



CHRISTINE BUHL

EDUCATION

2001–2003 Oregon State University Corvallis, OR
■ B.S., Environmental Science, Entomology minor/specialization.

1998–2001 Portland Community College Portland, OR
■ A.S., Environmental Science

SKILLS

- Experimental design setup and modification experience in the field, lab and greenhouse
- Program development and coordination, which includes budgeting, acting as communication liaison, recruitment and training of volunteers and employees
- Data maintenance, manipulation and analysis using Excel, Word, Access, PowerPoint and GIS (ESRI ArcView 3.3 and ArcGIS 9.2)
- Collection and identification of aquatic and terrestrial adult and juvenile invertebrates using butterfly and 'D' nets; light, pitfall, baited, malaise, pan, EVS CO₂ and gravid traps and berlese funnels.
- Species identification of aquatic and terrestrial adult and juvenile invertebrates using dichotomous keys and a compound or dissecting microscope
- Species identification of common introduced and native wet and dry land plants and trees
- Museum curation of plants and invertebrates using acid free mounting and point, spread and soft body preservation techniques
- Rearing and husbandry of native and exotic invertebrates, reptiles and mammals
- Orienteering using GPS, compass and navigation of rough terrain using 4-wheel vehicles
- Development and implementation of biological science curriculum used in outreach, tutoring and other education programs

LICENSES

2005-2009 #180624
Public Pesticide Applicators License

EXPERIENCE

2005 - 2008 **Washington County, Environmental Health** Hillsboro, OR

West Nile Virus Program Coordinator/ Entomologist

- Coordination of a developing West Nile Virus (WNV) prevention and mosquito control program, which includes budgeting, developing parameters, establishing partnerships, etc.
- Coordination of WNV surveillance and testing between local and federal government agencies
- Mapping of WNV vector mosquito breeding areas on urban and rural land surveillance, testing and treatment efforts using ArcView and Access
- Identification and WNV testing of mosquito and bird species

2005 **The Oregon Garden** Silverton, OR

Environmental Educator

- Developed and implemented ecologically based science classes for K-12 school groups
- Classes taught include ornithology, entomology, plant adaptation, pollination, wetland science, animal tracking and habitat ecology
- Assisted in eradication efforts of invasive plant and animal species on garden grounds

2004 **University of Texas** Austin, TX

Research Assistant

- Surveyed the spread of the invasive fire ant, *Solenopsis invicta*, and the effectiveness of its biocontrol agent the phorid fly using baited traps around central and south Texas
- Study subjects were observed, collected, identified and curated. Reared phorid biocontrol agents were released at *S. invicta* nesting sites.
- GPS and weather instruments were used to collect habitat and climate data

2005 **USDA** Corvallis, OR

Research Assistant

- Development of reliable methods and protocols for detection of insect pests in soil such as the black vine weevil, *Otiiorhynchus sulcatus*, using acoustical equipment
- Testing conducted using amplification and recording equipment to identify insect activity during disturbance and changes to temperature, humidity, (periodicity?) times of day/night, soil pressure, etc.

2002–2004 **Earth Design Consultants, Inc.** Corvallis, OR

Lab Manager

- Bioindication studies of watershed health using native species abundance and richness in response to introduction of the non-native plants, Purple Loosestrife (*Lythrum salicaria*) and Reed Canary Grass (*Phalaris arundinacea*).
- Studies done using aquatic juvenile and adult invertebrate species abundance and biodiversity as indicators of ecosystem change
- Watershed and forest delineation done and use of ArcView
- Recruitment, training and supervision of lab identification volunteers and employees
- Presented study at the Portland conference of the Society of Wetland Scientists (SWS)

2003 **USGS** Hawaii Volcanoes National park, HI

Lab/Field Assistant

- Monitoring of endangered honeycreeper bird populations, habitats and insect food sources
- Collection, preservation, ID and curation of larval and adult terrestrial insects around the island of Hawaii for reference collections
- Bird mist-net capture and weight, body fat and stomach content sampling done for avian malaria and endangered honeycreeper studies

2003 **OSU Extension ID Clinic** Corvallis, OR

ID Clinic Assistant

- Species identification of invertebrate specimens with follow-up correspondence regarding medical importance or pest status
- Curation of museum collection specimens

2001–2003 **OSU Entomology Department** Corvallis, OR

Research Assistant

- Monitored impacts upon species richness and diversity of wetland plant and invertebrate species in bio-impact
- Lepidoptera larvae and adults were collected in the field, identified and reared in the lab and greenhouse to determine the suitability of Reed Canary Grass and Purple Loosestrife versus natives as host plants
- Analysis of land-use in surrounding wetland areas using GIS mapping

2000–2001 **Quest Diagnostics** Portland, OR

Lab Assistant

- Processing of histology and cytology specimens in a high capacity medical lab
- Scanned patient forms into database, filed specimen slides, managed data, used a multi-line phone for patient and clinic support.

VOLUNTEER & INTERNSHIP EXPERIENCE

2003–2008 **SOLV**

Volunteering at multiple native plant and tree plants and invasive plant and trash removal events

2003–2008 **Salmon Watch/Oregon Trout**

I taught middle school groups the importance of aquatic invertebrates for spawning salmon and the stream ecosystem as well as stream invertebrate trapping techniques.

2005 **ODFW**

Spawning salmon, reptile and amphibian surveys

2001–2003 **OSU BugZoo**

As president and outreach coordinator, my duties consisted of obtaining and maintaining native and exotic reptile and invertebrate exhibits used for teaching. I developed and implemented hands-on classes and presentations for schools, libraries, teacher training, home schools and other organizations.

I also managed the finances, which included raising funds through donations, school grants and profits from goods sold at various local events; created brochures and informational poster displays; acted as a liaison for schools and other groups interested in our program

PRESENTATIONS

2007 **“WNV Prevention” and “Avian Influenza (AI) Prevention”**

Preparatory meetings for local governments

2003 **“Effects of Purple Loosestrife (*Lythrum salicaria* L.)
Densities on Invertebrate Taxonomic Richness and Litter
Bag Decomposition Rates in the Columbia River.”**

Annual Pacific Northwest Chapter Conference of the
Society of Wetland Scientists in Portland, OR 2003.