

Scott W. Yanco

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Yale University
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Dept. of Ecology and Evolutionary Biology
165 Prospect St.
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Education

2016-2021	Ph.D. (pending conferral)	University of Colorado Denver Integrative and Systems Biology
2002-2006	B.A.	Colorado College Biology

Relevant Professional Employment

2021-Present	Postdoctoral Associate, Yale University
2020-2021	Research Assistant, University of Colorado Denver
2010-Present	Biologist/Owner, ClearPath Environmental, LLC
2004-2015 (seasonal)	Research Assistant, Colorado College Department of Biology
2009-2010	Biologist, Natural Resources Consulting/STANTEC
2007-2009	Biologist, ARCADIS U.S.
2003	Teacher Naturalist, Massachusetts Audubon Society

Refereed Publications

(*denotes equal contribution)

- [6] Ciaglo, M, R Calhoun, **SW Yanco**, C Stricker, M Wunder, B Linkhart. 2020. Evidence of fall prospecting in a long-distance migrant. *Ecology and Evolution* 11: 599-611
- [5] Contina, A, **SW Yanco**, AK Pierce, M DePrenger-Levin, MB Wunder, AM Neophytou, CP Lostroh, BM Benito, J Chipperfield, RB O’Hara, CJ Carlson. 2020. Comment on “A global-scale ecological niche model to predict SARS-CoV-2 coronavirus infection rate”, author Coro. *Ecological Modelling* 436: 109288
- [4] **Yanco, SW**, A. McDevitt, C. Trueman, L Hartley, and MB Wunder. 2020. A modern method of multiple working hypotheses to improve inference in ecology. *R. Soc. open sci.* 7200231
- [3] **Yanco, SW** and BD Linkhart. 2018. Changing fire regimes and faunal responses: Post-burn habitat use by Flammulated Owls in Colorado. *In: Shuford, WD, Gill, RE Jr., and Handel CM, eds. Trends and Traditions: Avifaunal Change in Western North America. Studies of Western Birds 3. Western Field Ornithologists, Camarillo, CA. (invited paper)*

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- [2] Linkhart, BD, JW Fox, and **SW Yanco**. 2016. Migration timing and routes, and wintering areas of Flammulated Owls. *Journal of Field Ornithology* 87 (1): 42-54.
- [1] Linkhart, BD, EM Evers, JD Megler, EC Palm, CM Salipante, and **SW Yanco**. 2008. First observed instance of polygyny in Flammulated Owls. *Wilson Journal of Ornithology* 120 (3): 645-648.

In Review/Prep

Yanco, SW*, AP Pierce*, MB Wunder. 2020. Bioenergetics of seasonality predict life history diversity in terrestrial animals. Submitted to *Ecography*.

Yanco, SW, BD Linkhart, PP Marra, M Mika, M Ciaglo, A Carver, MB Wunder. 2020. Niche dynamics and ecological origins of migration in an insectivorous owl. Submitted to *Ecology*

Parker, T., H. Fraser, S. Nakagawa, E. Gould, S. Griffith, P. Vesk, F. Fidler and 200+ co-authors in alphabetical order, including **S. Yanco**. (Stage 1 Registered Report, passed peer review and granted in-principle acceptance March 2020) Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. BMC Biology. https://springernature.figshare.com/registered-reports_bmcb

Other Publications

Yanco, SW, ER Pansing, AK Pierce, MB. Wunder. Better models make for softer landings: A comment on Yeh et al. 2019. *BMJ Rapid Response* to Yeh et al. *BMJ* 2018;363:k5094.

Michonneau et al. 2019. datacarpentry/R-ecology-lesson: Data Carpentry: Data Analysis and Visualization in R for Ecologists, June 2019.
doi: [10.5281/zenodo.3264888](https://doi.org/10.5281/zenodo.3264888), <http://datacarpentry.org/R-ecology-lesson/>.

Yanco, SW and Pansing, E. 2018. Everything is a model. *Rapid Ecology*. URL: <https://rapidecology.com/2018/09/05/everything-is-a-model/>

Yanco, SW. 2018. How a tiny migratory owl can teach us about the changing role of fire in the American west. *The Lark Bunting* 54 (5).

Grants *Twelve grants awarded, total: \$296,618*

2020	\$2,000	Drivers of flammulated owl movement behaviors in Colorado <i>Denver Field Ornithologists</i> Role: PI
2020	\$1,500	Ecological drivers of multi-scale movements in a sensitive raptor. <i>Colorado Field Ornithologists</i> Role: PI
2019	\$2,000	Drivers of flammulated owl movement behaviors in southern Colorado <i>Denver Field Ornithologists</i> Role: PI
2019	\$114,736	Assessing influences of prescribed fire within the Hot Creek RNA on the demography, movement patterns, and habitat use of Flammulated Owls.

		<i>Challenge Cost Share between U.S. Forest Service and Colorado College.</i>
		Role: Site manager
2019	\$1,000	Proximate ecological drivers of habitat selection behavior by a sensitive raptor. <i>Colorado Field Ornithologists</i>
		Role: PI
2019	\$9,600	Migratory connectivity of Flammulated Owls. <i>Migratory Connectivity Project, Smithsonian Conservation Biology Institute</i> (in-kind valuation)
		Role: PI
2018	\$1,000	Multi-scale habitat selection behavior by a sensitive raptor following prescribed fire. <i>Colorado Field Ornithologists</i>
		Role: PI
2018	\$1,500	Multi-scale avian habitat selection: detecting process from pattern. <i>Denver Field Ornithologists</i>
		Role: PI
2018	\$6,000	Migratory routes and timing of Flammulated Owls. <i>Migratory Connectivity Project, Smithsonian Conservation Biology Institute</i> (in-kind valuation)
		Role: PI
2017	\$2,100	Spatially dynamic habitat selection in Flammulated Owls. <i>Denver Field Ornithologists</i>
		Role: PI
2015	\$147,682	Assessing influences of prescribed fire within the Hot Creek RNA on the demography, movement patterns, and habitat use of Flammulated Owls. <i>Challenge Cost Share between U.S. Forest Service and Colorado College.</i>
		Role: Site manager
2007	\$7,500	Territory size and habitat use by Flammulated Owls in a recently burned Forest. <i>U.S. Forest Service</i>
		Role: Co-investigator

Workshops, Invited Presentations, Seminars, and Other Lectures

Yanco, SW, BL Linkhart, PP Marra, MB Wunder. *Niche dynamics and ecological drivers of migration in an insectivorous owl*. Invited oral presentation to symposium: “Making the most of Disparate Data to Map Opportunities for Migratory Bird Conservation” at North American Ornithological Conference VII (virtual) (8/15/2020)

❖ **Won A. Brazier Howell award for “best presentation on any topic”**

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- Yanco, SW.** *Fire, Snow, and the Red Queen: how Flammulated Owls cope with environmental change.* Colorado Field Ornithologists Virtual Annual Meeting. (07/25/2020)
- Yanco, SW.** *Change is hard: animal movement strategies in variable environments.* University of Colorado, Colorado Springs. (12/9/2019)
- Yanco, SW** and A Pierce. *Introduction to Occupancy Modeling.* Workshop presented at XVII Congreso para el estudio y conservacion de las aves en México. (8/31/2019-9/1/2019)
- Yanco, SW.** 2019. *Flammulated Owl Research at the Hot Creek Research Natural Area.* Presented to the Rio Grande National Forest Leadership Team Meeting. Monte Vista, CO (2/14/2019)
- Yanco, SW.** 2019. *SeminR: Introduction to R.* University of Colorado Denver, Denver, CO. (1/29/2019)
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Contributed Presentations (presenting author listed first or denoted by *)

- Carello, C, **SW Yanco***, S Way. *Bird community dynamics across a successional gradient in a tropical wet forest.* Contributed poster presentation to North American Ornithological Conference VII. August 10-15, 2020 (virtual).
- Carello, C, S.Way*, **SW Yanco.** *Neotropical Reforestation & Avian Habitat Selection Dynamics in The Monteverde Reserve Complex, Costa Rica.* Contributed poster presentation to the 26th annual Front Range Student Ecology Symposium, Fort Collins, CO, February 20-21, 2020.
- ❖ **Won best undergraduate poster presentation (presenter: Shane Way).**
- Ciaglo, M, R Calhoun, **SW Yanco**, MB Wunder, C Sticker, BD Linkhart. *Evidence of post-breeding prospecting in a migratory raptor.* Contributed oral presentation to the Raptor Research Foundation Annual Conference, November 5-10, 2019, Fort Collins, CO.
- Yanco, SW**, BD Linkhart, M Micah, A Carver, M Ciaglo, P Marra, MB. Wunder. 2019. *Towards a full annual biogeography of the flammulated owl.* Contributed oral presentation to the Raptor Research Foundation Annual Conference, November 5-10, 2019, Fort Collins, CO.
- Linkhart, BD, **SW Yanco**, J Fox. *Migratory Pathways, Stopover Locations, and Wintering Destinations of Flammulated Owls Breeding in Colorado.* Contributed oral presentation to the 137th state meeting of the American Ornithological Society, Anchorage, AK, June 24-28, 2019.
- Yanco, SW**, A Pierce, MB Wunder. *Using genetic algorithms and agent-based models to explore landscapes and life histories which give rise to migration.* Contributed poster presented at Movement Ecology of Animals Gordon Research Conference. Lucca (Barga), Italy, March 2-8, 2019.
- Pierce, A, **SW Yanco**, MB Wunder. *Simulating animal movement using genetic algorithms and agent-based modeling.* Contributed poster presented at Movement Ecology of Animals Gordon Research Conference. Lucca (Barga), Italy, March 2-8, 2019.
- Yanco, SW**, AL McDevitt, LM Hartley, BD Linkhart, and MB Wunder. *Check yourself: using agent-based models to test the logic of hypotheses.* Contributed oral presentation to 2018 Ecological Society of America Annual Meeting, New Orleans, LA, August 5-10, 2018.
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- Yanco, SW**, BD Linkhart, and MB Wunder. *Home-range scale habitat selection patterns do not necessarily imply home-range scale decisions*. Contributed oral presentation to the 136th state meeting of the American Ornithological Society, Tucson, AZ, April 9-14, 2018.
- Yanco, SW**, A McDevitt, L Hartley, and MB Wunder. *Non-inferential approaches to agent-based modeling*. Contributed oral presentation to the 24th annual Front Range Student Ecology Symposium, Fort Collins, CO, February 13-15, 2018.
- Yanco, SW** and BD Linkhart. *Scale-dependent habitat selection by a sensitive forest raptor following wildfire*. Contributed oral presentation to the 23rd annual Front Range Student Ecology Symposium, Fort Collins, CO, February 22-23, 2017.
- Yanco, SW** and BD Linkhart. *Habitat selection by breeding Flammulated Owls in a post-fire environment*. Invited oral presentation to the 39th annual conference of the Western Field Ornithologists, San Diego, CA, October 8-12, 2014.
- Yanco, SW** and BD Linkhart. *Home-range and habitat use by Flammulated Owls (*Otus flammeolus*) following a large-scale forest fire in central Colorado*. Contributed poster presented at the 130th stated meeting of the American Ornithologists Union, Vancouver, BC, August 14-18, 2012.
- Linkhart, BD, **SW Yanco**. *Migration path and wintering area of Flammulated Owls breeding in Colorado*. Contributed oral presentation at the 130th stated meeting of the American Ornithologists Union, Vancouver, BC, August 14-18, 2012.
- Yanco, SW**, BD Linkhart and RT Reynolds. *Nest habitat characteristics of Flammulated Owls (*Otus flammeolus*) in Colorado*. Contributed oral presentation to the 128th stated meeting of the American Ornithologists Union, San Diego, CA, February 9, 2010.
- Yanco, SW** and BD Linkhart. 2008. *Nest site selection by Flammulated Owls (*Otus flammeolus*) in a post-fire environment in Colorado*. Contributed poster presented at the 126th Meeting of the American Ornithologists' Union, Portland, OR, August 4-8, 2008.
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Software

GitHub: <https://github.com/syanco>

pinpointreadR

R Package: Convenience functions for reading Lotek PinPoint GPS tag data into R. Available at: <https://github.com/syanco/pinpointreadR>

checkyourself

R Package: Functions to run simple individual-based simulation models in spatial ecology. Available at <https://github.com/syanco/checkyourself>

Awards and Honors

- 2021 Outstanding Graduate Defense, University of Colorado, Integrative Biology Dept.
- 2021 Outstanding Graduate Student, University of Colorado Denver, Integrative Biology Dept.
- 2020 A. Brazier Howell award from American Ornithological Society for “Best presentation on any topic in ornithology”
- 2020 Fritz Knopf Doctoral Fellowship in Avian Conservation
- 2020 University of Colorado Denver, Department of Integrative Biology Student Dissemination/Travel Award (\$75)
- 2019 Colorado Environmental Management Society Scholarship (\$3,000)
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- 2019 University of Colorado Denver, Integrative and Systems Biology Merit Scholarship. (\$15,000)
- 2019 University of Colorado Denver, College of Liberal Arts and Sciences Student Travel Award (\$750)
- 2019 University of Colorado Denver, Department of Integrative Biology Student Dissemination/Travel Award (\$500)
- 2018 University of Colorado Denver, Graduate School Travel Award (\$500)
- 2018 University of Colorado Denver, College of Liberal Arts and Sciences Student Travel Award (\$500)
- 2018 American Ornithological Society Student Travel Award (\$400)
- 2006 Richard and Reba Beidleman Award, Colorado College
Given to a student who has "demonstrated through courses, fieldwork, or other activities, outstanding potential for becoming a professional ecologist and/or field biologist"
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Courses Taught

- 2016-2021 Graduate Teaching Assistant University of Colorado Denver
 BIOL 6764 Biological Data Analysis
 BIOL 3763 Biostatistics
 BIOL 1500 Basic Biology: Cells to Organisms
- 2020 Guest Lecturer Metropolitan State University of Denver
 BIO 4280 Ornithology
Change is hard: animal movement strategies in variable environments.
- 2018 Guest Lecturer University of Colorado Denver
 BIOL 3763 Biostatistics
The Central Limit Theorem
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Academic Service

- 2019 - present Referee: *Frontiers in Ecology and the Environment (2x), USGS Colleague Review, PLoSOne, Oecologia (2x), Condor: Ornithological Applications, Journal of Experimental Marine Biology, Journal of Raptor Research, Avian Conservation & Ecology, Ornithology, Ecological Indicators*
- 2020 Program Committee, 2021 Gordon Research Seminar on Movement Ecology of Animals (postponed)
- 2018-2019 Founder and organizer of the Graduate Student Seminar Series, University of Colorado, Department of Integrative Biology.
- 2017-2018 Organizer of the Ecology and Evolutionary Biology Journal Club University of Colorado Denver, Department of Integrative Biology
- 2017-2018 Graduate student representative to the University of Colorado Denver, Department of Integrative Biology Space and Facilities Use Committee
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