

**Jane Doe**  
*Curriculum Vitae*

**Mobile** ????.???.????

**Email** janedoe@gmail.com

**EDUCATION**

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May 2018 – Present

*University of Dayton*

- Master's Candidate, M.S. of Biology
- Research Assistantship- Fire and Larch Arctic Regeneration Experiment

August 2011- May 2015

*University of Dayton*

- B.S. Biology
- 3.57 GPA
- Cum laude

2010- 2011

*Ohio State Academy*

- Completed coursework contributing to B.S. Degree
- Study Abroad Experience: Global Environmental Health Course- Costa Rica

**CERTIFICATES**

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2015

Geographic Information Systems

2018

Arctic Wilderness First Aid (WFA)

**AWARDS**

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May 2015

*University of Dayton*- The John J. Comer Ecological Undergraduate Research Award

**RESEARCH EXPERIENCE**

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*Native Plant Intern- AmeriCorps Service Term*

Spring 2018

Song Dog Native Plant Nursery, Lake Mead NRA

Great Basin Institute

- Investigate clipping propagation techniques for *Larrea tridentata* and *Encelia farinosa* in hopes of developing a successful protocol for propagation by this method. Testing chemical and physical effectiveness in stimulating and promoting root growth in cutting material taken from mature individuals

*Lab Intern*

September 2015- April 2016

Dr. Kelly Dorgan Polychaete Laboratory

Dauphin Island Sea Lab

- Studying the relationship between polychaete worm length and weight in determining age
- Investigating infestation level of mudblister worms in oysters depending on season and other factors

## **Undergraduate Research:**

*Undergraduate Researcher*  
Dr. Ryan McEwan Laboratory

May 2014- May 2015  
University of Dayton

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- Lead, organize, and participate in site reconnaissance
- Refining of methods and experiment design
- Testing effects of invasive plant leachate on native Ohio seed germination (Spring 2015)
- Examining the effect leaves and berries of *L. maackii* has on seed germination, plant height, and leaf production of the herbaceous species *Brassica rapa* and the woody plant *L. maackii* over a 30 day growing period (Spring 2014)
- Investigating the reach of debris (fruit, flower, leaves) from the invasive species *Lonicera maackii* from an area of invasion into an area of removal in a riparian system over one growing season (Fall 2013-Spring 2014)

## **RESEARCH PRESENTATIONS**

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"**Frankenberg, S.J.**, "O'Callaghan, H.L. and R.W. McEwan. 2014. Reach of *Lonicera maackii* debris from an area of invasion to an area of removal. Midwest Ecology and Evolution Conference (Dayton, OH, March 2014)

"**Frankenberg, S.J.**, "O'Callaghan, H.L. and R.W. McEwan. 2014. Reach of *Lonicera maackii* debris from an area of invasion to an area of removal. University of Dayton Stander Symposium (Dayton, OH, April 2014)

## **TECHNICAL REPORTS**

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Custer, KW., SJ Frankenberg, EB Borth, SN Eisele, RW McEwan. 2015. Water quality effects of urban outfalls along sections of the Great Miami River, Mad River, and Wolf Creek – 2015. City of Dayton, Environmental Management Department, Final Report, pp 50.

## **TEACHING EXPERIENCE**

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*Undergraduate Teaching Assistant*  
*Invertebrate Zoology Laboratory*

Spring 2015  
University of Dayton

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- Assist students with slide and specimen preparation along with the preparation of lab examination materials. Full knowledge of course material used.

## **PROFESSIONAL EXPERIENCE**

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*Native Plant Intern- AmeriCorps Service Term*  
@ Song Dog Native Plant Nursery, Lake Mead NRA

October 2017- April 2018  
Great Basin Institute

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- Propagate and care for forbs, cacti, shrubs, trees, and graminoids native to the Mojave Desert Ecosystem
- Investigate propagation techniques for *Larrea tridentata* and *Encelia farinosa* via cuttings
- Monitor growth of native plants and work to promote growth and optimal plant health

- Work with Nevada Conservation Corps planting native species along slopes of Hoover Dam interstate restoration project (digging using pick-mattock, watering using backpack sprayers) for Park Service
- Lead and train volunteers and NCC crew when Nursery Supervisors are absent in transplanting techniques of native forbs using Nursery soil mixes and protocols
- Assist nursery and education staff during field trips (answer youth's questions and monitor stations lead by NPS)
- Perform regular checks on nursery beds and greenhouses to prevent weed/fungus growth, rodent disturbance, and monitor irrigation quality
- Responsible for watering schedule and duties for all beds in nursery- Operate time clock managing automatic irrigation schedules for nursery yard, beds and greenhouses
- Maintain Propagation Log to record germination of planted seeds, plant progress, propagation techniques and anticipate transplanting needs
- Update Nursery Log daily to track nursery changes such as watering schedules, transplanting, plant health, exposure, and treatments for later reference
- Stratification of seed through scarification, temperature, and pre-soak treatments
- Construct and manipulate irrigation lines on nursery beds to fit seasonal needs of plants
- Apply insecticide and fungicide to affected plants
- Winterization of nursery beds with Hoop House Installation
- Collect and manipulate weather station data to determine local nursery climate
- Inventory seedlings and plants in varying growth stages for project planning
- Prepare plants for pick up by project partners by removing foreign debris/seeds and weeds
- Work side by side with NPS volunteers in transplanting individual plants
- Collect and process compost from park offices to be reduced into organic soil at the nursery
- Prepare "soil-less substrate" based on protocol in bulk for upcoming planting projects
- Prepare a Quarterly Report for AmeriCorps and Great Basin Institute detailing daily and long term project goals and progress

*Biological Science Technician*  
 Vegetation Department, Yellowstone NP

May 2017- October 2017  
 National Park Service

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- Identify Rocky Mountain Vegetation including forbs, graminoids, and some woody species
  - Trained by an NCRS professional in US Army Corps of Engineer protocol in Wetland Delineation
  - Analyze landscapes for wetland qualities by evaluating hydric soils, hydrology, and vegetation communities
  - Monitor wetland progression via plant surveys along reclaimed wetlands post construction
  - Evaluate soils for hydric qualities based on color and texture for Wetland Determination using Munsell's soil chart and USDA Texture Triangle

- Use GPS Pathfinder unit to map wetlands and areas of interest
- Install groundwater wells to monitor water levels using data loggers (WinSitu)
- Manual collection of groundwater well data along Gibbon River
- Trained by an NCRS professional in seed collection techniques including seed readiness, quality and storage
- Collect native seed of multiple plant species for the Yellowstone Vegetation Program for restoration projects in YNP
- Track flowering, bolting, and location of native forbs and graminoids using a Native Plant Seed Database for later seed collection
- Use dichotomous key to identify unknown plants to species
- Collect and press voucher specimens in the field for preparation for Yellowstone NP Herbarium
- Lead and train volunteer groups in plant identification, weed pulling, and seed collection techniques
- Lead and train volunteer groups in native plant harvesting and transplantation for riparian restoration, as well as habitat restoration and native reseeding in overused alpine area.
- Conduct survey for rare species *Gymnosteris parvula* in YNP prior to construction to evaluate impact potential

*Lab Intern*

Dr. Kelly Dorgan Polychaete Laboratory

September 2015- April 2016

Dauphin Island Sea Lab

- Personal project focusing on the lifecycle, behavior, and oyster shell boring mechanism of mud blister worms
- Personal project concerning the metabolism of oxygen by macrofauna found in marine benthic environments
- Complete sediment analysis (porosity, grain size, C:N)
- Contribute to polychaete sample processing under scope
- Investigate mud blister worm larvae culture methods
- Lead field work and data analysis (R Software) of personal projects

*Ecological Research Technician*

Dr. Ryan McEwan Laboratory

May 2015- July 2015

University of Dayton

- Assist staff with duties pertaining to Amur Honeysuckle grant and City of Dayton Stormwater Biomonitoring Project
- Organize and participate in field site selection for NSF funded project
- Used Plant taxonomy skills to identify trees to genus and species in the field.
- Train and lead undergraduate technicians on culture techniques, tree identification, and project objectives/goals
- Establish and maintain *Daphnia magna* and *Hyalella azteca* cultures

- Testing of an Amur Honeysuckle effect on *D. magna* and *H. azteca* and stream invertebrate communities
- Assisted with USEPA acute and chronic toxicity tests with effluent water and stream sediments using *D. magna* and *H. azteca*
- Laboratory and field-testing of physicochemical parameters on ambient water: temperature, dissolved oxygen, conductivity, hardness, alkalinity, pH
- Macroinvertebrate sampling using D-frame dip nets, surber sampler, and kick seines
- Collecting, sorting, and preserving aquatic macroinvertebrates
- Instrumentation: YSI 650 and YSI Professional Series handheld units, balances, muffle furnace, ovens, and autoclave

*Undergraduate Researcher*  
 Dr. Ryan McEwan Laboratory

May 2014- May 2015  
 University of Dayton

- Lead, organize, and participate in site reconnaissance
- Refining of methods and experiment design

*Student Research Assistant*  
 STEM Internship

March- June 2011  
 OhioHealth

- Created an outline of research to be approved by the International Review Board of OhioHealth

## **SKILLS**

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### *Field*

- Irrigation Repair and manipulation
- Leading field crews
- Plant propagation from seed and clippings
- Transplanting of forbs and shrub species
- Rodent management
- Installation of groundwater wells
- Collection of native seed in Greater Yellowstone and Mojave Desert Ecosystems
- Plant Identification and classification in Greater Yellowstone Ecosystem
- Wetland community plant identification
- Wetland surveying and mapping
- Location mapping using portable GPS unit
- Soil classification using Munsell's chart and USDA soil triangle
- Track phenology of native plant species
- Plant pruning techniques
- Transplanting immature plant species
- Restoring habitats via transplanting
- Erosion control and trail maintenance
- Watering techniques
- Proficient in tree classification to genus and species
- Project construction with PVC
- Tree core sample preparation
- Use of thaw depth probe
- Plot Design
- Macroinvertebrate field collections following USEPA Rapid Bioassessment Protocol with D-frame kicknet, Surber sampling, and kick seine
- Water and sediment collection methodology
- Beginner experience in Macroinvertebrate identification
- Familiar with Amur Honeysuckle (invasive species) removal techniques

- Training in use of SonTrek FlowTracker
- Some experience in herbaceous plant classification
- Proficient in measuring canopy cover using Densiometer
- Plankton sampling using Niskin Bottle

- Marine polychaete sample collection
- Comfortable working on boats (and barges) for long periods of time
- Experience in hiking and backpacking in humid and dry climates
- Hike 20+ miles with 30lb gear pack

### *Laboratory*

- Proficient in Geographic Information Systems
- Calibration and use of YSI probes
- Scarification and stratification of seed
- Maintenance of Nursery and propagation logs
- Manipulate data in Access Databases
- Seed cleaning and processing using a shaker
- *D. magna* and *H. azteca* food preparation
- Dechlorinated water and EPA standard culture water preparation
- Proficient in permanent slide preparation
- Use of a stereoscope
- Training in invertebrate specimen dissection
- Proficient in agar preparation
- Familiar with aseptic technique

- Experience with plant growth using a growth chamber
- Beginner experience in seed germination techniques
- Proficient in acid washing
- Training in Hach Water Quality Testing
- Minor experience in polychaete classification to family
- Sediment analysis: porosity sample processing
- Grain Size Analysis sample processing
- Carbon: Nitrogen sediment sample
- Use of Muffle Furnace
- Quantify ecto-mycorrhizae on *Larix cajanderi*
- Some training in use of microtome for specimen preparation

### **TECHNICAL SKILLS:**

- WinDENDRO- Tree Ring Analysis
- R - Statistical Software
- Trimble/ PathFinder GPS unit
- HOBOWare Weather station analysis
- ArcMap- ArcGIS 10.1
- ERDAS Imagine 2015
- Prism
- Google Drive
- ImageJ
- WinSitu

### **OTHER EXPERIENCES:**

*Aquatic Botanist Field Work Volunteer*  
 Vegetation Department, Yellowstone NP

August 2016  
 National Park Service

- Lead by Dr. Eric Hellquist, locate and collect field specimens of native aquatic plant species found in Yellowstone National Park ecosystems contributing to an overall catalog of aquatic plants found in the park
- Located rare species of pondweed (obtuse-leaved pondweed) that will be featured in the Yellowstone Herbarium

*Yellowstone Vegetation Program Volunteer* July 2016 – October 2016  
Vegetation Department, Yellowstone NP National Park Service

- Trained by Park Botanist in plant identification of native plants, nonnative plants (spotted knapweed, cheatgrass) and two park endemics (Sulfur Buckwheat and Ross' Bentgrass) at Old Faithful
- Collected seed for multiple native species for the Yellowstone Vegetation Program; making native plant material available for individual projects at Old Faithful.
- Trained another volunteer on seed collection and native species identification in the Old Faithful area.

*Yellowstone Vegetation Program Volunteer* May 2016 – October 2016  
Old Faithful Backcountry Office, Yellowstone NP National Park Service

- Assist in trail management: clearing of debris and downed trees from backcountry trails

*Geographic Information Systems Workshop* January 2016  
Dauphin Island Sea Lab

- Overview of GIS techniques

*Alabama Coastal Clean Up Volunteer* September 2015  
Dauphin Island Sea Lab

- Debris/ trash removal from Little Dauphin Island

*Conference Volunteer* March 2014  
Midwest Ecology & Evolution Conference Dayton, OH

- Moderated oral presentation session

*Marianist Hall Learning Space Support Specialist* August 2013- May 2015  
University of Dayton, Student Employment

- Solve technological problems with computers, DVD players & projectors
- Manage noise level and use of the space by faculty and student community.

*Beta Beta Beta Honors Biological Society Member* 2011- 2015  
University of Dayton

- Attend research seminars at UD
- Long term volunteering on/off campus.
- Science Olympiad tutor at Holy Angels (students ages 12-14).

**RELEVANT COURSEWORK:**

- Applied GIS
- Introductory Statistics
- Entomology
- Vertebrate Zoology
- Environmental Ecology
- Environmental Ethics

- Religion and Ecology
- Evolution & Development
- The Dynamic Earth
- Remote Sensing
- Advanced Applied GIS

- Biological Analysis (Introduction to R)
- Plant Diversity and Ecology + Laboratory
- General Microbiology + Laboratory
- Invertebrate Zoology + Laboratory