CURRICULUM VITAE

CHRISTINE A. BOZARTH, PhD

Northern Virginia Community College – Alexandria Campus
Mathematics, Science, Technology, and Business Division
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EDUCATION

Ph.D. Environmental Science and Public Policy, George Mason University (2003-2010)
Advisors: **Larry Rockwood** - Professor, Environmental Science & Policy, George Mason University
Jesus E. Maldonado - Center for Conservation and Evolutionary Genetics, Smithsonian Conservation Biology Institute; Adjunct Faculty, Environmental Science & Policy, George Mason University
B.A. Zoology, Connecticut College (1997-2001)

TEACHING EXPERIENCE

Full-Time Faculty, Northern Virginia Community College (fall 2011 to present)
Teaching lecture and laboratory for *Environmental Science I* and *II* (undergraduate)
Wrote all lectures and labs for these courses
Incorporated field trips in to these courses
Uses civic engagement, active learning, and technology in these courses
Taught lecture and laboratory for *General Biology II* (undergraduate)
Taught lecture and laboratory for *Human Anatomy and Physiology II* (undergraduate)
Adjunct Faculty, George Mason University (fall 2010 to summer 2011, and May 2012)
Developed and taught course on *Non-Invasive Genetic Techniques* (graduate/professional)
Taught *Animal Biology Honors* (undergraduate)
Taught *Fundamentals of Ecology* (graduate)
Interacted with students using *Blackboard* web-based learning system
Instructor and Course Developer, George Mason University (summer 2008)
Created an upper level undergraduate course on *Conservation Genetics*
Designed all lectures, homework assignments, and exams for all courses
Selected current literature and lead discussion groups
Interacted with students using *Blackboard* web-based learning system

PROFESSIONAL EXPERIENCE

Environmental Science Discipline Group Chair, Northern Virginia Community College (2018-present)
Chairs bi-monthly meetings of College environmental science faculty
Creates course pathways for environmental science majors
Represents discipline on College steering committee
Led the writing, deployment, and analysis of the first ENV SLOs/CLOs
Lab Manager, Center for Conservation and Evolutionary Genetics, Smithsonian Institution (2007-2008)
Monitored lab funding from various grants and endowments
Purchased lab supplies
Supervised daily lab activity
Graduate Student Fellow, Center for Conservation and Evolutionary Genetics, Smithsonian Institution (2006-2010)
Performed molecular analyses on canid scat for dissertation research project
Wrote dissertation research chapters
Participated in the outreach activities of the lab

OUTREACH EXPERIENCE

Student Club Advisor, Northern Virginia Community College (fall 2012 to present)
Organized conference attendance for students, including an international leadership conference in NYC
Organized students for stream cleanups and campus garden construction
Helped students make a short movie on recycling and presented it at Convocation
Organizer and Presenter, Northern Virginia Community College (fall 2012 to present)
Featured on With Good Reason national radio program

Advised and acted in Film Collaborative International film on climate change
Organized Earth Week events, including a virtual Earth Week during Covid

Guest Lecturer, Northern Virginia Community College (2018)
Lectured on wildlife conservation to Community College Initiative international students

Guest Lecturer, Georgetown University, George Mason University (fall 2007 & 2008, spring & fall 2010)
Lectured on non-invasive molecular methods to 4 different courses

Outreach Materials Development, National Zoological Park, Smithsonian Institution (2001 & 2008)
Designed and fabricated a DNA game for the outreach activities of the genetics lab
Prepared a fox pelt and skull for outreach activities of the genetics lab
Designed and fabricated various displays for the Amazonia Science Gallery
Created a PowerPoint slide show for display at the Amazonia Science Gallery

Public Outreach, National Zoological Park and Conservation Research Center, Smithsonian Institution (2001-2008)
Participated in outreach to inform the public about the zoo's research programs
Taught hands-on games to instruct the public about genetics research at the zoo

GRANTS & AWARDS

NVCC Educational Foundation Grant – funding for training a student on DNA lab techniques to contribute to a research project on snake fungal disease
2018 $3200

NOVA Student Organization Advisor of the Year – student-nominated award for leadership of the Green Club.
2018

NVCC Alumni Foundation Teacher of the Year – student-nominated award for teaching and leadership excellence
2016

NVCC Educational Foundation Grant – funding for training a student on DNA lab techniques to contribute to a research project on amphibian disease
2015 $2400

NOVA Faculty Rewards and Recognition – award at the campus and college level for scholarly and creative engagement
2015 $3000

Smart and Sustainable Campuses – funding for attendance at the Smart and Sustainable Campuses conference
2012 $400

Marine Corps Base Quantico – funding for dissertation research on molecular ecology of local canids
2008-2010 $83,000

Friends of the National Zoo – travel award to the American Society of Mammalogists (ASM) meetings
2006 & 2007 $250

Graduate Student Travel Fund, George Mason University – to present at ASM meetings
2006 $275

MANUSCRIPTS IN PUBLICATION

Bozarth, C.A., B. Gardner, L.R. Rockwood, and J.E. Maldonado. 2015. Using Fecal DNA and Spatial Capture-Recapture to Characterize a Recent Coyote Colonization. Northeastern Naturalist 21(1): 144-162.

Bozarth, C.A., S.L. Lance, J.L. Glenn, and J.E. Maldonado. 2011. Phylogeography of the Gray Fox (*Urocyon cinereoargenteus*) in the Eastern United States Reveals a Signature of Recent Expansion into New England. Journal of Mammalogy 92(2): 283-294.

Bozarth, C.A., F. Hailer, L.R. Rockwood, C.W. Edwards, and J.E. Maldonado. 2011. Coyote Colonization of Northern Virginia and Admixture with Great Lakes Wolves. Journal of Mammalogy 92(5): 1070-1080.

Bozarth, C.A., Y.R. Alva-Campbell, K. Ralls, T.R. Henry, D.A. Smith, M.F. Westphal, and J.E. Maldonado. 2010. An Efficient Noninvasive Method for Discriminating Among Faeces of Sympatric North American Canids. Conservation Genetics Resources 2(1): 173-175.

Tupper, T., L. Fuchs, C. O'Connor-Love, R. Aguilar, **C. Bozarth**, and D. Fernandez. Fall 2017. Detection of the Pathogenic Fungus, *Batrachochytrium dendrobatidis*, in Anurans of Huntley Meadows Park, Fairfax County, Virginia. Catesbeiana 37(2): 109-120.

Tupper T.A., **C.A. Bozarth**, K. Jones, and R. Cook. 2014. Detection of *Batrachochytrium dendrobatidis* in the eastern spadefoot toad (*Scaphiopus h. hollbrookii*) at Cape Cod National Seashore, USA. Herpetological Review 45:445-447

Tupper, T.A., T. Galitzin, **C.A. Bozarth**, and D.M. Lawlor. 2012. Patterns of frog and toad vocalization in Fairfax County, Virginia. Banisteria 39: 34-46.

González-Porter, G.P., O.F. Villela, F. Hailer, **C.A. Bozarth**, and J.E. Maldonado. 2010. Characterization of Eight Polymorphic Loci for the Critically Endangered Central American River Turtle, *Dermatemys mawii.* Molecular Ecology Resources 10(6): 1098-1105.

REVIEWED MANUSCRIPTS AND MATERIALS FOR JOURNALS AND TEXTBOOKS

Axios Review	Journal of Mammalogy	PLoS ONE
Cengage	McGraw-Hill	Wiley
Conservation Genetics Resources	Northeastern Naturalist	
FlatWorld	Pearson	

PROFESSIONAL SOCIETY MEMBERSHIPS

Science Education for New Civic Engagements and Responsibilities (2017-present)
Virginia Natural History Society (2014-present)
National Association of Biology Teachers (2009-present)
National Science Teachers Association (2009-present)
American Society of Mammalogists (2006 – 2016)

PRESENTATIONS AT SCIENTIFIC MEETINGS

Detection of Batrachochytrium dendrobatidis in the Eastern Spadefoot, *Scaphiopus holbrookii*. Virginia Community College System Science Peer Group. Oral Presentation October 18, 2014. Richmond, Virginia.

Mid-Atlantic Melting Pot: Non-Invasive Molecular Detection of Coyote Origins in Northern Virginia. American Society of Mammalogists Meeting. Oral Presentation June 14, 2010. University of Wyoming, Laramie, Wyoming.

Use of Non-Invasive Sampling to Study Relative Patterns of Distribution and Abundance of Canids at Marine Corps Base Quantico, Virginia. American Society of Mammalogists Meeting. Poster Presentation June 18, 2006, University of Massachusetts, Amherst, Massachusetts.

Phylogeography and Demographic History of Gray Foxes (*Urocyon cinereoargenteus*) From Eastern North America. American Society of Mammalogists Meeting. Poster Presentation June 18, 2006, University of Massachusetts, Amherst, Massachusetts.

PROFESSIONAL SKILLS

Educational applications, Canvas, Google Drive Suite, Kahoot, Quizizz, McGraw-Hill Connect, Blackboard, REVEL, Learning Catalytics, Google Drive, iMovie, HHMI Interactive Labs
Field work, including amphibian and reptile surveys, transect delineation, and scat collection
Laboratory work, including DNA extraction, PCR, microsatellite analysis, and sequencing of tissue, scat, hair, and swab samples from mammals and amphibians

REFERENCES

Dr. Maggie Emblom-Callahan
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Professor of Biology and Environmental Science and Policy
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