and Executive Committee (member).
- Council for Geospatial Modeling and Analysis, member.
- Attended spring Banquet and Commencement (gave up my seat for family members)

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 very proudly supported students in The Wildlife Society as they successfully fought to hold onto their titles as the TWS Quiz Bowl champions for both the Northeast Region and NY State. My main contribution to their success was coercing a graduate student (Sara Hansen) to serve in an advisory role to the club. This was necessary as there were numerous new initiatives undertaken by the club this year that required a lot of coordination – primarily a Wildlife Professional Speaker Series (with video interviews intended for a soon-to-be revamped club website) and the first annual "Beast Feast" (which received many community donations and was well attended by students and faculty). The Beast Feast was the first official fund-raising effort by the students to support travel to Hawaii this fall to compete in the national Quiz Bowl. Despite feeling that I can't give these students the time and focus they need, being involved with them has been tremendously rewarding as I've seen them accomplish really great things and helped them start to achieve their professional aspirations. They apparently appreciated my modest efforts having nominated me for the "2011 Student Chapter Advisor of the Year" award, which I will receive from TWS at the national conference this fall. Inside the classroom, I successfully delivered my graduate-level course in Landscape Ecology for the third time and it is now an officially listed (rather than experimental) course. I intend to

rotate this course with my other graduate level offering, which is now called "Quantitative Methods and Models in R" and will be co-taught with John Stella this coming fall. I'm very pleased with the structure and content of my required undergraduate course "Applied Wildlife Science" (EFB 491), and its delivery is getting much smoother as my materials become increasingly refined and I continue to involve excellent undergraduate teaching assistants. I received insightful input from external reviewers of my teaching this year that I look forward to employing in the coming academic year – this should help smooth out some of the remaining kinks in the course, which center around writing exams that remain challenging while setting students up for success and taking more time to draw students into a conversation about the material, letting them struggle more to find the right answers amongst themselves. I do strive to become a better teacher, which the students apparently recognize and respond positively to given that the Undergraduate Student Association awarded me their "Distinguished Teacher Award" this spring. I feel humbled by this honor.

One of my main contributions to the department this year involved taking on the role of the Wildlife Science Curriculum Coordinator and working with faculty to make several changes to the curriculum to accommodate both the new Diversity of Life courses and students more interested a vertebrate ecology track rather than the traditional professional wildlife track. We moved the introduction to wildlife ecology course (EFB 390) to the fall semester, which should greatly improve scheduling of the required upper division three-course sequence: EFB 390 (fall junior year) → EFB 491 (spring junior year) → EFB 493 (capstone, fall senior year), which has not functioned as a proper sequence yet. Following this scheduling change, I am coordinating course content with Jonathan Cohen to enable his capstone course to build on the material in 491 and other courses to provide the more synthetic, application-focused experience the capstone is intended for. In addition, both Jonathan and I are working to add new courses to the undergraduate and graduate curriculum. This fall I will be offering a course in "Hunter and Trapper Education for Wildlife Professionals" that will provide students with a solid grounding in the role of harvest and sportspersons in wildlife management, something that our increasingly urban student body has little personal experience with. The growing need for such courses has been recognized in recent national reports on Wildlife Education and I became a member of the TWS College and University Wildlife Education Working Group to stay current on these issues and the novel approaches being taken to fill educational gaps. My other main contribution to the department this year was to become formally involved in the Roosevelt Wild Life Station as its Associate Director (with James Gibbs as Director), and working with the Development Office to reach out to potential financial supporters of the Station. I was instrumental in engaging the Boone and Crockett Club in conversations about the Station – authoring an article on the Station in their "Fair Chase" members magazine and giving a presentation to the executive board members at their annual meeting in Kansas City. One of my primary duties is to oversee the Roosevelt Wildlife Collection – and this year Ron Giegerich and I involved a suite of undergraduate interns to initiate a full-scale inventory, cleanup, and taxonomic reorganization of the collection. We are working on a new website for the Station and intend to have a web-accessible database of the collection available in the near future. I am also working with the administration to secure funding for the collection and new exhibit spaces targeted for the Gateway building. At the college level, my primary contributions were serving as the chair of the Faculty Governance Committee on Research (COR) and member of the Executive Committee. This year we successfully undertook a major revision of the Governance bylaws designed to help increase faculty participation in as well as the effectiveness of campus governance. I also continue to serve as a Science Advisor to the NY State Fish and Wildlife Management Advisory Board, and as an ambassador for ESF (along with my graduate students) given the many and various public talks given on our research around the state. Collectively we gave more than 16 public talks this year, with several events attended by more than 400 people, and many resulting in press coverage.

For myself professionally, this past year I began engaging in issues regarding the effects of energy extraction activities on wildlife in the northeast, in particular in response to the emerging issue of rapid growth in hydraulic fracturing wells. This is an area I have some related expertise in given ongoing research collaborations in Alberta that involve a long-term and broad-scale assessment of the cumulative impacts of oil & gas development on elk and wolf populations. I was invited to give a presentation this past April in a special session on Biological Impact of Hydraulic Fracturing for Natural Gas" at the Northeast Natural History conference in Albany, and focused that talk on lessons learned in the west that could inform wildlife management and development in the east. Preparing for this talk helped me get up to speed on the hydrofracking industry, regulatory processes, and wildlife concerns, and I've recently agreed to chair an ad hoc committee of The Wildlife Society focused on these issues. I'm also coordinating

with DEC personnel and seeking funding to initiate the kind of before-after-control-impact research, and long-term monitoring, needed to manage the growing tide of industrial footprint so as to ensure healthy ecosystems and wildlife populations in its wake. In addition to working on developing new avenues for local/regional research, I'm also working on developing international research collaborations. First, Panthera has funded my Ph.D. student (Allison Devlin) to focus on population viability of jaguar in the Pantanal region of Brazil. Allison is currently there deploying GPS collars on jaguar. Second, I spent three weeks last summer in Mexico with Stewart Diemont to forge local research collaborations and develop research ideas that blend our two areas of expertise. We are working together on grant proposals that focus on indigenous land use practices and wild cat conservation in the region. In addition to direct research foci, I also acted this year to increase my personal research capacity by seeking additional training in Bayesian methodologies – with a one-day workshop focused on survival analysis and a full-week workshop on population modeling at the Patuxent Wildlife Center.

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)

Briefly, I plan to continue to work closely with Jonathan Cohen and Guy Baldassarre to grow the undergraduate and graduate curriculum in wildlife – filling key educational gaps through new courses and seminars. I have several in-progress manuscripts from recently completed research activities that are a priority for getting into print. I also am developing new collaborations that may soon lead to new research directions in my lab. Another primary area of interest for me in the coming year is procuring support for the Roosevelt Wild Life Station and Collection. And importantly, this September I will be submitting my tenure dossier for consideration.

B. PROJECTED ACTIVITIES FOR NEXT YEAR

1. Summer 2011

a. Course(s) to be offered

EFB 496, Wildlife Techniques

b. Proposed research activity

- Complete analysis of two major objectives of ongoing coyote research – statewide population analysis and deer kill rates, and get these student chapters completed and submitted for publication.
- Support graduate student field work in the Adirondacks and Brazil.
- Submit grant proposals to support developing international collaborations in Brazil and Mexico.
- Complete in-progress manuscripts.

c. University, professional society, and public service

- Participate in Argali Sheep surveys in Russia with J.P. Gibbs.
- Chair Ad hoc committee for The Wildlife Society investigating the impacts of gas development via hydraulic fracturing in the eastern US.
- Work on grants to support Roosevelt Wild Life Station and Collection.

2. Fall Semester 2011

a. Course(s) to be offered

- Quantitative Methods and Models in R (EFB 796 / FOR 796) – co-taught with J. Stella
- Hunter and Trapper Education for Wildlife Professionals (EFB 496)

b. Proposed research activity

- Support graduate students in their field work, lab analytical work, and data analysis.
- Submit grant proposals having September, November, and January deadlines.

c. University, Professional society, and public service

- Ongoing Department and College-level service commitments.
- Co-lead one-day workshop on spatial analysis at The Wildlife Society annual conference (with Hawthorne Beyer, University of Toronto).
- Chair Ad hoc committee for The Wildlife Society investigating the impacts of gas development via hydraulic fracturing in the eastern US.

3. Spring Semester 2012

a. Course(s) to be offered

- Applied Wildlife Science (EFB 491)

b. Proposed research activity

- Support graduate students in their field work, lab analytical work, and data analysis.
- Develop and submit manuscripts for publication.

c. University, professional society, and public service

- Chair Ad hoc committee for The Wildlife Society investigating the impacts of gas development via hydraulic fracturing in the eastern US.