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Donal Seán O'Leary III
Selected Curriculum Vitae
April 18th, 2019

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Education

Colorado State University	GPA = 3.86	Fort Collins, Colorado	Watershed Science/GIS	B.S. 2013 Magna Cum Laude
Western Washington University	GPA = 3.97	Bellingham, Washington	Geography	M.S. 2016
University of Maryland	GPA = 4.00	College Park, Maryland	Geographical Sciences	PhD Expected 2020

Appointments:

Academic: Wylie Fellow. University of Maryland Sep 2019 - December 2019.

Graduate Research Fellow (NSF-GRFP). University of Maryland Sep 2016 - Aug 2019.

Lead Instructor – GEOG 306, University of Maryland, College Park, 2018-2019.

Co-Instructor – GEOG 301, University of Maryland, College Park, Spring 2017, 2018.

Assistant Instructor – GEOG 418, University of Maryland, College Park, Summer 2017, 2018.

Lead Instructor – ENVS 201, Western Washington University. 2015.

Teaching Assistant – Environmental Studies Department, Western Washington University. 2014-2016.

Conservation: NSF Graduate Research Internship Program (USGS). Jackson, Wyoming. Summer 2018 & '19.

Young Leader in Climate Change Fellow. Crater Lake National Park. Summer, 2015.

Dave Cole Scholarship Intern – Big Thompson Watershed Forum. Loveland, Colorado. 2012-2013.

Trail Crew Leader, Volunteer Coordinator – Rocky Mountain National Park. Estes Park, Colorado. 2010-2012.

Backcountry Trail Crew Member – Yosemite National Park. Mariposa, California. 2009.

Trail Crew Leader – Student Conservation Association. Olympic National Forest, Washington. 2008.

Backcountry Trail Crew Leader – Southwest Conservation Corps. Tucson, AZ, and Durango, CO. 2007-2008.

Publications:

1. **O'Leary, Donal III**; Trevor Bloom; Molly Smith; Christopher Zempf; and Michael J. Medler. 2016. "A New Method Comparing Snowmelt Timing with Annual Area Burned." *Fire Ecology* 12 (1). http://fireecologyjournal.org/docs/Journal/pdf/Volume12/Issue01/041.pdf
2. **O'Leary, Donal III**; Kellermann, Jherime; Wayne, Chris. 2017. "Snowmelt timing, phenology, and growing season length in conifer forests of Crater Lake National Park, USA" *International Journal of Biometeorology* 62 (2), 273-285. https://doi.org/10.1007/s00484-017-1449-3
3. **O'Leary III, D.**, D.K. Hall, M. Medler, R. Matthews, and A. Flower. 2017. Snowmelt Timing Maps Derived from MODIS for North America, 2001-2015. ORNL DAAC, Oak Ridge, Tennessee, USA. https://doi.org/10.3334/ORNLDAAC/1504
4. **O'Leary, Donal III**; Hall, Dorothy; Medler, Michael; Flower, Aquila. 2018. "Quantifying the early snowmelt event of 2015 in the Cascade Mountains, USA by developing and validating MODIS-based snowmelt timing maps." *Frontiers of Earth Science* 12 (4), 693-710. https://doi.org/10.1007/s11707-018-0719-7
5. G. Hurtt, M. Zhao, R. Sahajpal, A. Armstrong, R. Birdsey, E. Campbell, K. Dolan, R. Dubayah, J. Fisk, S. Flanagan, C. Huang, W. Huang, K. Johnson, R. Lamb, L. Ma, R. Marks, **D. O'Leary III**, J. O'Neil-Dunne, A.

Swatantran, H. Tang. 2018 “Beyond MRV: High-resolution forest carbon modeling for climate mitigation planning over MD, USA” *Environmental Research Letters* https://doi.org/10.1088/1748-9326/ab0bbe

6. Notaro, M., Emmett, K., and **O’Leary, D.** (2019). Spatio-Temporal Variability in Remotely Sensed Vegetation Greenness Across Yellowstone National Park. *Remote Sensing* 11, 798. https://doi:10.3390/rs11070798

Unpublished:

7. [*In Review*] **O’Leary, Donal III**; Medler, Michael; Flower, Aquila. “Early snowmelt timing leads to divergent wildfire responses in ecosystems of the western USA” *Target journal: International Journal of Wildland Fire*
8. [*Under Revision*] Teodoro, Jose Daniel; **O’Leary, Donal III**; Kerr, Siobhan; Peskin, Eva; Silva, Julie. “The Relevance of Case Studies to Climate Change Research in the Era of Big Data: A Review of Policy Engagement” *Target Journal: Climate and Development*
9. [*In Preparation*] Ma, Lei; Hurtt, George; Sahajpal, Ritvik; Chini, Louise; **O’Leary, Donal III**; Frolking, Steve. “A global Transition Rule for Translating Land-use Change to Land-cover Change” *Target journal: Geoscientific Model Development*

Selected Oral Presentations:

1. The many ways that snow influences wildfire. *(Press conference – Snow in the US West)* (American Geophysical Union 12/2018)
2. Early snowmelt timing leads to divergent wildfire responses in ecosystems of the western USA. (American Geophysical Union 12/2018 **&** MtnClim Conference 09/2018)
3. Investigating the Early Snowmelt Event of 2015 in the Cascade Mountains Using The MODIS-Based Snowmelt Timing Product**.** (American Geophysical Union 12/2017 **&** Wright Society Conf. 4/2017)
4. Investigating the spatio-temporal relationships between snowmelt timing and wildfire occurrence in the US Mountain West *(Thesis Defense as a part of the North Cascades West Side Fire Symposium)* (Western Washington University 05/2016)
5. Investigating the spatio-temporal relationships between snowmelt timing and wildfire occurrence in the US Mountain West. (Association for Fire Ecology Int’l. Fire Congress 11/2015)
6. Understanding Climate Change using Satellite Imagery *(Casual Conversation Series)* (Crater Lake National Park 08/2015)

Press Coverage:

1. Davis T (2018) Snowpack in trouble across the West and around the globe, researchers say. *Arizona Daily Star*. https://tucson.com/news/local/snowpack-in-trouble-across-the-west-and-around-the-globe/article_c0443567-0d0c-56c7-a472-e273037c64bf.html
2. Gill V (2018) Climate change is ‘shrinking winter’. https://www.bbc.com/news/science-environment-46547064
3. Niiler E (2018) As Snow Disappears, the Sierras and Rockies Are Shrinking. *Wired*. https://www.wired.com/story/as-snow-disappears-the-sierras-and-rockies-are-shrinking/
4. Totiyapungprasert P (2018) Wildfires increase with shrinking snowpack, changes in snowmelt timing. *azcentral*. https://www.azcentral.com/story/news/local/arizona-environment/2018/12/12/climate-change-environment-less-snow-earlier-snowmelt-leads-more-wildfires-global-warming/2282994002/

Selected Awards:

Wylie Fellow (UMD 2019); Outstanding student paper (AGU Fall meeting 2017); Graduate Research Fellowship (NSF 2016); Outstanding Graduate (WWU 2016); Young Leaders in Climate Change Fellowship (NPS 2015); Magna Cum Laude (CSU 2013); Outstanding Staff Member (Rocky Mountain National Park 2012); Physics All-American (American Physical Society 2004); Michigan Math Prize (Math. Association of America 2004).

Service: Manuscript Reviewer – Ecosphere (2018), Physical Geography (2018), Biogeosciences (2019)