

Curriculum Vitae
Ellyce Eddy
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EDUCATION:

Pursuing a B.S. in Biology and a minor in Chemistry. Concentration in Zoology. Northern Arizona University. Will graduate in May 2010.

WORK EXPERIENCE:

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| Program Coordinator | May 09-Present. Northern Arizona University's Merriam-Powell Center for Environmental Research Overnight Science Camp. Employ professional and educational background to write, develop, and run a novel youth overnight science camp. Author and implement program curriculum, handle advertising and hiring of employees, and manage funds. Provide interactive lessons in ecology and natural history to child and adult participants. Co-wrote start-up grant. |
| Program Director | June 2009. Boy Scouts of America. Facilitated and implemented the first Venturing Bronze Award program at BSA's Camp Lawton. Taught primitive skills, first aid, wilderness survival, and rock climbing. Lead overnight camping and mountain bike trips, hikes, and discussions for boy scouts in pursuit of the Venturing Bronze Award. |
| Undergraduate Researcher | Dec 08-Present. Northern Arizona University's Environmental Genetics and Genomics Laboratory. Work with sugar beet root aphid (<i>Pemphigus betae</i>), cottonwood (<i>Populus deltoides</i> and <i>Populus fremontii</i>), and pronghorn (<i>Antilocapra americana</i>) genetics. Extract, amplify, and sequence DNA. Use the genotyping software Genemapper to size allele fragments. Study genetic correlations between the aphid and its secondary host, the cottonwood tree. Study the possibility of a speciation event in a population of pronghorn fragmented by a highway. |
| Undergraduate Researcher | Sept 07-Present. Northern Arizona University's Avian Cognition Laboratory. Study the caching abilities of western scrub-jays (<i>Aphelocoma californica</i>) and embryological brain development in altricial, precocial, and seed caching species of birds. Capture and band pinyon jays (<i>Gymnorhinus cyanocephalus</i>) to obtain phenotypic and genotypic data for long-term ecological study. Developed and maintain lab website. Maintain lab database. Maintain lab facility and care of lab birds, including pinyon jays, western scrub-jays, and Mexican jays (<i>Aphelocoma ultramarine</i>). |

Instructor Sept 07-Present. Phoenix Zoo. Handle and present program animals, including invertebrates, mammals, amphibians, and reptiles, to participants in overnight educational camps. Lead discussions, activities, and hikes while emphasizing wildlife conservation. Use pelts and skulls to amplify lessons.

Lead Instructor May-Aug 07 & May-July 08. Phoenix Zoo. Handled and presented program animals including invertebrates, mammals, and amphibians to summer camp participants. Offered a hands-on learning experience by developing individual activities, crafts, and curriculums per age group. Worked closely with keepers and other staff to amplify the zoo experience and underscore the overall message of conservation.

Program Assistant May-Aug 05. Glendale Parks and Recreation. Provided recreational services and care for children ages 5-16. Managed, invented, and lead games, activities, and craft projects. Maintained filing systems. Responsible for the cleaning and organization of facilities.

Education Intern June-August 04. Riverside Municipal Museum. Responsible for the daily implementation of youth programs and service focusing on natural and cultural resources. Provided formal and informal visitor programs using objects from the Museum's teaching collection, including pelts, skulls, preserved specimens, and cultural artifacts. Cared for living collection of vertebrates and invertebrates, including diet preparation and enclosure maintenance.

RELEVANT COURSEWORK:

Mammalogy	Genetics and Evolution
Herpetology	Cellular and Molecular Biology
Entomology	Biochemistry
Vertebrate Zoology	Wildlife Management
Animal Anatomy and Physiology	Wilderness Management
Ecology	Trees and Forests of North America
Behavior of Animals	Arizona Forests and Wildlife

RESEARCH INTERESTS:

Evolutionary Biology	Wildlife Conservation
Genetics	Informal Science Education
Ecology	Speciation
Animal Behavior	Convergent Evolution

SOFTWARE SKILLS:

Genemapper Genotyping Software
 JMP Statistical Software
 Microsoft Office: Excel, Access, FrontPage, Publisher, PowerPoint and Word
 Adobe: Photoshop, Illustrator, and Acrobat

LAB SKILLS/PROFICIENCIES:

DNA extraction and quantification
PCR
MSATs
ITS
Bird banding
Basic plant, insect, herp, bird, and mammal identification

ABI Genetic Analyzers (3130, 3730)
Thermocyclers
Centrifuges
NanoDrop Spectrophotometer
Microscope and dissecting Scope

CERTIFICATIONS:

Phoenix Zoo Animal Handling Certified
Project WILD Certified

PUBLICATIONS:

Meneses N, Eddy E K, Grasso S, Allan G, and Witham T G. Genetic differentiation in a keystone herbivore (*Pemphigus betae*) across a latitudinal gradient. *In prep.*
Meneses N, Eddy E K, Grasso S, Allan G, and Witham T G. Genetic differentiation in a keystone herbivore: *Pemphigus betae* on it's secondary host. *In prep.*
Meneses N, Eddy E K, Grasso S, Allan G, and Witham T G. *Pemphigus betae's* endosymbiont community. *In prep.*

AWARDS AND GRANTS:

Benford, R., and Eddy, E. 2009. Merriam-Powell Center for Environmental Research Project Initiation Award. Overnight Science Camp. \$2,000.
Eddy, E. 2008-2010. Making a Difference Award. \$1,500.
Eddy, E. 2007-2010. Dougherty Foundation Scholarship and Loan. \$6,000.
Eddy, E. 2006. Hispanic Heritage Foundation. Gold Award for Journalism. \$3,000.

ACADEMIC DISTINCTIONS:

Northern Arizona University Dean's List. 2006-2010.
National Scholastic Press Association Honor Roll. 2005.

REFERENCES:

Benford, Russell. Northern Arizona University. Avian Cognition Laboratory supervisor. (928) 221-8392. russell.benford@nau.edu

Meneses, Nashelly. Northern Arizona University. Environmental Genetics and Genomics Laboratory supervisor. (928) 315-9672. nm49@nau.edu

Koenig, Amy. Phoenix Zoo. Night Camp supervisor. (602) 273-1341 x 7326. akoenig@thephxzoo.com

Sparks, Wendy. Former supervisor, Riverside Municipal Museum. (951) 972-0205. Wsparks42@msn.com