

CURRICULUM VITAE

MARIE L PITTS

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<http://www.ccbbirds.org/about-us/staff/marie-pitts/>

CURRENT POSITION

Operations Manager, Center for Conservation Biology (Nov 2017 – present)

- **Location:** Center for Conservation Biology, William & Mary, 205 Ironbound Road, Minson Galt House, Williamsburg, VA 23188
- **Responsibilities:** I collaborate with CCB's director to manage day-to-day operations, including the execution and/or oversight of fiscal management, personnel, compliance, resource management, infrastructure maintenance, fundraising, outreach, and partnerships. I am the primary liaison between CCB and the operational departments within William & Mary. I assist with data analyses, report editing, and fieldwork as needed.
- **Director:** Bryan Watts 757-221-2247; bdwatt@wm.edu

EDUCATION

M.S. Biology, William & Mary, Williamsburg, VA (Jan 2012)

- Master's Thesis: The influence of golf course landscapes on eastern bluebird occupancy and reproductive success: an observational and experimental approach.
- Cumulative G.P.A. 3.7, Advisor: Dr. John Swaddle
- **GIS Certification Program (Jan 2022):** 15 credits of graduate-level GIS-related coursework, Cumulative G.P.A. 3.8, Advisor: Dr. Shannon White

B.S. Biology, University of Maryland, College Park, MD (May 2006)

- Honors Thesis: Exploitative and interference competition in the foraging ecology of golden-headed lion tamarins.
- Honors in Biology, Cumulative G.P.A. 3.7, Advisor: Dr. James Dietz

RESEARCH INTERESTS

Biological Data Management & Analysis • Wildlife Population Dynamics and Modeling • GIS and Spatial Analyses • Landscape Ecology • Animal Behavior & Ecology • Conservation

RELEVANT COURSEWORK

Advanced GIS • Remote Sensing • Geovisualization • Biogeography • Biostatistics • Ecology (population/community/behavioral/quantitative) • Conservation & Extinction • Animal Behavior • Urban Wildlife Management • Evolution • Mammology • Sexual Selection • Genetics • Vertebrate Form & Function • Psychology • Cell Biology & Physiology • Animal Diversity • Chemistry • Physics • Statistics • Calculus

SELECT RESEARCH EXPERIENCE

Data Administrator, Center for Conservation Biology (Dec 2012 – Nov 2017)

- **Location:** The Center for Conservation Biology, William & Mary, 205 Ironbound Road, Minson Galt House, Williamsburg, VA 23188
- **Responsibilities:** Managed CCB's data and information resources, including our website, Mapping Portal, and social media outlets. I was also involved with administrative procedures such as payroll, employee hiring and training, and procurement. I oversaw CCB's citizen science projects and assisted in data analyses, report editing, and fieldwork as needed.
- **P.I.:** Bryan Watts, 757-221-2247, bdwatt@wm.edu

GIS Analyst & Research Assistant, Center for Conservation Biology (Jun 2011 – Dec 2012)

- **Location:** The Center for Conservation Biology, William & Mary, 205 Ironbound Road, Minson Galt House, Williamsburg, VA 23188
- **Research:** Consolidating published data on the declining eastern black rail and organizing it into a central geospatial database; Additional data and resource management as needed.
- **P.I.:** Bryan Watts, 757-221-2247, bdwatt@wm.edu

GIS Analyst & Research Assistant, ACER Lab (Jan 2011 – Oct 2011)

- **Location:** Applied Conservation & Ecological Research Lab, William & Mary, 540 Landrum Drive, Integrated Science Center (ISC), Williamsburg, VA 23187
- **Research:** Using GIS to create a predictive model of traffic volume for the conterminous United States, to be used for a variety of ecological studies.
- **P.I.:** Dr. Matthias Leu, 757-221-7497, mmleu@wm.edu

Lab Manager, University of Maryland, College Park (May 2006 – May 2008)

- **Location:** University of Maryland, College Park, MD
- **Responsibilities:** Cared for fly populations, assisted on several research projects, supervised undergraduate workers, oversaw supplies, lab organization, inventories, and equipment upkeep.
- **P.I.:** Dr. Gerald Wilkinson, 301-405-6942, wilkinso@umd.edu

Research Assistant, Patuxent Wildlife Research Center (Sept 2007 – Nov 2007)

- **Location:** Patuxent Wildlife Research Center, Laurel, MD
- **Responsibilities:** Maintained study sites comparing infrared cameras, paw print captures, and hair traps in their ability to detect meso-predators.
- **P.I.:** Dr. Allan O'Connell

Lab Technician, University of Maryland, College Park (Dec 2004 – May 2006)

- **Location:** University of Maryland, College Park, MD
- **Honors Research:** Testing exploitative and interference competition in golden-headed lion tamarins. Mapped home ranges with GIS, wrote and defended an honors thesis.
- **P.I.:** Dr. James Dietz, 301-405-6949, jmdietz@umd.edu

Lab Tech/Field Assistant, University of Maryland, College Park (May 2004 – May 2005)

- **Location:** University of Maryland, College Park, MD
- **Responsibilities:** Monitored insect traps, planted test crops, gathered soil samples, reared beetle populations, assisted in larval pesticide experiments.
- **P.I.:** Dr. Galen Dively; galen@umd.edu

Wildlife Rescue Intern, Wildlife Rescue Inc. (Dec 2003 – May 2004)

- **Location:** Wildlife Rescue Inc., Baltimore, MD
- **Responsibilities:** Helped capture, transport, and care for injured wildlife.
- **Supervisor:** Gerda Deterer 410-288-4546, <http://www.wildliferescueinc.org/>

Research Assistant, U.S. Department of Agriculture (May 2001 – Jun 2002)

- **Location:** U.S. Department of Agriculture, Beltsville, MD
- **Research:** Testing the effectiveness of pollen electrotransformation by “shocking” an herbicide-resistant gene into soybean plants.
- **P.I.:** Dr. James A. Saunders, Supervisor: Dr. Sue Mischke

SKILLS**Research Programs**

ArcGIS Pro, Google Earth, SPSS, basic R, Microsoft Access, Lightroom, LightWorks, FragStats, Genotyper 2.5, GeneMapper 4.0, NIH Image

Administrative Programs

Microsoft Office programs, Banner, BuyW&M, eVA, ChromeRiver, PeopleAdmin, Box, Cornerstone, Qlik Sense

Field Techniques

GPS, nest monitoring, bird banding, mist netting, some boating experience

Lab Techniques

DNA/RNA extraction, animal dissections, PCR, gel electrophoresis, RT-PCR (Roche LightCycler480 System), fragment analysis (ABI 3100, ABI 3730)

ACADEMIC PUBLICATIONS

Cornell, K. L., C. R. Kight, R. B. Burdge, A. R. Gunderson, J. K. Hubbard, A. K. Jackson, J. E. LeClerc, **M. L. Pitts**, J. P. Swaddle, and D. A. Cristol. 2011. Ecological value of suburban golf courses as breeding habitat for eastern bluebirds. *The Auk* 128(3): 577-586.

Birge, L. M., **M. L. Pitts**, R. H. Baker, and G. S. Wilkinson. 2010. Length polymorphism and head shape association among genes with polyglutamine repeats in the stalk-eyed fly, *Teleopsis dalmanni*. *BMC Evolutionary Ecology* 10:227.

Ribak, G., **M. L. Pitts**, G. S. Wilkinson, and J. G. Swallow. 2009. Wing shape, wing size, and sexual dimorphism in eye-span in stalk-eyed flies (Diopsidae). *Biological Journal of the Linnean Society* 98 (4):860-871.

PRESENTATIONS

Virginia Society of Ornithology Annual Meeting, Farmville, VA (Apr 2010)

Marie Pitts, John Swaddle, Kerri Duerr, Allyson Jackson. The influence of golf course landscape on occupancy and reproductive success in eastern bluebirds.

Williamsburg Bird Club, Williamsburg, VA (Apr 2010)

Marie Pitts, John Swaddle, Kerri Duerr, Allyson Jackson. The influence of golf course landscape on reproductive success in eastern bluebirds.

William and Mary Graduate Research Symposium, Williamsburg, VA (Mar 2010)

Marie Pitts, John Swaddle, Kerri Duerr, Allyson Jackson. The influence of golf course landscape on reproductive success in eastern bluebirds.

GRANTS, CERTIFICATES, & AWARDS

GIS Certification Program: William & Mary (2022)

Professional Grant Development Workshop Certificate of Completion: William & Mary, \$1,000 (2018)

Development Support Fund: Virginia Tech (2018)

Arts & Sciences OGSF/Graduate Student Association Conference Funds: William & Mary, \$200 (2010)

Graduate Research Grants:

J.J. Murray Research Grant: Virginia Society of Ornithology, \$1,000 (2010)

Arts & Sciences Graduate Research Grant: William & Mary, \$300 (2010)

Arts & Sciences Graduate Research Grant: William & Mary, \$246 (2009)

Williamsburg Bird Club Research Grant: \$500 (2009)

Arts & Sciences OGSR Conference Funds: William & Mary, \$200 (2009)

Howard Hughes Medical Institute Undergradu Research Fellowship: UMD, \$1200 (2005)

College Park Scholars Outstanding Achievement Award: UMD (2004)

REFERENCES

Dr. Bryan Watts, Director & Research Professor, Center for Conservation Biology, William & Mary
Relationship: supervisor
757-221-2247, bdwatt@wm.edu

Dr. Shannon White, GIS Certificate Coordinator & Interim Director, William & Mary
Relationship: GIS Certificate Program advisor and professor for several classes
757-221-1914, shwhite@wm.edu

Erica Lawler, Sponsored Program Administrator, William & Mary
Relationship: colleague & department grant contact
757-221-3971, emlawler@wm.edu

Dr. John Swaddle, Professor, Department of Biology, William & Mary
Relationship: graduate advisor & co-author until 2011
757-221-2231, jpswad@wm.edu