

# Alexander Fox

Phone: (646) 276-1821 – Email: [alexfox@gmail.com](mailto:alexfox@gmail.com) – Website: [afox.land](http://afox.land)

## EDUCATION

---

**Ph.D. in Hydrologic Science, University of Wyoming** Planned: 2024  
Advisor: Brent E. Ewers GPA: 4.0  
Relevant coursework: Fluid Mech., Phys. Meteorology I, Adv. Hydrology

**B.A. in Physics (conc. in astrophysics) and Mathematics, Oberlin College** May 2018  
Relevant coursework: Classical Mech., Electronics GPA: 3.38

## RELEVANT WORK EXPERIENCE

---

**University of Wyoming** Laramie, WY  
*Graduate Research Assistant* June 2020 – Present

- Bioinformatics approaches to eddy covariance preprocessing workflows
- Process modeling to differentiate drought tolerance between perennial and annual grains
- Constraining springtime energy budget measurements in snow-dominated ecosystems
- Manage the US-CPk Ameriflux site and other UW micromet stations in the Snowy Range

*Graduate Teaching Assistant*

- Courses: Water Resources Seminar, Forest Mgmt., Intro. to Research and Data Analysis

**University of Wyoming** Laramie, WY  
*Field Technician* Jun– Nov 2019

- Maintenance of the US-CPk Ameriflux site, including data processing and QA/QC

**Cooperative Institute for Satellite and Earth System Studies (CISESS)** College Park, MD  
*Research Assistant* Nov 2018 – May 2019

- Developed code for a rapid water balance assessment tool using the ALEXI algorithm

## AWARDS AND HONORS

---

Professional-Producer Grant – Western SARE 2021-2024  
Graduate Student Fellowship – Wyoming NASA Space Grant Consortium 2021-2022  
Grant A. Harris Fellowship – METER Group 2021  
Sigma Xi Scientific Research Honor Society 2017

## PUBLICATIONS AND PRESENTATIONS

---

**Fox, A. S.**, Rodgers, H. R., Norton, J. B. et al. Modeling Sustainability of Annual and Perennial Cropping Systems in Eastern Wyoming. (2022). *In 2022 Perennial Grain Early Career Researchers Workshop. Oral Presentation*

**Fox, A. S.**, Frank, J. M., Blanken, P., Bretfeld, M., Burns, S., Hubbard, R., Ewers, B. E. et al. Understanding ecosystem processes in the subalpine forests of Wyoming and Colorado under synergistic disturbances from bark beetles, wildfire, and climate change. (2022). *In Ameriflux Annual Meeting 2022. Poster*

Owen, R., **Fox, A. S.**, Freiberg, J. A. & Jacques, T. P. Black hole spin axis in numerical relativity. *Phys. Rev. D* 99, 084031 (2019).

Owen, R., **Fox, A. S.**, Freiberg, J. A. & Jacques, T. P. The Precession and Nutation of Dynamical Black Holes (2017). *In Ohio College Summer Research Symposium. Poster.*

### **OTHER WORK AND LEADERSHIP EXPERIENCE**

---

**The Land Institute**

*Research Intern*

Salina, KS

Sep – Oct 2018

**Oberlin College**

*Teaching Assistant: Energy Sci. & Tech.*

Oberlin, OH

Jan – May 2018

*Research Assistant, Dept. of Physics and Astronomy*

May – Aug 2017

*Research Assistant, Dept. of Mathematics*

Feb – Sep 2016

*Telescope Technician*

Nov 2014 – May 2017

### **PROFESSIONAL TRAININGS**

---

New Advances in Land Carbon Cycle Modeling - Northern Arizona University (Virtual) 2021