

C U R R I C U L U M V I T A E

Dr. Rebecca Jo Safran

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EDUCATION

Post-doctoral Fellow	Princeton University	Council on Science and Technology and Department of Ecology and Evolutionary Biology	September 2005 – December 2007
Ph.D.	Cornell University	Ecology and Evolutionary Biology Minor Degree in Biometry	January 2005
M.S.	Humboldt State University	Ecology	May 1997
B.S.	University of Michigan	Ecology	December 1991

PUBLICATIONS

* = undergraduate author

In Press

1. **Safran, R.J.** The Sexual and Social Behavior of the Barn Swallow. *Encyclopedia of Animal Behavior*. **Summer 2010**
2. **Safran, R.J.** M.N. Vitousek, M.E. Hauber, and C.K. Ghalambor. Sexual selection: a dynamic state of affairs. *Trends in Ecology and Evolution*. **July 2010**.
3. Dor, R., **Safran, R.J.** Sheldon, F.H. Winkler, D.W., and Lovette, I.J. Phylogeny of the genus *Hirundo* and the Barn Swallow subspecies complex. *Molecular Phylogenetics and Evolution* **Fall 2010**.
4. **Safran, R.J.**, K.J. McGraw, K.M. Pilz, and S. Correa. Egg-yolk androgen and carotenoid deposition as a function of maternal social environment in barn swallows *Hirundo rustica*. *Journal of Avian Biology*. **Fall 2010**.

In review

5. Billerman, S, G*. Huber, **R.J. Safran** and I.J. Lovette. Population Genetics of the Recent Transcontinental Colonization of South America by Breeding Barn Swallows. *Conservation Genetics*
6. Lifjeld, J.T., Kleven, O. , Jacobsen F, McGraw, K.J., **Safran, R.J.** and Robertson, R.J Age before beauty in barn swallows: an analysis of reproductive consequences in terms of morphological variation and age in male barn swallows. *Animal Behavior*.

7. Dor, R., **Safran, R.J.**, Vortman, Y, Lotem, A, McGowan, A, Evans, M, and Lovette I. Population genetics of migratory European (*Hirundo rustica rustica*) and sedentary East-Mediterranean (*H. r. transitiva*) Barn Swallows. *Journal of Evolutionary Biology*.

In print

8. Hubbard, J, Uy, J.A.C., Hauber, M.E. Hoekstra, H.E., and **Safran, R.J.** Vertebrate Pigmentation: From Genes to Adaptive Function. *Trends in Genetics* 26: 231-239. *Featured with the cover photo.*
9. **Safran, R.J.**, K.J. McGraw, M.R. Wilkins, J.K. Hubbard, and J. Marling. 2010. Positive antioxidant balance over the breeding season predicts reproductive performance in a wild bird. *PLoS ONE* 5(2) e9420.
10. Maguire, S.E*. and **R.J. Safran**. 2010. Paternity, ornamentation and patterns of parental care in the North American barn swallow. *Journal of Avian Biology* 41:74-82.
11. Tibbetts, E.A., and **R.J. Safran***. 2009. Co-evolution of Badges of Status and Winter Sociality in New and Old World Sparrows. *Journal of Evolutionary Biology* 22: 2376-2386. * Both authors contributed equally. *Featured with cover photo*
12. **Safran, R.J.**, and M. Vitousek. 2008. Evolutionary Biology: Arms Race in the Eye of the Beholder. *Current Biology*. 18: R734-736.
13. **Safran, R.J.**, J. Adelman, K.J. McGraw and M. Hau. 2008. Sexual signal exaggeration affects physiological state in a social vertebrate. *Current Biology* 18: R461-462. Rated by Faculty of 1000 as "Must Read"
14. **Safran, R.J.**, K.M. Pilz, K.J. McGraw, S. Correa, H. Schwabl. 2008. Maternal Deposition of Egg-Yolk Androgens and Carotenoids in Barn Swallows: Is Allocation Related to Indicators of Parental Quality? *Behavioral Ecology Sociobiology* 62:427-438.
15. **Safran, R.J.**, V.A.J. Doerr, P.W. Sherman, E. Doerr, S. M. Flaxman and D. W. Winkler. 2007. Group Breeding In Vertebrates: Linking Individual and Population-Level Approaches. *Evolutionary Ecology Research* 9: 1163-1185.
16. Doerr, E., Doerr, V.A.J., and **Safran, R.J.** 2007. Integrating delayed dispersal into broader concepts of social group formation. *Behavioral Processes* 76: 114-117.
17. **Safran, R.J.** 2007. Settlement patterns of female barn swallows across different group sizes: access to colorful males or favored nests? *Behavioral Ecology and Sociobiology*. 61: 1359-1368
18. **Safran R.J.**, Hauber M.E. 2007. Evolutionary Biology: Variation Isn't Always Sexy. *Current Biology* 17: R368-R 370.
19. C.R. Neuman*, **R.J. Safran**, and I.J. Lovette. 2007. Male tail streamer length does not predict paternity in a population of North American Barn Swallows. *Journal of Avian Biology* 38: 28-36.
20. **Safran, R.J.** 2006. Nest-Site Selection Decisions in Barn Swallows: What Predicts Reproductive Performance? *Canadian J. Zoology* 84: 1533–1539.
21. M.E. Hauber and **R.J. Safran**. 2006. Promiscuous fathers sire young that recognize true family. *Current Biology* 16: R797-R800. *Featured with the cover photo.*

22. **Safran, R.J.**, C.R. Neuman*, K.J. McGraw, and I.J. Lovette. 2005. Dynamic paternity allocation as a function of male plumage color in barn swallows. *Science*. 309: 2210-2212. Featured with the cover photo and in "Science Magazine's News of the Week". Rated by Faculty of 1000 as "Recommended"
23. McGraw, K.J., **R.J. Safran**, and K. Wakamatsu. 2005. How feather colour reflects its melanin content. *Functional Ecology* 19:816-821.
24. **Safran, R.J.** 2004. Adaptive site selection rules and variation in group size of barn swallows: individual decisions predict population patterns. *American Naturalist* 164: 121-131.
25. **Safran, R.J.** and K.J. McGraw. 2004. Plumage coloration, not length or symmetry of tail-streamers, is a sexually selected trait in North American barn swallows. *Behavioral Ecology* 15: 455-461.
26. McGraw, K.J., **R.J. Safran**, M.R. Evans, and K. Wakamatsu. 2004. European barn swallows use melanin pigments to color their feathers brown. *Behavioral Ecology* 15: 889-891.
27. McGraw, K.J., K. Wakamatsu, S. Ito, P.M. Nolan, P. Jouventin, F.S. Dobson, R.E. Austic, **R. Safran**, L. Siefferman, G. Hill and R. Parker. 2004. You Can't Always Judge a Plumage Pigment by its Color: Carotenoid and Melanin Content of Yellow and Brown Feathers in Swallows, Bluebirds, Penguins, and Domestic Chicks. *Condor* 106:390-395.
28. Taft, O.W., M.A. Colwell, C.R. Isola, and **R.J. Safran**. 2002. Waterbird responses to experimental drawdown: implications for multispecies management of wetland mosaics. *Journal of Applied Ecology* 39: 987-1001.
29. **Safran, R.J.**, M.A. Colwell, O.E. Williams and C.R. Isola. 2000. Foraging site selection by nonbreeding White-faced Ibis *Condor* 102:211-215.
30. Isola, C.R., M.A. Colwell, O.E.W. Taft, and **R.J. Safran**. 2000. Interspecific differences in habitat use of shorebirds and waterfowl foraging in managed wetlands of California's San Joaquin Valley. *Waterbirds* 23: 196-203.
31. **Safran, R.J.**, C.R. Isola, M.A. Colwell and O.E. Williams. 1997. Benthic invertebrates at foraging locations of nine waterbird species in managed wetlands of the northern San Joaquin Valley, California. *Wetlands* 17: 407-415.
32. Shuford, W.D., C.M. Hickey, **R.J. Safran** and G.W. Page. 1996. A review of the status of the White-faced Ibis in winter in California. *Western Birds* 27: 169-196.

Book Review

- Safran, R.J.** 2002. A Review of Bird Nests and Construction Behavior. *Auk* 119:892-894.

FELLOWSHIPS and AWARDS

2010	Elected Member, Sigma Xi
2009	University of Colorado nomination for the Packard Fellows Program .
2006	National Science Foundation Travel Award to the North American Ornithological Congress, Veracruz, Mexico. October 2006 (\$771)
2006	National Science Foundation Travel Award to International Society for Behavioral Ecology Meeting, Tours, France. July 2006 (\$1,000)
2005 – 2008	Princeton University, Council on Science and Technology Postdoctoral Fellowship (\$155,000)
2004	Cole Award for Best Published Paper as a Graduate Student, presented by the faculty of the Department of Ecology and Evolutionary Biology, Cornell
2003 - 2004	American Association of University Women – American Fellowship (\$20,000)
2003, 2001, 2000	Cornell University Graduate School Travel Award (\$1,800)
2003, 1999	American Ornithologists' Union – Travel Grant (\$1,000)
1998 – 2000	National Science Foundation – Research Training Fellowship in Computational Biology (\$75,000)
1998	Student Presentation Prize: Annual Meeting of the Waterbird Society

RESEARCH GRANTS

Pending	Comparative Aerodynamic Function across a Morphological and Behavioral Gradient in Barn Swallows. Natural Environmental Research Council Grant, UK - Collaborator. Co-PI with Professor Matthew Evans (Exeter Univ, UK, Bret Tobalske, Univ. Montana, USA, Anders Hedenstrom, Lund Univ, Sweden. (500,000 BP).
Pending	Human Frontiers in Science Program: Pleiotropy in the Melanocortin System: from genes to receptor function to phenotype. Lead PI with co-PI Alexandre Roulin, Lausanne Univ, Switzerland, Michaela Hau, Max Planck, Germany, and Helgi Schiöth, Uppsala University, Sweden. (\$1,400,000).
2010	National Center for Evolutionary Synthesis: Summer visit for Phylogenetic Analysis workshop with Drs Carlos Botero and Liam Revell. (all costs covered)
2008	National Center for Evolutionary Synthesis: An Integrative Evolutionary Approach to Examine Sexual Selection as a Mechanism of Speciation. Lead PI with co-PI J. Albert Uy, Syracuse University (all costs covered, 4 meetings x 17 national/international participants)
2007-2011	Function of Multiple Sexual Signals in the Mediterranean Barn Swallow <i>Hirundo rustica transitiva</i> . PI: Dr. Arnon Lotem, Tel-Aviv University. Israel Science Foundation Research Grant - Collaborator (\$225,000 USD)
2008-2010	The underlying behavior and genetics of phenotypic differentiation: geographic variation in the barn swallow species complex. Sole PI. National Science Foundation – IOS/Research Initiation Grant (\$175,000)
2006	National Geographic Society, Committee for Research and Exploration (\$15,005)

- 2003 - 2004** National Science Foundation –Doctoral Dissertation Improvement Grant (\$10,000)
- 2002** American Museum of Natural History – Chapman Award for Research (\$1,200)
- 2002, 2001, 2000** Sigma Xi – Grant in Aid of Research (\$1,800)
- 2001, 2000, 1999** Department of Ecology and Evolutionary Biology – Grant for Research (\$1,800)
- 2001** American Ornithologists' Union – Grant for Research (\$1,300)
- 2001** Animal Behavior Society – Grant for Research (\$500)
- 2001** Wilson Ornithological Society – Grant for Research (\$500)
- 2001** Purple Martin Conservation Association - Grant for Research (\$500)
- 1995** Frances Peacock Award – through the Cornell Lab of Ornithology and Garden Club of America - Funds for Research (\$4,000)
- 1995** Funds for Research – Humboldt County Chapter of the Audubon Society (\$250)
- 1995** Marin County Rod and Reel Club – Funds for Research (\$1,500)

University of Colorado – Internal Grants

- 2009** UROP – Team Grant for 2009 – 2010, \$2,400
- 2009** CRCW Junior Faculty Development Award. An Integrative Approach for Understanding the Underlying Physiology of Adaptive Morphological Variation in Barn Swallows. \$5,000
- 2009** ATLAS new course development grant. \$6,000

Grant Effort/Not Funded

- 2009** Human Frontiers in Science Program. The evolution of oxidative stress management: links to antioxidants and animal life histories. Lead PI with co-PI David Costantini (Italy), Kevin McGraw (ASU). \$1,000,000.
- 2009** **Finalist.** Human Frontiers in Science Program. Comparative aerodynamics in populations of barn swallows across the Holarctic. Lead PI: Matthew R. Evans (Exeter, UK) with co-PI RJ Safran (CU, USA), Bret Tobalske (U MT, USA), Anders Hedenstrom (Lund U – Sweden), Arnon Lotem (Tel-Aviv University, Israel). \$1,400,000.
- 2009** NSF PIRE Pre-Proposal for CU competition: Evolution in Action across the Holarctic: An Integrative International Research and Education Collaboration with a Focus on the *Hirundo rustica* Species Complex. Lead PI with co-PIs: Margaret Eisenhart - CU, Robert Knight - CU, Irby Lovette – Cornell, Andrew Martin - CU, Hopi Hoekstra – Harvard. 2.5 million dollars (*not chosen by CU internal review*)
- 2008** **Finalist.** Comparative Aerodynamic Function across a Morphological and Behavioral Gradient in Barn Swallows. Natural Environmental Research Council Grant, UK - Collaborator (500,000 BP).
- 2007** NSF PIRE Pre-Proposal for CU competition: The Role of Sexual selection in Speciation: An Integrative, International Research and Education Collaboration. Lead PI with co-PIs: Margaret Eisenhart - CU, Irby Lovette – Cornell, Michaela Hau – Princeton, Hopi Hoekstra – Harvard. 2.5 million dollars (*not chosen by CU internal review*)

TEACHING EXPERIENCE & QUALIFICATIONS

TEACHING-RELATED AWARDS

- 2003** **Outstanding Graduate Teaching Assistant Award**, College of Agriculture and Life Sciences, Cornell University.
- 2003** **Excellence in Teaching Award** – Department of Ecology and Evolutionary Biology, Cornell University.
- 2008** **CU - ATLAS (Alliance for Technology, Learning and Society)**. Award for new course development. Global warming: science and expression through video-production and presentation. \$6,000. In collaboration with Dr. Kendi Davies and Michael Liguori

TEACHING & PROFESSIONAL DEVELOPMENT WORKSHOPS

Teaching Workshops - Designed and taught:

Cornell

Teaching Writing to Undergraduates. Cornell University. Fall 2004. Cornell Knight Writing Program.

University of Colorado

Achieving Your Goals in Graduate School. Fall 2008, Department of EBIO, CU

3-hour workshop; Funded by LEAP; 25 attendees

Work-Life Balance, Fall 2008, Department of EBIO, CU

3-hour workshop; Funded by LEAP; 26 attendees

Teaching Workshops - Attended:

Cornell

Excellence in Teaching: Graduate Teaching Assistant Training. Fall 2000.

Princeton

Assistant Professor Excellence Program. Various workshops. Fall 2005 – 2007.

CU

FTEP series workshops. Teaching on your first day. Fall 2008

LEAP workshop for new faculty. Spring 2008.

FTEP: Videotape & Evaluation of Lecture, Spring 2009

TEACHING EXPERIENCE

Courses

Physiological Dynamics of Sexual Signals. EBIO 6300-005. Co-taught graduate seminar with postdoc Dr. Maren Vitousek. Spring 2010. N = 7 enrolled students plus several informal attendees.

Global Climate Change: the Art and Science of Information. ATLS 3519. Undergraduate level course, Fall 2009, CU (n = 10 students); Fall 2010/cross listed with EBIO; (n = 20 students= max enrollment). With co-instructors Dr. Kendi Davies, Michael Liguori (media specialist). Funded by the Alliance for Technology, Learning and Society (ATLS). Student produced and presented films on global climate change. **See** <http://www.youtube.com/ATLASClimateChange>

Research Design in Ecology and Evolutionary Biology. EBIO 5100. Graduate level course, Fall 2008, CU (n = 11 students). Students produced NSF Graduate Research Fellowship and Doctoral Dissertation Improvement Grants.

General Biology. Majors course. EEB 211. Fall 2007, Princeton University (n = 155 students) and EBIO 1220. Spring 2008 (n = 562 students), 2009 (n = 627 students), 2010 (n = 665 students). CU. My part of the course focuses on Evolution and Human Physiology.

Statistical Analysis for Biologists. I designed and taught an undergraduate-level workshop on experimental design and statistical analysis, which included developing a tutorial run by 2 graduate students. Princeton University. Winter/Spring 2007

Dynamics of Living Systems. EEB 221. I co-taught an undergraduate-level integrative ecology/evolutionary biology course. Princeton University. Spring 2006 (n = 38 students)

Evolutionary Biology. I designed and taught three separate writing-intensive courses in Evolutionary Biology. Cornell University. Spring 2001, 2003, 2005. (21 students per section)

PRESENTATIONS

Invited Seminars

2010 (November), Invited Departmental Seminar: University of Colorado, Denver.

2010 (April). Invited Special Seminar Speaker: Univ British Columbia, Biodiversity Research Centre

2009. (March) Invited Departmental Seminar Speaker, Department of Biology, Virginia Tech.

2009. (May) Invited Departmental Seminar Speaker, Department of Biology, Colorado State Univ.

2008. Guest Seminar: "Sexual Selection and Speciation in the Barn Swallow" Roger Tory Peterson Institute, Jamestown, New York.

2006. Tel-Aviv University, Department of Zoology. "Individual Decisions and Population-Patterns: Do Patterns of Mate Selection Help Define Ecological and Behavioral Boundaries of Species?"

2006. University of Colorado, Boulder, Department of Ecology and Evolutionary Biology. "Ecological and Evolutionary Connections Between Individual Behavior & Population Biology"

2006. George Washington University, Department of Biological Sciences. "Ecological and Evolutionary Connections Between Individual Behavior & Population Patterns"

2005. Oxford University, Department of Zoology. "Using Individual Decision Rules to Explain Large Scale Patterns In Evolution".

2005. Max Planck Institute. "Using Individual Decision Rules to Explain Large Scale Patterns In Evolution"

2004. Cornell Lab of Ornithology Lecture Series. "Individual Decisions and Population-Level Patterns: Why Do Barn Swallows Breed In Groups?"

2004. Queen's University, Department of Ecology and Evolutionary Biology. "Female Reproductive Strategies and Group Size Variation in Barn Swallows: Individual-Level Decisions and Population-Level Patterns".

SERVICE**Professional Service**

Primary Literature Peer-Reviews (currently: 15 – 20 per year): The Auk, The American Naturalist (many), Animal Behavior (many), Behavioral Ecology (many), Behavioral Ecology and Sociobiology (many), Biology Letters (many), The Condor, Current Biology (many), Ecology Letters (many), Evolution (many), Journal of Animal Ecology (many), Journal of Avian Biology (many), Diversity and Distributions (1), Functional Ecology (many), Ibis (1), the Journal of Field Ornithology (2), Proceedings of the Royal Society of London B (many), Trends in Ecology and Evolution (many), Waterbirds (2), Wilson Bulletin (1)

Editorial Board: Ornithology (Fall 2007 – present)

Panel Service: National Science Foundation: Evolutionary Processes, Doctoral Dissertation Improvement Grant Panel, Spring 2010.

Grant Reviews: National Science Foundation (Evolutionary Processes x 2; CAREER), Marsden Fund, Wellcome Trust, Graduate Women in Science

American Ornithologists Union:

Student Award Committee (Fall 2006 to present)
Publication Committee (Fall 2008 to present)

CU-EBIO Departmental Service:

- 1) Voting Committee (to revise voting rules related to new faculty hires). Spring 2008 – Fall 2009
- 2) Web Site Development Committee (Spring 2009 – present: to revise departmental web page)
- 3) EBIO – LEAP workshops for graduate students and postdoctoral students. Funded by NSF-LEAP program at CU. Evening workshops related to professional development and work/life balance issues (Fall 2008; will continue for academic year 2009 - 2010)
- 4) Merit Evaluation Review Committee (EBIO Fall 2009 – present)
- 5) Graduate Student Committee (EBIO, Fall 2009 – present)
- 6) General Biology Committee (EBIO, Spring 2008 – present)

CU-Campus Service:

- 1) Boulder Faculty Assembly. Elected Member: Diversity Committee. Spring 2008 – Spring 2111.
- 2) Women's Leadership Group in association with LEAP (Leadership Education for Advancement and Promotion). Work with women faculty at CU to discuss and explore ways to support faculty, especially those with diverse backgrounds. Invited Member. Fall 2008 – present

AFFILIATIONS AND MEMBERSHIPS

The American Association of University Women, The American Ornithologists' Union, American Society of Naturalists, The Animal Behavior Society, Cooper Ornithological Society, Graduate Women In Science, The International Society for Behavioral Ecology, The National Geographic Society, the Society for the Study of Evolution, Sigma Xi

BROADER IMPACTS

Media Coverage

Press Releases: Hundreds of national and international press coverage including press releases by AAAS, Reuters, the Associated Press, New York Times Syndicate, and Bloomberg News.

Articles: hundreds in print and on-line including New York Times Science Times, National Geographic (2), Science News, the Economist, LA Times, US News, London Telegraph, London Daily, Washington Post, LA Sun, Boulder Daily Camera

Radio: dozens of pieces including CBC Quirks and Quarks, June 2008, coverage on various NPR programs including Voice of America

Television Coverage: CNN interview, Good Morning America, several local cable station interviews, featured scientist on PBS Nature series on Sexual Selection, April 2008 entitled: "What Females Want" and "What Males Will Do".

Outreach, Workshops, and Lectures

Biology Club, Invited Speaker: the Role of Sexual Selection in Speciation. Spring 2009.

CU Boulder Faculty Assembly, Elected to the Diversity Committee 2008 – 2011.

American Association for University Women – many events

Expanding Your Horizons - Hands on Workshops for Middle School Girls

Undergraduate Training

Since 1998, I have worked closely with over **31** students, mostly female, in both field and laboratory settings. Many of these students are successfully pursuing graduate degrees of their own.

At CU, I have supervised 13 students, many of whom have pursued independent studies and receiving CU funding for their research experiences. Andrew Flynn (Spring 2008 – present, UROP, HHMI, honor's student, BA-MA student in my lab), Connor Fitzhugh (Spring 2008 – Spring 2009, UROP, HHMI, graduated in Spring 2009), Lori Fraser (Spring 2008, Fall 2009 (BURST), Rachel Wildrick (Spring 2009 – present, UROP, honor's student, BA-MA student in my lab, Sigma Xi Undergraduate Research Award), Alexander Oesterle (Spring 2009 – Fall 2009), Sally Voyles (Summer 2009, Independent Study, Fall 2009), Kathy Chmiel (Summer 2009, Independent Study, Fall 2009), Katherine Gloeckner, Summer 2010 (UROP), Tessa Warner, Summer 2010 (BURST), Haley Biddle, Summer 2010, Eric Lord, Spring 2010 – present, Julie Marling, Summer 2008 – Spring 2010, Monica Brandhuber: student from *New Vista High School* (Fall 2008 – present

Graduate and Postdoctoral Training

Graduate Committees (**12**)

CU Matthew Wilkins: (Chair of Committee, **NSF Graduate Fellow**), Joanna Hubbard: (PhD, Chair of Committee), Clinton Francis (PhD), Catherine Driscoll (PhD), Chrissy Mott (MA), Michelle Ochomogo (PhD), Caitlin Kelly (PhD), Rachel Egley (MS)

Other Universities. Gernot Huber (PhD, Cornell University), Yoni Vortman (PhD, Tel-Aviv University), Tali Brodetzki (MS, Tel-Aviv University), Nathan Rathbun (MS, Indiana State Univ),

Postdoctoral Associates (**3**). Maren Vitousek, Andrew McGowan (based at Exeter University, UK), Roi Dor (based at Cornell University)

COLLABORATORS (last 12 months)

Matthew Evans (Exeter Univ), Michaela Hau (Max Planck), Hopi Hoekstra (Harvard), Arnon Lotem (Tel-Aviv University), Irby Lovette (Cornell), Kevin McGraw (Arizona State Univ), Elizabeth Tibbetts (U Michigan), Al Uy (Syracuse)

REFERENCES

Dr. Jeffry Mitton, Professor and Department Chair, Ecology and Evolutionary Biology, University of Colorado. E-mail: mitton@colorado.edu, Telephone: (303) 492-0505.

Dr. Daniel Rubenstein, Professor and Department Chair, Ecology and Evolutionary Biology, Princeton. E-mail: dir@Princeton.EDU, Telephone: (609)258-5698.

Dr. Paul Sherman. Professor, Department of Neurobiology and Behavior, Cornell University. E-mail: pws6@cornell.edu, Telephone: (607) 254-4333.

Dr. David Winkler. Professor, Department of Ecology and Evolutionary Biology, Cornell. E-mail: dww4@cornell.edu, Telephone: (607) 254-4216.