

# ROBERT L. NIESE

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## PERSONAL

Date of Birth:	21 December 1988	Contact:	Division of Biological Sciences
Place of Birth:	Mission Viejo, California		University of Montana
Languages Spoken:	English (1 <sup>st</sup> language), Spanish		32 Campus Dr, HS104
Favorite Bird:	Rock Pigeon ( <i>Columba livia</i> )		Missoula, MT 59812 USA
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## EDUCATION

2013-present	Ph.D. Student, Organismal Biology and Ecology, Flight Laboratory, University of Montana, (Bret Tobalske, advisor)	Missoula, MT
2007-2011	B.S. Biology, Minor Spanish, University of Puget Sound	Tacoma, WA

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## PROFESSIONAL EXPERIENCE

2018 (Spring)	Head Teaching Assistant, Rocky Mountain Flora, University of Montana	Missoula, MT
2017 (Fall)	Teaching Assistant, Mammalogy, University of Montana	Missoula, MT
2017 (Spring)	Lab Instructor, Comparative Vertebrate Anatomy, University of Montana	Missoula, MT
2016 (Fall)	Course Instructor, Mammalogy, University of Montana	Missoula, MT
2016	Interim Director, Philip L. Wright Zoological Museum	Missoula, MT
2016	Research and Forensics Consultant, Montana Fish, Wildlife, and Parks	Missoula, MT
2016 (Spring)	Lab Instructor, Comparative Vertebrate Anatomy, University of Montana	Missoula, MT
2015-present	Investigative Research Consultant, The W Group, Inc.	Missoula, MT
2015 (Fall)	Teaching Assistant, Mammalogy, University of Montana	Missoula, MT
2015 (Summer)	Teaching Assistant, Diversity of Life, University of Montana	Missoula, MT
2015 (Spring)	Head Teaching Assistant, Rocky Mountain Flora, University of Montana	Missoula, MT
2014 (Fall)	Teaching Assistant, Mammalogy, University of Montana	Missoula, MT
2014 (Summer)	Teaching Assistant, Diversity of Life, University of Montana	Missoula, MT
2014 (Summer)	Teaching Assistant, Rocky Mountain Flora, University of Montana	Missoula, MT
2014 (Spring)	Teaching Assistant, Diversity of Life, University of Montana	Missoula, MT
2011-2014	Media and Design Consultant, Slater Museum, U. of Puget Sound	Tacoma, WA
2013 (Fall)	Teaching Assistant, Mammalogy, University of Montana	Missoula, MT
2012- 2013	Education and Outreach Specialist, Slater Museum, U. Puget Sound	Tacoma WA
2012	Guest Naturalist and Educator, Annie Wright Summer Camps	Tacoma, WA
2012 (Spring)	Teaching Assistant, Ornithology, University of Puget Sound	Tacoma, WA
2011-2012	Education and Outreach Coordinator, Slater Museum, U. of Puget Sound	Tacoma WA
2011	Backcountry Point Count Technician, Institute for Bird Populations	Port Angeles, WA
2011 (Spring)	Teaching Assistant, General Ecology, University of Puget Sound	Tacoma, WA
2010 (Fall)	Teaching Assistant, Diversity of Life, University of Puget Sound	Tacoma, WA
2009	Laboratory Technician, EnviroSurvey Inc.	San Francisco, CA

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## GRANTS AND AWARDS

2017	University of Montana, Toelle-Bekken Exploratory Research Grant (\$2,500)
2017	University of Montana, Drollinger-Dial Travel Grant (\$2,500)
2016	University of Montana, Drollinger-Dial Travel Grant (\$900)
2014	Tahoma Audubon Society, Distinguished Service Award—Slater Museum of Natural History
2011	University of Puget Sound, Phi Sigma Award for Best Research Symposium Presentation
2011	University of Puget Sound, Leadership Award
2010	University of Puget Sound, Summer Science Research Award (\$3,000)
2010	University of Puget Sound, Havana Bradner Memorial Scholarship for the Sciences (\$2,000)

- 2010 University of Puget Sound, Gordon Dell Alcorn Scholarship for the Sciences (\$475)  
 2009 University of Puget Sound, William McCullough Scholarship for Biology and Chemistry (\$2,000)

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PRESENTATIONS AND SYMPOSIA

- 2018 *Columbina* ground doves produce sonations via unique feathers and a percussive aeroelastic flutter phenomenon. International Ornithological Congress, Vancouver, Canada
- 2018 Testing the aerodynamic and aeroacoustic function of unique dove feathers. Organismal Biology and Ecology Seminar Series, University of Montana, Missoula, MT
- 2017 Novel feather songs in New World ground doves: Exploring odd feather shapes and wing sounds in the Neotropical pigeon genus, *Columbina*. Organismal Biology and Ecology Seminar Series, University of Montana, Missoula, MT.
- 2016 Wing Sounds as Sonations of Alarm: Exploring the evolution of signals that are intrinsically linked to movement. Organismal Biology and Ecology Seminar Series, University of Montana, Missoula, MT.
- 2016 Specialized primary feathers in rock pigeons (*Columba livia*) produce tonal sounds during take-off. Society for Integrative and Comparative Biology 56(1). P1.37
- 2015 "Instrumental Music" – Whistling wings and chirping tails: An introduction to non-vocal feather-songs. Five Valleys Audubon Society (Invited Speaker), Missoula, MT.
- 2014 Communicating with Wings: The evolution and mechanics of feather sounds in pigeons and doves. Organismal Biology and Ecology Seminar Series, University of Montana, Missoula, MT.
- 2013 Darwin's Instrumental Music: Whistling wings and chirping tails, an introduction to non-vocal feather songs. Behavior and Evolution (Invited Lecturer), University of Montana, Missoula, MT.
- 2013 Darwin's Instrumental Music: Whistling wings and chirping tails, an introduction to non-vocal feather songs. Pilchuck Audubon Society Annual Membership Meeting (Invited Speaker), Everett, WA.
- 2011 Communicating with Wings: Wing sounds in Rock Pigeons (*Columba livia*). Phi Sigma Research Symposium, University of Puget Sound, Tacoma, WA.
- 2010 Communicating with Wings: Non-vocal wing-sounds in male and female rock pigeons (*Columba livia*). Student Research Symposium, University of Puget Sound, Tacoma, WA.
- 2010 Non-vocal alarm sounds produced by the wings of Inca doves (*Columbina inca*). Symposium on Tropical Ecology and Conservation, Escuela de los Amigos, Monteverde, Costa Rica.

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PROFESSIONAL ACTIVITIES, SOCIETIES, AND AFFILIATIONS

- 2013-present Research and Outreach Affiliate, Philip L. Wright Zoological Museum
- 2015-2017 Volunteer Master Naturalist, Missoula Butterfly House and Insectarium
- 2016 Grand Judge, Biology Chair (Division II), Montana State Science Fair
- 2014 Grand Judge, Environmental Chair (Division II), Montana State Science Fair
- 2011-2013 Volunteer Master Naturalist, Puget Sound Outdoors
- 2011-2013 Volunteer Master Birder, Tahoma Audubon Society
- 2010-2011 Phi Sigma Biological Sciences Honors Society
- 2010-2011 Volunteer Docent, Slater Museum of Natural History
- 2010-2011 Co-Editor-in-Chief, Elements Science Magazine
- 2009-2011 Publicity Manager, Elements Science Magazine
- 2009-2010 Co-President, BGLAD, a club promoting LGBTQ diversity.

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## COMMUNITY OUTREACH

- 2015-2017 Volunteer Educator, TRIO-Upward Bound, University of Montana
- 2013-2016 Volunteer Educator, SpectrUM Children's Science Museum, University of Montana
- 2017 Volunteer Educator, We are MT in the Classroom, University of Montana
- 2013 Coordinator, "A Celebration of Art and Science" exhibit and open house, Slater Museum of Natural History, University of Puget Sound (300 guests)
- 2013 Educational booth, Seattle Science Festival EXPO, Pacific Science Center
- 2013 Instructor/Coordinator, "Nature in the Classroom: Utilizing natural history specimens to teach 4<sup>th</sup> and 5<sup>th</sup> grade science," teacher training session (14 teachers), Tacoma
- 2012 Coordinator, "It's Wild Outside" exhibit and open house, Slater Museum of Natural History, University of Puget Sound (300 guests)
- 2012-2013 Science Liason, ArtSci, Tacoma Art Museum and University of Puget Sound
- 2012-2013 Guest Science Educator, Tacoma, South Kitsap, Bremerton, Franklin Pierce, Sumner, and Issaquah School Districts and various private schools (1500 students, 4200 contacts, 724 "at-risk" youth)
- 2012 Instructor/Coordinator, "Nature in the Classroom: Utilizing natural history specimens to teach 4<sup>th</sup> and 5<sup>th</sup> grade science," teacher training session (17 teachers), Tacoma
- 2012 Coordinator, "Exotic Species Night" exhibit and open house, Slater Museum of Natural History, University of Puget Sound (300 guests)
- 2012 Instructor/Coordinator, "Nature in the Classroom: Utilizing natural history specimens to teach 4<sup>th</sup> and 5<sup>th</sup> grade science," teacher training session (16 teachers), Tacoma
- 2011-2012 Guest Science Educator, Tacoma, Kitsap, Issaquah, and Bremerton School Districts and various private schools (1700 students, 4100 contacts)
- 2011 Educational booth, Nisqually Watershed Festival (100 guests)
- 2011 Instructor/Coordinator, "Nature in the Classroom: Utilizing natural history specimens to teach 4<sup>th</sup> and 5<sup>th</sup> grade," teacher training session (23 teachers), Tacoma Public Schools
- 2011-present Science Writer, SoMuchScience online blog, content featuring science, technology, and natural history <[somuchscience.tumblr.com](http://somuchscience.tumblr.com)>

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## GENERAL INTERESTS

Natural history, pigeons and doves, birding, botanizing, graphic design, science writing, macro photography, museum curation and research, K-12 education, community outreach and involvement, vertebrate forensics, investigative research