

Curriculum Vitae of
Martín Andrés Nuñez

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University of Central Florida
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Orlando, FL 32816

Education

Ph.D. in Ecology and Evolutionary Biology, April 2008. The University of Tennessee.

Licenciado in Biological Sciences, October 2002. Universidad Nacional del Comahue at Bariloche, Argentina.

Academic positions

5/2008 – Present, Post-doctoral research associate with Dr. Betsy Von Holle, Department of Biology, University of Central Florida – Orlando; and Dr. Daniel Simberloff, Department of Ecology and Evolutionary Biology, The University of Tennessee – Knoxville.

8/2003 – 4/2008, Graduate teaching assistant, Department of Ecology and Evolutionary Biology, The University of Tennessee – Knoxville.

Scientific Publications

Simberloff, D, **Nuñez, M. A.** Ledgard, N. J., Pauchard, A. Richardson, D. M., Sarasola, M., van Wilgen, B. W., Zalba, S. M., Zenni R. D., Bustamante, R. Peña, E., & Ziller, S. R. In Press. Spread and impact of introduced conifers in South America: Lessons from other southern hemisphere regions. **Austral Ecology**

Nuñez, M. A., Bailey, J. K. & Schweitzer, J. A. In Press. Population, community and ecosystem effects of exotic herbivores: A growing global concern. **Biological Invasions**

Relva, M. A., **Nuñez, M. A.** & Simberloff, D. In Press. Introduced deer reduce native plant cover and facilitate invasion of non-native tree species: evidence for invasional meltdown. **Biological Invasions**

Nuñez, C. I., Raffaele, E., **Nuñez, M. A.** & Cuassolo, F. 2009. When do nurse plants stop nursing?: Temporal changes in water stress levels in *Austrocedrus chilensis* growing within and outside shrubs. **Journal of Vegetation Science** 20:1064-1071

Nuñez, M. A. & Pauchard, A. In Press. Biological invasions in developing and developed countries: does one model fit all? **Biological Invasions** DOI 10.1007/s10530-009-9517-1

Nuñez, M. A., Horton T. R. & Simberloff, D. 2009. Lack of belowground mutualisms hinders Pinaceae invasions. **Ecology** 90 (9): 2352-2359

Rodríguez-Cabal, M. A. Stuble, K. L., **Nuñez, M. A.** & Sanders N. J. 2009. Quantitative analysis of the effects of the exotic Argentine ant on seed dispersal mutualisms. **Biology Letters** 5 (4):499-502

- Nuñez, M. A.**, Simberloff, D. & Relva, M. A. 2008. Seed predation as a barrier to alien conifer invasions. **Biological Invasions** 10:1389-1398
- Nuñez, M. A.**, Relva, M. A. & Simberloff, D. 2008. Enemy release or invasional meltdown? The role of exotic herbivores in pine invasion on Isla Victoria, Argentina. **Austral Ecology** 33 (3): 317-323
- Rodríguez Cabal, M. A., **Nuñez, M. A.** & Martínez, A. S. 2008. Quantity versus quality: endemism and protected areas in the temperate forest of southern South America. **Austral Ecology** 33 (6): 730-736
- Nuñez, M. A.**, Crutsinger, G. M, Simberloff, D. & Sanders, N. J. 2008. Striking a balance between the literature load and walks in the woods. **Frontiers in Ecology and the Environment** 6 (3): 160-161
- Nuñez C. I., **Nuñez, M. A.** & Kitzberger, T. 2008. Sex-related spatial segregation and growth in a dioecious conifer along environmental gradients in northwestern Patagonia. **Ecoscience** 15 (1): 73-80
- Richardson, D. M., van Wilgen, B. W. & **Nuñez, M. A.** 2008. Alien conifer invasions in South America: short fuse burning? **Biological Invasions** 10(4): 573-577
- Nuñez M. A.** & Raffaele, E. 2007. Afforestation causes changes in post-fire regeneration in native shrubland communities of northwestern Patagonia, Argentina. **Journal of Vegetation Science** 18 (6): 827-834
- Nuñez P. A. & **Nuñez, M. A.** 2007. Are controversies important for the epistemic progress in ecology? **Interciencia** 32 (12): 804-811
- Sanders, N. J. Weltzin, J. F., Crutsinger, G. M., Fitzpatrick, M. C. , **Nuñez, M. A.**, Oswalt, C. & Lane, K. 2007. Multiple controls on a plant invasion: insects mediate the interactive effects of propagule supply and resource availability. **Ecology** 88(9): 2383-2391
- Clergeau, P & **Nuñez, M. A.** 2006. The language of fighting invasive species. **Science** 311 : 951-951 (short letter)
- Nuñez, M. A.** & Nuñez P. G. 2005. Controversies in ecology: competition, from certainty to the question. **Ecología Austral** 15(2):229-238
- Nuñez, M. A.** & Simberloff, D. 2005. Invasive species and the cultural keystone species concept. **Ecology and Society** 10(1): r4
- Simberloff, D., Relva, M. A & **Nuñez, M.** 2003. Introduced Species and Management of a *Nothofagus/Austrocedrus* Forest. **Environmental Management** 31(2):263- 275
- Nuñez, M.** 2002. How to start an international program to deal with invasive species? **Conservation Ecology** (now: **Ecology and Society**) 6(2): r1
- Simberloff, D., Relva, M. A. & **Nuñez, M. A.** 2002. Gringos en el bosque: introduced tree invasion in a native *Nothofagus/ Austrocedrus* forest. **Biological Invasions** 4: 35-53
- Puntieri, J., Souza, M. S., Barthélémy D., Brion, C., **Nuñez, M.A.** & Mazzini C. 2000. Preformation, neoformation, and shoot structure in *Nothofagus dombeyi* (Nothofagaceae). **Canadian Journal of Botany** (now: **Botany**) 78: 1044-1054

Outreach publications

- Nuñez P. A. & **Nuñez, M. A.** 2006. Controversias en ecología: La competencia interespecífica y la estructuración de comunidades [Controversies in ecology: interspecific competition and the structuration of communities]. **A Parte Rei** 47: 1-15.
- Nuñez, M. A.** & Quintero, C. 2002. ¿Qué hacer con las especies invasoras?: Problemática y Técnicas de Manejo (What to do with invasive species? Problems and management techniques). **Cuaderno Universitario N° 44**. CRUB, Universidad Nacional del Comahue. 65 pp.
- Sarasola, M., **Nuñez, M. A.** & Relva, M. A. 2007. ¿Invasión de coníferas en la patagonia andina? Diagnóstico y evaluación para la toma de decisiones (Is there a conifers invasion in the Patagonian Andes? Diagnosis and evaluation for decision making). **EcoForestar bulletin** 427-433
- Nuñez C. I. and **Nuñez M. A.** 2007. Coníferas exóticas en patagonia:¿potencial invasión?. (Exotic Conifer in Patagonia: will they invade?) **Desde la Patagonia** 4(5): 2-7.

Thesis

- Nuñez, M. A.** 2008. Experiments on multiple factors affecting Pinaceae invasions on Isla Victoria, Nahuel Huapi National Park, Argentina. Ph.D. thesis, The University of Tennessee, Department of Ecology and Evolutionary Biology.
- Nuñez, M. A.** 2002. Post- fire regeneration in native shrubland and Ponderosa pine plantations in Nonwestern Patagonia. Licenciatura thesis. Centro Regional Universitario Bariloche. Universidad Nacional del Comahue, Argentina.

Grants and Academic Honors

- Doctoral Dissertation Improvement Grant, National Science Foundation (**NSF DDIG**). *Dissertation Research: Experiments on multiple factors affecting Pinaceae invasions on Isla Victoria, Nahuel Huapi National Park, Argentina.* 2007-2008.
- Science Alliance Award**, Division of Biology, University of Tennessee. 2007.
- Merit Award**, University of Tennessee, Department of Ecology & Evolutionary Biology. 2006, 2007, and 2008.
- EEB Summer Research Grant, University of Tennessee. *Propagule pressure as a determinant of conifer invasion on Isla Victoria, Argentina.* 2007.
- Graduate Researchers in Ecology Travel Award, Behavior & Evolution. University of Tennessee. 2006.
- Graduate Student Travel Award, University of Tennessee. 2006.
- Grant- in-Aid of Research **Sigma Xi**. *The role of mycorrhizal fungi in Pinaceae invasion on Isla Victoria, Nahuel Huapi national park, Argentina.* 2006.
- EEB Summer Research Grant, University of Tennessee. *The role of mycorrhizal fungi in Pinaceae invasion on Isla Victoria, Argentina.* 2006.
- DeSelm Fund research grant, University of Tennessee. *Seed predation and its implications for conifer invasion at Isla Victoria, Argentina.* 2005.
- EEB Summer Research Grant, University of Tennessee. *Ectomycorrhizal symbiosis and its implications for conifer invasion at Isla Victoria, Argentina.* 2004.
- Plan Nacional de Becas Universitarias, Ministerio de Cultura y Educación, Argentina. 1998-2002.
- Professional Experience**
- Invited lecturer** 2/09- present. Lab and lectures for the class PCB 6046 Advanced Ecology, for graduate students at the University of Central Florida.

Editor of a special issue of the journal *Biological Invasions*, on the ecological effects of exotic herbivores (with Drs. J. Bailey, and J. Schweitzer from the U. of Tennessee)

Symposium Organizer, August 2009. The invasion ecology of pines in South America: patterns, process, prognosis and lessons. 10th Int. Conf. on the Ecol. and Management of Alien Plant Invasions (EMAPi 10) (With Dr. Pauchard, U. de Concepción, and Dr. Bustamante, U. de Chile).

Teaching Assistant Coordinator. 8/07 – 5/08. For ca. 600 students and 12 Teaching Assistants in Biology 130. Division of Biology. The University of Tennessee.

Workshop Organizer. Spring 2007. First international workshop on Pine invasion in South America, May 10th -12th 2007 Bariloche, Argentina (With Dr. Richardson from Stellenbosch University, South Africa, and Dr. Relva from The U. of Comahue, Argentina).

Teaching Assistant. 1/06-5/07. For ca. 50 students per semester in Biology 130. Division of Biology. The University of Tennessee.

Field Course Instructor. 11/05. Invasion in Patagonia: tree invasion on Isla Victoria, Nahuel Huapi National Park, Argentina. Course for PhD students of the Section of Plant Ecology and Systematics, Lund University, Sweden (co- instructor with Dr. Relva).

Teaching Assistant. 1/04-5/04. Conservation Biology 484. Department of Ecology and Evolutionary Biology. The University of Tennessee.

Teaching Assistant. 8/04-12/04. Ecology 250. Department of Ecology and Evolutionary Biology. The University of Tennessee.

Research Assistant. 8/03-12/05 in D. Simberloff laboratory. Department of Ecology and Evolutionary Biology. The University of Tennessee.

Field and Research Assistant 12/00 – 6/03 in Nahuel Huapi National Park. with Dr. Daniel Simberloff on the project, "*Gringos en el bosque: Invasion by non indigenous tree species on Isla Victoria, Nahuel Huapi National Park, Argentina.*"

Teaching Assistant. 03/00-12/01, General Ecology for Biology Majors in the Universidad Nacional del Comahue-Centro Regional Universitario Bariloche.

Field Trip Coordinator and Guide. 3/ 01- 6/03, in Northwest Patagonia, Argentina. General coordinator and guide for investigative field trip activities for public school children in an ecological education project from the University of Montana, Project ALAS, Alumnos y Aves del Sur.

Conference Presentations

Nuñez, M. A., Pinaceae invasion in Argentina: General patterns and factors controlling their spread. August 2009, Stellenbosch, South Africa.

Nuñez, M. A., Horton T. R. and Simberloff, D. Lack of mutualisms as barrier for Pinaceae invasion. 2008. Ecological Society of America Annual meeting, August 2008. Milwaukee, Wisconsin.

Nuñez, M.A., Horton T.R. & Simberloff, D. Lack of mutualisms as barrier for pine invasion on Isla Victoria, Argentina. 2007. Third binational meeting of the Ecology society of Chile and the Argentine Ecological Society, September 2007, La Serena, Chile.

Nuñez, M. A., Simberloff, D & Relva, M. A. 2007. Biotic resistance by seed predators could halt plant invasions. Ecological Society of America Annual meeting, August 2007, San Jose, California.

Nuñez, M. A. 2007. Pine invasion in Patagonia. First international workshop on Pine invasion in South America, May 2007, Bariloche, Argentina.

Sarasola, M, **Nuñez M. A.** & Relva M. A. 2007. Is there a conifers invasion in the Patagonian Andes? Diagnosis and evaluation for decision making. EcoForestar – First meeting on forestry in Patagonia. Esquel, Argentina.

- Nuñez, M. A.**, Relva, M. A. & Simberloff, D. 2006. Enemy release or invasional meltdown? The role of exotic herbivores in pine invasion on Isla Victoria, Argentina. Ecological Society of America Annual meeting, August 2006, Memphis, Tennessee.
- Nuñez C. I., E. Raffaele, **Nuñez, M. A.** & F. Cuassolo. 2006. Nurse effect between shrubs and Ciprés (*Austrocedrus chilensis*) in the Patagonian ecotone: Temporal changes in the levels of hydric stress. Meeting of the Argentine Ecological Society, August 2006 Cordoba, Argentina.
- Relva, M.A., **Nuñez, M.A.** & Simberloff, D. 2006. Los ciervos exóticos facilitan o controlan la invasión de pinos introducidos? [Do exotic deer facilitate or control invasion of introduced pines?] Meeting of the Argentine Ecological Society, August 2006 Cordoba, Argentina.
- Nuñez C. I., **Nuñez, M. A.** 2006. Do exotic conifer plantations constitute a threat to native *Austrocedrus* forests? Workshop on Forest Fragmentation in South America, June 2006 – San Carlos de Bariloche, Argentina.
- Nuñez, P. G. & **Nuñez, M. A.** 2006. Consensos y divergencias en la historia de la ecología [Agreements and disagreements in the history of ecology]. XVII Jornadas de Historia y Epistemología de las ciencias. November 2006, Cordoba, Argentina.
- Weltzin, J.F., G.M. Crutsinger, M.C. Fitzpatrick, **M.A. Nuñez**, C.M. Oswalt, J.M. Stephens, P.B. Allen & N.J. Sanders. 2005. Combined and relative effects of resource availability, propagule pressure, and insect herbivores on invasion in an old-field system. Association of Southeastern Biologists Annual Meeting, 13-15 April 2005, Florence, AL .
- Crutsinger, G. M., M. C. Fitzpatrick, **M. A. Nuñez**, C. M. Oswalt, J. M. Stephens, & J. F. Weltzin. 2004. Interactive effects of nitrogen availability and propagule pressure on invasion by *Lespedeza Cuneata*. 15th Annual SAMAB Conference November, 2004. Gatlinburg, Tennessee.
- Nuñez, P. G. & **Nuñez, M. A.** 2004. Controversies in ecology: competition as an explanatory factor. XV Jornadas de Historia y Epistemología de las ciencias. Cordoba, Argentina.
- Nuñez C. I., **Nuñez, M. A.**, Kitzberger, T. 2004. Spatial segregation of female and male *Austrocedrus chilensis* (Ciprés de la Cordillera), due to slope position. Second Binacional Ecology Meeting. Mendoza, Argentina.
- Nuñez, M. A.**, Rodríguez Cabal, M. A. & Martínez, A. S. 2004. Endemism richness and its correlation with protected areas in the temperate forest of Austral South America. Second Binational Ecology Meeting. Mendoza, Argentina.
- Nuñez, M. A.** & Raffaele, E. 2004. Early post- fire regeneration on Matorrals and Ponderosa pine plantations in Northwestern Patagonia. Southeastern Ecology and Evolution Conference, Georgia Institute of Technology. Atlanta, Georgia.
- Raffaele E. Nilsson, J & **Nuñez, M.** 2003. Exotic conifer plantations in Patagonia, Argentina, a new land use and changes in the landscape. XXIX Jornadas Argentinas de botanica, XV Reunión anual de la sociedad Botánica de Chile. San Luis, Argentina.
- Nuñez, M. A.** & Nuñez, P. G. 2004. Change in ecology, a revision from the controversy of competition as an explicative factor. Seventh International Colloquium Bariloche of Philosophy. Bariloche, Argentina.
- Simberloff, D., Relva, M. A. & **Nuñez, M. A.** 2001. Gringos en el bosque: invasión de especies arbóreas en el bosque de *Nothofagus dombeyi* – *Austrocedrus chilensis* en la Isla Victoria, Parque Nacional Nahuel Huapi. First Binational Ecology Meeting, Bariloche, Argentina.
- Nuñez, M. A.** and Raffaele, E. 2001. *Efecto de las plantaciones de coníferas exóticas sobre la regeneración post fuego en los matorrales de Ecotono del N. O. Patagónico*. First Binational Ecology Meeting, Bariloche, Argentina.
- Puntieri, J., Souza, M. S., Barthélèmy D., Brion, C., **Nuñez, M. A.** & Mazzini C .1998. *Contenido de Las yemas de Nothofagus dombeyi y Nothofagus pumilo (Fagaceae) de acuerdo a su posición en el árbol y su relación en el tamaño de los brotes*. XXVI Jornadas Argentinas de Botanica, Rio Cuarto, Argentina.

Selected Invited Seminars

2009. Deer, rodents, birds, and fungi - dissecting a tree invasion in Patagonia. Departmental seminar. Department of Biology. The University of Central Florida.
2008. Pine invasion on Isla Victoria: the role of deer, rodents, birds and mycorrhizal fungi. National Parks services of Argentina, Headquarters at Bariloche. Argentina.
2008. Lack of mutualisms as barrier for conifer invasion on Isla Victoria, Argentina. EEB Departmental Seminar. Department of Ecology and Evolutionary Biology. The University of Tennessee.
2007. Effects of multiple factors on conifer invasion on Isla Victoria, Nahuel Huapi National Park, Argentina. Working Group on the Environment in Latin America, Nicholas School. Duke University.
2006. Factors Controlling Pine Invasions on Isla Victoria, Nahuel Huapi National Park, Argentina. Evolutionary & Behavioral Ecology Seminar. Department of Ecology and Evolutionary Biology. The University of Tennessee.
2006. Biological invasions on Isla Victoria, what we know and what we need to do. National Parks services of Argentina, Headquarters at Bariloche. Argentina.
2005. The effect of multiple factors on pine invasion: ideas and some results. Ecotono Laboratory, Universidad del Comahue, Argentina.
2004. Going to the roots of the problem: the role of ectomycorrhizal fungi on pine invasion. Ecotono Laboratory, Universidad del Comahue, Argentina.

Reviewer for Scientific Publications or Grants

Biological Invasions; Bosque; Botany; Diversity and Distribution; Ecologia Austral; Ecology and Society; Forest Ecology and Management; Gayana Botanica; Journal of Applied Ecology; Journal of Ecology; Journal of Vegetation Science; Naturwissenschaften; Non linear Analysis, Series B; Oecologia; Oikos; Perspectives in Plant Ecology, Evolution and Systematics; Plant Ecology; Preslia; Conceptual ecology and invasions biology: reciprocal approaches to nature (Book published by Springer Verlag)

National Science Foundation, Ecological Biology Cluster.

Fondo para la Investigación Científica y Tecnológica, Argentina (FONCyT).

Membership in Professional Organizations

Ecological Society of America

Asociación Argentina de Ecología

Current Collaborators

Daniel Simberloff (The University of Tennessee at Knoxville, Tennessee, USA)

Betsy Von Holle (University of Central Florida at Orlando, Florida, USA)

Maria Andrea Relva (Universidad Nacional del Comahue at Bariloche, Argentina)

Thomas R. Horton (SUNY - Syracuse, New York, USA)

Aníbal Pauchard (Universidad de Concepción, Chile)

Mariano Rodríguez-Cabal (The University of Tennessee at Knoxville, Tennessee, USA)

Nathan Sanders (The University of Tennessee at Knoxville, Tennessee, USA)

Cecilia I. Nuñez (Universidad Nacional del Comahue at Bariloche, Argentina)

Paula G. Nuñez (Fundación Bariloche – Centro Atómico Bariloche, Argentina)