

TOMÁS A. CARLO

RESUME

CURRENT ADDRESS

Biology Department
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BORN

May 22, 1973 in Hato Rey, Puerto Rico

EDUCATION

Ph.D. Ecology and Evolutionary Biology, University of Colorado at Boulder, 2005
M.S. Zoology, North Carolina State University, Raleigh, 1999
B.S. Soil Sciences, University of Puerto Rico, Mayagüez, 1996

HONORS AND AWARDS

- 2005 National Science Foundation Postdoctoral Fellowship DBI-0511927 – (120,000 at University of Washington, Seattle)
- 2004 National Science Foundation Doctoral Dissertation Improvement Grant DEB-0407826 (12,000)
- EEB One-Semester Departmental Fellowship, Fall 2003. (9,000)
- EEB Departmental Grant, 2001, 2003 (3,500)
- GEM Predoctoral Fellowship for Science, 2002-2003. (17,000)
- Beverly Sears Graduate Student Grant, 2001. (500)
- Honorable Mention (four times)- The National Academies of Sciences, fellowship competition.
- Counselor's Teaching Fellowship, University of Colorado Graduate School, 2001. (3,000)
- CUM LAUDE, University of Puerto Rico 1996.

SELECTED WORK EXPERIENCE IN BIOLOGY

1988-1990 Volunteer, Puerto Rico Department of Natural Resources (Cuerpo de Investigadores Científicos Auxiliares)
1989 – Research Assistant to Carlos Díaz and Dr. Thomas Kunz (Boston University)
1990 Nature photographer, Fundación Puertorriqueña de Conservación
1990 – 1991 Research Assistant to Dr. Jorge Moreno (University of Colorado)
1990-1992 SCA volunteer, Puerto Rican Parrot Recovery Project
1992-93 summer internships, USFWS – Puerto Rican Parrot Recovery Project
1995 – Research Assistant to Dr. Michael Blatz (University of Missouri)
1995 – Research Assistant (summer internship), Lajas Agriculture Experimental Station (UPR)
1996-00 Research Assistant, North Carolina State University
1997 (spring semester) Teaching Assistant, North Carolina State University
1999 Consultant and Content Developer in “Orígenes y Formación”. Interactive CD-Rom Puerto Rico Department of Education.

2000-01 Teaching Assistant, University of Colorado
2002 Research Assistant, USGS Research Station-Utuado PR
2002- *present* Scientific Consultant, USFWS Caribbean Regional Office
2003 Consultant to Ecosystems Inc.
2004-2005 Faculty (adjunct), Universidad Metropolitana, San Juan, Puerto Rico
2004-2005 Consultant to Sociedad Ornitológica de Puerto Rico
2005-2008 NSF Postdoctoral Fellow, University of Washington, Seattle

PUBLICATIONS

Morales JM, and Carlo TA (In Press). The effects of plant distribution and frugivore density on the scale and shape of dispersal kernels. **Ecology**.

Carlo TA, and Aukema JE (2005). Female directed dispersal and facilitation between a tropical mistletoe and its dioecious host. **Ecology** [In press for Vol 86(12)].

Carlo TA (2005) Interspecific neighbors change seed dispersal pattern of an avian-dispersed plant. **Ecology** 86:2440–2449.

Saracco JF, Collazo JA, Groom MJ, Carlo TA. (2005) Crop size and fruit neighborhood effects on visitation to fruiting trees. **Biotropica** 37:80-86.

Kuijt J, Carlo TA, Aukema JE. (2005) A new endemic species for Puerto Rico: *Dendrophthora bermejae* (Viscaceae). **Contr. Univ. Michigan Herb.** 24:115-118.

Carlo TA, Collazo JA, Groom MJ. (2004) Influences of fruit diversity and abundance on bird use of two shaded coffee plantations. **Biotropica** 36(4):602-614.

Carlo TA, Collazo JA, Groom MJ (2003) Avian fruit preferences across a Puerto Rican forested landscape: pattern consistency and implications for seed removal. **Oecologia** 134:119-131.

IN REVIEW

Aukema, JE, Carlo TA, Collazo JA. (In review) Landscape assessment of tree communities in the northern karst of Puerto Rico. **Plant Ecology**.

Carlo TA, Aukema JE, Morales JM. (In review) Plant-frugivore interactions as spatially explicit networks: integrating animal foraging and fruiting plant spatial patterns. (Invited book chapter) in A. Dennis, E. Schupp, and D. Wescott (Eds.) **Seed dispersal: theory and its application in a changing world**, CABI, Oxon UK.

Levey D.J., Tewksbury JJ, Cipollini ML, and Carlo TA. (In review). A field test of the directed deterrence hypothesis in two species of wild chili. **Oecologia**.

Díaz-Méndez S, Carlo TA. (In review) *Dendrophthora bermejae* in Cabo Rojo: abundance, distribution, host availability, threats, and hopes for an endemic mistletoe. **Acta Científica** (invited paper for special issue on endangered species in Puerto Rico).

IN PREPARATION

Carlo TA, Morales JM. Seed dispersal distances, fruit-removal rates, and neighborhood interactions change with plant distribution and frugivore abundance: insights from a simulation model. **American Naturalist**.

Carlo TA. High folivory in a tropical tanager. **Journal of Field Ornithology**.

Carlo TA. Diet similarity of six forest passerines in mountain forests of Puerto Rico. **Caribbean Journal of Science**.

Carlo TA, and Martínez del Rio CM. Tracking the fate of seedlings with stable isotopes.

Functional Ecology.

Carlo TA. Reduced frugivore movements in areas of high plant aggregation: implications for seed-dispersal patterns and intraspecific competition. **Oikos.**

Duran K, and Carlo TA. The influence of hosts in the geographic diversification of tropical mistletoe. **Evolution.**

Cardelús C., and Carlo TA. Seed dispersal mode and spatial aggregation of tropical bromeliads. **Ecology.**

OTHER PUBLICATIONS

Co-editor of "Conserving Sierra Bermeja for Future Generations". American Bird Conservancy 2005.

"Ecología de un Huracán," T.A. Carlo *in* El Nuevo Día, Nov. 29, 1998, p. 110.

"Nuevos avistamientos de aves en Puerto Rico" in El Bientevio, Aug. 1998

Carlo, Tomás A., and Francisco J. Vilella. Ecology of mixed species flocks in Cordillera forests of Puerto Rico: participation of tropical land bird migrants. **El Pitirre** 5(3):6.

"Fotografías de aves de Puerto Rico", T.A. Carlo *in* Semanario Claridad, Feb. 1987, p. 62.

SELECTED PRESENTATIONS

2005 – Competition and facilitation in bird-dispersed plants. Seminar lecture. Biology Department, University of Puerto Rico.

2005 – Competition, facilitation, and context-dependence in seed-dispersal. Plenary Symposium. Griffith University, Brisbane, Australia

2005 - Competition and facilitation in bird-dispersed plants. Dissertation Lecture. Ecology and Evolutionary Biology Department. Boulder, Colorado.

2004 – Facilitation in bird-dispersed plants. Oral presentation. Ecological Society of America 89th annual meeting, Portland, Oregon.

2003 – Effects of interspecific neighbors in the fruit removal of *Solanum americanum*. Seminar lecture. Ecology and Evolutionary Department, University of Colorado, Boulder, Colorado.

2002– Tracing the fate of seedlings with stable isotopes. Poster presentation. Ecological Society of America 87th annual meeting, Tucson, Arizona.

2001 – Fruit diversity and bird use of shaded coffee plantations in Puerto Rico. 13th Meeting of the Society for the conservation and study of Caribbean birds.

1999 – Fruit preferences and seed-dispersal capabilities of forest birds in north-central Puerto Rico. Oral presentation. EEB Department, University of Colorado, Boulder, Colorado.

1999 - Fruit preferences and seed-dispersal capabilities of forest birds in north-central Puerto Rico. Master thesis lecture. Zoology Department, North Carolina State University, Raleigh, North Carolina.

1996 - Árboles como indicadores del régimen de humedad de suelos en el noroeste de Puerto Rico. Honors Thesis oral presentation. Departamento de Agronomía, Universidad de Puerto Rico, Mayagüez.

1992 - Ecology of mixed species flocks in Cordillera forests of Puerto Rico: participation of tropical land bird migrants. 1992 Annual meeting of the Society of Caribbean Ornithology, San Juan, Puerto Rico.

1991 – Birds of Puerto Rico in Photographs. 1991 Annual meeting of the Society of Caribbean Ornithology, St. Lucia.

COLLABORATORS

Juliann E. Aukema – North Carolina State University
Catherine Cardelús – University of Florida
Alexander Cruz - University of Colorado at Boulder
Jaime A. Collazo - North Carolina State University
Kristy Duran – Bowdoin College
Martha J. Groom - University of Washington
Job Kuijt - University of Victoria
Doug Levey – University of Florida
Carlos Martínez del Rio - University of Wyoming
Juan M. Morales – Cambridge University (UK)
Eugenio Santiago - University of Puerto Rico
James F. Saracco – The Institute of Bird Populations, University of Alaska Southeast
J. Carlos Trejo – Ciudadanos del Karso
Joshua J. Tewksbury - University of Washington
Sebastián Vélez – Museum of Comparative Zoology, Harvard University

ADVISORS AND REFERENCES

Alexander Cruz, University of Colorado (alex.cruz@colorado.edu)
Carlos Martínez del Rio, University of Wyoming (cmdelrio@uwoyo.edu)
Jaime A. Collazo, North Carolina State University (Jaime_collazo@ncsu.edu)
Martha J. Groom, University of Washington (groom@u.washington.edu)
José A. Colón (mentor, personal reference), Ciudadanos del Karso (787-871-2948)
Joshua Tewksbury, University of Washington (tewksjj@u.washington.edu)

GRADUATE STUDENTS

Sheylda N. Díaz-Méndez, M.S. student 2004-2005, Universidad Metropolitana. Thesis directed: “Patrón de distribución y abundancia de *Dendrophthora bermejeae* (Kuijt et al.) con relación a su hospedero *Guaiacum officinalis* (L.) en el área suroeste de Puerto Rico: implicaciones para su conservación.”. San Juan, Puerto Rico.

SERVICE

Reviewer for: Journal of Tropical Ecology, The Auk, Conservation Biology, Rapid Communications in Mass Spectrometry

PROFESSIONAL ORGANIZATIONS

Ecological Society of America
Caribbean Ornithological Society
Association for Tropical Biology and Conservation