

## CURRICULUM VITAE

**ALANA M. RADER**

Department of Geography  
Rutgers University  
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### **Academic History**

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PhD Geography, in progress, Rutgers University

Tropical Biology Field School, University of Costa Rica, Summer 2018

MSc Geography, University of Victoria, 2017

BSc Geography, emphasis Geomatics, University of Victoria, 2014

### **Professional History**

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Rutgers University, New Brunswick, NJ

09/2017 to present- Coastal Climate Risk and Resilience Trainee/Fellow

09/2017 to present- Pre-dissertation PhD Candidate, Department of Geography

09/2017 to 04/2018- Research Assistant, Department of Marine and Coastal Sciences

University of Victoria, Victoria, BC

05/2015 to 08/2017- MSc Candidate, Department of Geography

05/2015 to 08/2017- Research Assistant, Department of Geography

01/2013 to 06/2014- Research Assistant, Coastal Erosion and Dune Dynamics Lab

United States Fish and Wildlife Service, Arcata, CA

04/2017- LiDAR Survey Technician, Humboldt Bay National Wildlife Refuge

09/2016- LiDAR Survey Technician, Humboldt Bay National Wildlife Refuge

04/2016- LiDAR Survey Technician, Humboldt Bay National Wildlife Refuge

01/2016- Topographic Survey Crew Leader, Humboldt Bay National Wildlife Refuge

11/2015- LiDAR Survey Technician, Humboldt Bay National Wildlife Refuge  
05/2016- Vegetation and LiDAR Survey Technician, Humboldt Bay National Wildlife Refuge

United States Geological Survey, Lakewood, CO  
09/2012 to 06/2014- Geomatics Technician, University of Victoria (remote)  
06/2012 to 08/2012- Physical Science Technician, Department of Energy

## **Teaching Opportunities**

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### **Laboratory Instructor**

University of Victoria, Victoria, BC  
09/2016 to 05/2017- Introduction to Geographic Information Science (Geog 222),  
Department of Geography  
09/2015 to 12/2015- Field Surveying (Geog 325), Department of Geography

### **Teaching Assistant**

University of Victoria, Victoria, BC  
05/2016 to 07/2016- Cascadia Sustainability Field School: Sustainable City Planning and  
Environmental Management in the Cascadia Region, Department of  
Geography

## **Fellowships and Scholarships**

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06/2018 Research Travel Grant, Coastal Climate Risk and Resilience  
05/2018 MaGrann Geography Field Research Award, Department of Geography, Rutgers  
University  
03/2018 Summer Course Scholarship, Organization of Tropical Studies  
03/2018 Student Summer Travel Award, Rutgers University, Institute of Earth, Ocean,  
and Atmospheric Sciences

10/2017 Student Conference Travel Award, Rutgers University, Institute of Earth, Ocean, and Atmospheric Sciences

09/2017 National Science Foundation Coastal Climate Risk and Resiliency Fellowship, Rutgers University, Institute of Earth, Ocean, and Atmospheric Sciences

09/2016 Uvic Graduate Award, University of Victoria, Faculty of Graduate Studies

09/2015 Uvic Graduate Award, University of Victoria, Faculty of Graduate Studies

05/2015 Uvic Graduate Award, University of Victoria, Faculty of Graduate Studies

## **Publications**

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### **Journal Articles**

- 2018 Nordstrom, K.F., Jackson, N.L., **Rader, A.M.**, Garilao, E.S. (2018). Protecting natural landforms and habitats by nourishing an eroding estuarine beach. *Environmental earth processes*, 77.
- 2018 **Rader, A.M.**, Pickart, A.J., Walker, I.J., Hesp, P.A., Bauer, B.O. (2018). Fore-dune morphodynamics and sediment budget responses to varying vegetation cover, Humboldt Bay National Wildlife Refuge, Northern California, USA. *Geomorphology*, 318: 69 – 87.
- 2018 **Rader, A.M.**, Cottrell, A., Kudla, A., Karandikar, H., Lum, T., Henderson, D., Letcher, S.G. (Forthcoming). Microburst-associated treefalls as a stochastic disturbance in tropical wet forest. To be submitted to: *Biotropica* projected: December, 2018
- 2018 **Rader, A.M.**, Walker, I.J., Pickart, A.J., Bauer, B.O. (Forthcoming). Fore-dune (re)building after vegetation disturbance and reestablishment: Humboldt Bay National Wildlife Refuge. To be submitted to: *Geomorphology* projected: December, 2018.

## **Special Reports and Other Publications**

- 2017 **Rader, A.M.** Foredune morphodynamics and seasonal sediment budget patterns, Humboldt Bay National Wildlife Refuge, Northern California, USA. MSc Thesis submitted to: University of Victoria, Department of Graduate Studies.
- 2016 **Rader, A.M.**, Walker, I.J. Shoreline movements and volumetric changes within beach-dune systems within Lanphere and Ma-Le'l dune units, Humboldt Bay National Wildlife Refuge, Arcata, Northern California. Official report submitted to: Andrea J. Pickart, U.S. Fish and Wildlife Service, Humboldt Bay National Wildlife Refuge.
- 2014 **Rader, A.M.**, Walker, I.J. Quantifying coastal erosion and geomorphic responses at Beacon Hill Bluffs, Victoria, BC, Canada. Official report submitted to: Capital Regional District Department of Engineering.
- 2013 **Rader, A.M.**, Ho, J., Kwasnecha, K., Denouden, T. (2013). Ready, set, save trees: UVIC paper towel elimination. Official report submitted to: Capital Regional District, Climate Action Program

## **Presentations**

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### **Academic and Professional Conference Presentations**

- 2017 American Geophysical Union Fall Meeting. (Oral). Foredune morphodynamics and seasonal sediment budget patterns: Humboldt Bay National Wildlife Refuge, Northern California, USA.
- 2016 American Geophysical Union Fall meeting. (Poster). Foredune morphodynamics and sediment budget responses to varying vegetation cover: Humboldt Bay National Wildlife Refuge, Northern California, USA.
- 2014 Western Division, Canadian Association of Geographers Spring meeting. (Poster) Quantifying coastal erosion and geomorphic responses at Beacon Hill Bluffs, Victoria, BC, Canada.
- 2013 Bridging the Gap Conference. (Oral). UVIC Paper towel elimination: Ready, set, save trees.

### **Classroom and Public Presentations**

- 04/2018 *Invited.* Guest lecture, Rutgers University, Introduction to Earth Systems. Coastal processes, landforms, and geographic research.
- 04/2018 *Invited.* Guest speaker, New Brunswick High School STEM Club. STEM and physical science research: Not just science.
- 12/2017 *Invited.* Guest speaker, Gainsville Middle School, 8<sup>th</sup> grade science courses. Careers and opportunities in Earth science.
- 03/2017 *Invited.* Guest lecture, University of Victoria, Introduction to GIS (Geog 222). GIS applications for coastal research.
- 11/2016 *Invited.* Guest lecture, University of Victoria, Introduction to GIS (Geog 222). Coastal monitoring and GIS.

### **Service**

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#### **Community Outreach**

- 04/2018 Climate change communicator, Rutgers Climate Institute Booth, Rutgers Day

#### **Executive Board Memberships**

- 09/2018 to 05/2019 Geography Graduate Student Association, President, Department of Geography, Rutgers University, New Brunswick, NJ.
- 01/2018 to 08/2018 Geography Graduate Student Association, First year representative, Department of Geography, Rutgers University, New Brunswick, NJ.
- 09/2017 to present- Gathering of Rutgers Earth, Environmental and Natural Sciences, Coastal Climate Risk and Resiliency Traineeship representative, Rutgers University, New Brunswick, NJ.
- 09/2013 to 05/2014- Society of Geography Students, Director at large, University of Victoria, Department of Geography, New Brunswick, NJ.