

## ISABEL M. ROJAS

Department of Forest and Wildlife Ecology – University of Wisconsin Madison  
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### Education

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2013 -	Ph.D. Forestry, dissertator Department of Forest and Wildlife Ecology Advisors: Anna M. Pidgeon and Volker C. Radeloff Topic: Understanding the role of riparian forests on landscape connectivity for wildlife persistence in human dominated landscapes	University of Wisconsin, Madison
2011 - 2013	M. Sc. Conservation Biology and Sustainable Development Nelson Institute for Environmental Studies Advisor: Joy Zedler, Department of Botany Topic: Effect of plant invasion on plant richness of sedge meadows.	University of Wisconsin, Madison
2003 - 2008	Forest Engineer Department of Agriculture and Forest Sciences Topic: Assessment of the landscape conditions that influence the relationship between native and exotic species richness	Pontificia Universidad Católica de Chile, Santiago
2002 – 2003	Bachelor in Science	Pontificia Universidad Católica de Chile, Santiago

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### Peer-Reviewed Journal Articles

- Ibarra, J.T., T.A. Altamirano, **I.M. Rojas**, M.T. Honorato, A. Vermehren, G. Ossa, N. Gálvez, K. Martin and C. Bonacic. 2018. Sotobosque de bambú: hábitat esencial para la biodiversidad del bosque templado andino de Chile. *La Chiricoca* 23:4-14.
- Ibarra, J.T., N. Gálvez, T.A. Altamirano, J. Caviedes, **I.M. Rojas**, C. Bonacic and K. Martin. 2017. Seasonal dynamics of avian guilds inside and outside protected areas in an Andean Biosphere Reserve of southern Chile. *Bird Study*, <https://doi.org/10.1080/00063657.2017.1368447>.
- Rojas, I.M.** and J.B. Zedler. 2015. An invasive exotic grass reduced sedge meadow species richness by half. *Wetlands Ecology and Management* doi:10.1007/s11273-015-9409-3
- Healy, M.T., **I.M. Rojas** and J. B. Zedler. 2015. Adaptive Control of Phalaris arundinacea in Curtis Prairie. *Invasive Plant Science and Management* doi: 10.1614/IPSM-D-13-00106.1
- Zedler, J.B., J.M. Doherty, and **I.M. Rojas**. 2014. Leopold's Arboretum needs upstream water treatment to restore wetlands downstream. *Water* 6(1):104-121.
- Ibarra, J.T., N. Gálvez, A. Gimona, T.A. Altamirano, **I. Rojas**, A. Hester, J. Laker, and C. Bonacic. 2012. Rufous-legged Owl (*Strix rufipes*) and Austral Pygmy Owl (*Glaucidium nanum*) stand use in a gradient of disrupted and old growth Andean temperate forest, Chile. *Studies on Neotropical Fauna and Environment* 47(1): 33-40.
- Rojas, I.**, P. Becerra, N. Gálvez, J. Laker, C. Bonacic, and A. Hester. 2011. Relationship between fragmentation, degradation and native and exotic species richness in an Andean temperate forest of Chile. *Gayana Botánica* 68:163-175.
- Ibarra, J.T., T. Altamirano, N. Gálvez, **I. Rojas**, J. Laker and C. Bonacic. 2010. Avifauna de los Bosques Templados de Araucaria araucana del sur de Chile (Bird Community of Araucaria araucana Temperate Rainforest). *Ecología Austral* 20: 33-45.
- In review*
- Rojas, I.M.**, A.M. Pidgeon, S. Martinuzzi, C.F. Estades and V. C. Radeloff. 2018. Forest, agriculture, and topography shape structural connectivity of riparian forests. *In review*.

## Books and Chapters

Altamirano, T.A., J.T. Ibarra, F. Hernández, **I. Rojas**, J. Laker, and C. Bonacic (2011) Hábitos de nidificación de las aves del bosque templado de Chile (Nesting habits of birds of the Andean temperate forest of Chile). Fondo de Protección Ambiental, Ministerio de Medio Ambiente, Serie Fauna Australis, Pontificia Universidad Católica de Chile, Santiago, Chile. 113 pp. ISBN: 978-956-582-3.

**Rojas, I** (2010) “Chena and Lonquen Hills Vegetation” (Vegetación de los cerros Chena y Lonquén). In: Calera de Tango, Reserva de Vida. Eds. Makarena Roa & Cristián Bonacic. Serie Fauna Australis, Facultad de Agronomía e Ingeniería Forestal, Pontificia Universidad Católica de Chile. 135pp.

**Rojas, I.**, R. Petitpas, and V. Aedo (2010) “Chena and Lonquen Vegetation Communities” (Comunidades cerros Chena y Lonquén). In: Calera de Tango, Reserva de Vida. Eds. Makarena Roa & Cristián Bonacic. Serie Fauna Australis, Facultad de Agronomía e Ingeniería Forestal, Pontificia Universidad Católica de Chile. 135pp.

**Rojas, I.**, A. Muñoz, and P. Torres (2010) “Chena and Lonquen Flora” (Flora de los cerros Chena y Lonquén). In: Calera de Tango, Reserva de Vida. Eds. Makarena Roa & Cristián Bonacic. Serie Fauna Australis, Facultad de Agronomía e Ingeniería Forestal, Pontificia Universidad Católica de Chile. 135pp.

## Conference Presentation

**Rojas, I.M.**, V.C. Radeloff, J.T. Ibarra and A.M. Pidgeon (2017) “The association of riparian forest characteristics and landscape context with birds with varying feeding and habitat guilds in farmlands”. XII Chilean Congress of Ornithology, Santa Cruz, Chile.

**Rojas, I.M.**, S. Martinuzzi, A.M. Pidgeon, and V.C. Radeloff (2016) “Contribution of riparian forest to structural connectivity of the forest of Chile” IUFRO – IALE 2016, Temuco, Chile.

**Rojas, I.M.**, S. Martinuzzi, A.M. Pidgeon, and V.C. Radeloff (2016) “Contribution of Riparian Forests to Structural Corridors of Chile”. International Association of Landscape Ecology, US Chapter, Asheville, North Carolina, poster presentation.

**Rojas, I.M.**, and J. Zedler (2013) “Sedge meadows dominated by reed canary grass are less diverse across spatial scales”. Society of Wetland Scientist, Duluth, Minnesota\_Oral presentation.

Zedler, J., J. Doherty, **I. Rojas**, M. Fisher and P. Zedler (2012) ”Learning to manage urban runoff that reaches UW-Madison Arboretum”. Urban wetlands, Wisconsin Wetlands Association’s 17<sup>th</sup> Annual conference.

**Rojas, I.**, P. Torres, T. Altamirano, C. Gálvez, R. Petitpas, O. Ohrens and T. Ibarra (2010) “Floristic Characterization of the estuary Pullalli Salinas, in Central Chile” (Caracterización florística de las dunas del humedal Salinas de Pullally en Chile central). Libro de resúmenes, IV Reunión Binacional de Ecología. Buenos Aires, Argentina. p 53.

## Outreach Material

**Rojas, I.**, M. Fisher, J. Doherty, and J. Zedler (2012) How can neighbors help sustain native plants in Curtis Prairie? Brochure Arboretum UW-Madison. <http://uwarboretum.org/publications/leaflets/PDF/BrochureJuly2012.pdf>

Zedler, J., M. Fisher, R. Linding-Cisneros, J. Rifkin, **I. Rojas**, B. Svarstad, J. Doherty and P. Zedler (2012) A Self-Guided Walk through Curtis Prairie. Arboretum Leaflet 24. <http://uwarboretum.org/publications/leaflets/PDF/Leaflet24.pdf>

## **Research Experience**

2011-2012 Research assistant, Center for Restoration Ecology, Arboretum, University of Wisconsin-Madison. Learning while sustaining biodiversity at the Arboretum and beyond: Citizen stormwater runoff monitoring, and elaboration of outreach material.

2008-2011 Wildlife Laboratory Fauna Australis. Department of Agriculture and Forest Engineer. Pontificia Universidad Católica de Chile. Research assistant on following projects:

-“Assessment of IUCN Categories for 41 threatened plants species: data collection, database, and plant conservation categories” Ministry of Environment, Chilean Government.

-“Applied research for the conservation of the Chena and Lonquén hills in central Chile, Mediterranean region, Chile”. Habitat characterization of Burrowing Owl (*Athene cunicularia*), and description of the vegetational communities.

2010-2011 Food and Agriculture Organization (FAO-Latin America). Proyecto de cooperación técnica (tcp/chi/3302) “Fortalecimiento de las capacidades agro-productivas y empresariales de comunidades rurales afectadas por el terremoto en la comuna de Navidad, VI Región de O’Higgins. I developed a Landscape Plan, and a series of workshop on Ecological Agriculture for small farmers to improve their food diversity and sustainability.

2008 Project assistant, EXPLORA-CONICYT ED12029 “Our Green Roots: Discovering and appreciating the native plants and its traditional uses”. Outreach workshop for School ages students (6-12 years old) conducted in school in urban and rural areas of Chile.

## **Teaching Experiences**

Birds of Southern Wisconsin (2018) bird field identification, and identification of 235 birds of Wisconsin. Lead lectures and field trips. University of Wisconsin.

Ornithology (2018) broad overview of bird biodiversity, auto-ecology, physiology, conservation among other key aspects of bird biology. Grading and students support. University of Wisconsin.

Forest Ecology (2006), Agricultural Ecology (2006), Silviculture (2007), Forest Harvest (2008). Assignment preparation, grading and students support. Pontificia Universidad Católica de Chile

Urban Agroecology (2009-2010) Instructor and course development. Pontificia Universidad Católica de Chile.

## **Mentoring at University of Wisconsin**

FALL 2017-18 Meredith Nesbitt, BIO 152, Supervised by Professor Anna Pidgeon.

SPRING 2017-18 Hannah Kasun (Major in Environmental Science), Independent Study, Supervised by Professor Anna Pidgeon.

## **Teaching and mentoring training**

Research Mentor Training Seminar 2017 UW-Madison Delta Program and WISCIENCE

Diversity and Equity 2018 UW-Madison Office of equity and Diversity

Disability Training 2018 UW- Madison McBurney Disability Resource Center

L&S Training and Orientation 2018 UW-Madison

## **Professional Affiliations**

- International Association for Landscape Ecology (Regional Chapters: US and Chile)
- Sociedad Chilena de Ecología
- Sociedad Chilena de Socioecología y Etnoecología
- Unión de Ornitólogos de Chile

## **Journals Refereed**

- Wetland Ecology and Management, Scientific Report

## Relevant Courses

Ecology, forest ecology, and conservation biology:

Ethnobotany	SPRING2011-12
The Vegetation of Wisconsin	FALL 2011
Restoration Ecology	FALL2011
Conservation Biology	SPRING2011-12
Adaptive Restoration Lab	SPRING2011-12
Ecosystem Concepts	SPRING2011-12
Debates in Ecology	SPRING2012-13

Statistics and tools:

Applied statistics, Data analysis for spatial data, Introduction to remote sensing, Hierarchical Modeling in Ecology.

## Courses at Pontificia Universidad Católica de Chile

Plants Biodiversity 2005

Practice in Forest Ecology 2005

Forest Ecology 2005

Biogeography 2005

Advanced Silviculture 2006

Forestry Management 2007

Forest Harvest 2007

Advanced Forest Ecology 2007

Silviculture 2006

Dasometrics 2007