

Annalaura Averill-Murray

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EDUCATION

Masters in Science, December 1996

University of Arizona, Tucson, AZ 85721

Major: Wildlife & Fisheries Science

Thesis: Brown-headed Cowbird Parasitism of Neotropical Migrant Songbirds Breeding in Riparian Areas along the Lower Colorado River

Bachelor of Arts, May 1989

Bowdoin College, Brunswick, ME 04011

Major: Biology

RELATED WORK EXPERIENCE

Fish and Wildlife Biologist

U.S. Fish and Wildlife Service, 1340 Financial Blvd, #234, Reno, NV 89502

February 2005 – Present

Responsibilities: Service lead for two groundwater development projects in southern and eastern Nevada. Duties include participating on Interdisciplinary Teams; coordinating with contract biologists regarding survey protocols for federally-listed species; coordinating with Service personnel in two Service regions, three states, and six National Wildlife Refuges to provide scoping comments and review of NEPA documents; and providing updates on project status through regular communication to Service personnel in the form of verbal and written status updates and briefing papers. Other responsibilities include: coordinating with the DOI Regional Solicitor, Service personnel, and State of Nevada and Utah personnel to develop exhibits and witness testimony for State Engineer hearings regarding groundwater applications in Spring Valley, Nevada; helping negotiate and develop a stipulated agreement between DOI Bureaus and the Southern Nevada Water Authority (SNWA), including drafting biological monitoring requirements, thereby removing DOI protests to SNWA's groundwater applications; Service lead for developing the biological monitoring plan for the stipulated agreement, including organizing and facilitating technical work group meetings, co-authoring the plan, and helping to organize an expert workshop; conducting section 7 (ESA) consultations and analyzing effects to federally-listed species, including for a complex urban development and water extraction project in southern Nevada; preparing a critical habitat designation proposal for a southern California chaparral plant species (section 4, ESA); co-leading tours for a local annual bird festival; and participating on the planning committee for the Nevada Water Resources Association tour of the regional carbonate system, including coordinating tour speakers and developing fact sheets.

Habitat Specialist

Arizona Game and Fish Department, 555 N. Greasewood Dr., Tucson, AZ 85745

January 2003 – February 2005

Responsibilities: Reviewed federal, state, county, and city projects, including NEPA and Section 7 consultation documents; provided comment on project-related effects to Arizona's wildlife resources and offered suggestions for minimizing and mitigating impacts, including energy and Border Patrol projects; served on Interdisciplinary Teams for large-scale planning efforts, such as U.S. Forest Service's Pinaleno Ecosystem Restoration Project (fuel treatments) and Bureau of Land Management's Ironwood Forest National Monument planning; reviewed fuel-treatment programs on State Trust Lands in the Wildland Urban Interface; coordinated with Pima County and Army Corps of Engineers on large-scale, multi-jurisdictional riparian enhancement projects along the Santa Cruz River; conducted site visits and consulted with private landowners on habitat improvement projects to benefit sensitive species; secured funding for such projects through the Landowner Incentive Program and worked closely with Natural Resources Conservation Service staff to secure additional monies for and improve projects on private lands funded through the Wildlife Habitat Incentives Program; coordinated and facilitated annual inter-agency meetings with the Bureau of Land Management and U.S. Forest Service; served as regional coordinator for the Arizona Bird Conservation Initiative, including soliciting and evaluating grant proposals for bird and habitat conservation projects; participated in multi-agency and citizen group efforts to conserve open space in the Tucson Basin (Cienega Corridor Conservation Council), including development of Interagency Agreements; reviewed and wrote grant proposals; surveyed for Threatened and Endangered species and State Species of Special Concern; and led bird identification tours at birding festivals.

Nongame Biologist

Arizona Game and Fish Department, 555 N. Greasewood Dr., Tucson, AZ 85745

January 2001 – December 2002

Responsibilities: Managed contract projects, including desert tortoise surveys at Ironwood Forest National Monument and a vertebrate inventory of the Gila Box Riparian National Conservation Area. Duties included: general avian surveys, cactus ferruginous pygmy-owl surveys, small mammal trapping, bat mist-netting, herpetofaunal surveys, tortoise surveys using distance sampling, and radio tracking tortoises; field trip coordination and organization; supervision of contract biologists, interns, and project volunteers; database setup and data analysis; technical report preparation; and oral/poster presentations on methods and results. Also, co-authored Arizona's 2001 black-tailed prairie dog management plan and participated in Arizona's Black-tailed Prairie Dog Working Group; organized and participated in bi-annual Mt. Graham red squirrel midden surveys and managed a large project database; led bird identification tours at birding festivals; organized Tucson winter raptor count; and participated in jaguar monitoring and conservation activities in the region, including remote-sensing camera monitoring, mapping potential jaguar habitat and conservation areas, and report preparation.

Averill-Murray

Nongame Birds Specialist

Arizona Game and Fish Department, 2221 W. Greenway Rd., Phoenix, AZ 85023

October 1997 – December 2000

Responsibilities: Managed field and volunteer effort for the Arizona Breeding Bird Atlas program; contacted landowners regarding access to private properties; coordinated with military installments, mining operations, National Park Service, and U.S. Forest Service regarding access for conducting breeding bird surveys; conducted statewide surveys for breeding birds; conducted nocturnal surveys for owls and nightjars; managed large databases; responded to requests for information (Birds of North America accounts, U.S. Fish and Wildlife Service Status Assessment reports); wrote annual technical reports and prepared presentations on project status; wrote articles for helped put together Arizona Breeding Bird Atlas newsletters; hired and supervised field assistants; helped coordinate volunteer appreciation events; and participated on the 1999 Heritage Grant review committee.

Research Assistant

University of Arizona, School of Natural Resources, 325 Biological Sciences East, Tucson, AZ 85721

Supervisor: Dr. Michael Morrison

February 1997 – October 1997

Responsibilities: Designed and implemented a cowbird control project in riparian areas along the lower Bill Williams River in Arizona; conducted point-count surveys; established nest-searching plots; searched for and monitored nests of passerine species; built cowbird traps; trapped and removed cowbirds; banded cowbirds (adults and nestlings); analyzed data; prepared project proposal and annual report; prepared scientific presentation and manuscript; and supervised field assistants.

Research Assistant

University of Arizona, School of Natural Resources, 325 Biological Sciences East, Tucson, AZ 85721

Supervisor: Dr. Amy Kuenzi

May 1996 – August 1996

Responsibilities: Surveyed for bats at artificial and natural water holes in southwestern Arizona on the Barry Goldwater Air Force Range; recorded echolocation calls using time expansion ultrasonic detector coupled with a tape recorder; mist-netted bats; measured and determined reproductive status of captured bats; and surveyed for insects with Malaise traps.

Graduate Research Assistant

University of Arizona, School of Natural Resources, 325 Biological Sciences East, Tucson, AZ 85721

Supervisor: Dr. Michael Morrison

January 1994 – May 1996 (following 3 projects)

Neotropical Migrant Songbird Monitoring Program, Lower Colorado River Valley

Responsibilities: Prepared project proposal and vegetation survey protocol; established point-count survey routes; conducted avian and vegetation surveys; analyzed data and prepared final report with management recommendations; managed project budgets; hired and supervised field assistants.

Cowbird Parasitism of Neotropical Migrant Songbirds, Lower Colorado River Valley

Responsibilities: Thesis work for Masters in Science. Prepared project proposal and protocols for nest searching and vegetation measurements at nests and random sites; established nest-searching plots; searched for and monitored nests of four passerine species; analyzed data and prepared final report with management recommendations; prepared scientific presentations and manuscript; managed project budgets; hired and supervised field assistants.

Vermilion Flycatcher Nesting Biology, Bill Williams River, Arizona

Responsibilities: Searched for and monitored nests of Vermilion Flycatchers; developed protocol for measuring nest-site characteristics.

Research Intern

Archbold Biological Station, P.O. Box 2057, Lake Placid, FL 33862

Supervisor: Dr. Reed Bowman.

February 1993 – July 1993

Responsibilities: Searched for and monitored nests of suburban Florida Scrub Jays; measured and banded nestlings; developed independent project; quantified habitat use, foraging patterns, levels of intra and interspecific competition using timed focal watches of individually marked birds; determined territory size by using play-back tapes to elicit aggressive responses between neighboring jays; prepared final report and presentation.

Intern

Student Conservation Association, 689 River Road, P.O. Box 550, Charlestown, NH 03603

Supervisor: Dr. Ann Dahl

September 1992 – December 1992

Responsibilities: Surveyed Aleutian Canada Geese on their wintering grounds in the Sacramento Valley, California; identified individually marked birds; sampled vegetation at foraging and non-use sites.

Research Assistant

Bowdoin Scientific Station, Biology Department, Bowdoin College, Brunswick, ME 04011

Supervisor: Dr. Charles Huntington (Professor Emeritus)

May 1989 – August 1989

Responsibilities: Searched for and monitored nests of Leach's Storm Petrels; measured and banded nestlings; mist-netted and banded adults; prepared final presentation; collected and identified plant and mushroom species for herbarium.

AWARDS

Star Award, U.S. Fish and Wildlife Service (2006)

Certificate of Achievement, Arizona Game and Fish Department (2001)

Commendation of Excellence, Arizona Game and Fish Department (2000)

REPORTS AND PUBLICATIONS

- Hatten, J.R., A. Averill-Murray, and W.E. Van Pelt. 2005. A Spatial Model of Potential Jaguar Habitat in Arizona. *Journal of Wildlife Management* 69(3):1024-1033.
- Averill-Murray, R.C., and A. Averill-Murray. 2005. Regional-scale Estimation of Density and Habitat Use of the Desert Tortoise (*Gopherus agassizii*) in Arizona. *Journal of Herpetology* 39:65-72.
- Snow, T.K., A. Averill-Murray, and C.L. Blasch. 2004. Vertebrate Inventory of the Gila Box Riparian National Conservation Area. Nongame and Endangered Wildlife Program Technical Report #230, Arizona Game and Fish Department, Phoenix, AZ.
- Lynn, S., A. Averill-Murray, and M.L. Morrison. 2003. Bell's Vireos and Yellow-breasted Chats in Remnant Cottonwood/Willow Vegetation of the Lower Colorado River Valley in Faber, P.M. (ed). 2003. California Riparian Systems: Processes and Floodplains Management, Ecology, and Restoration. 2001. Riparian Habitat and Floodplains Conference Proceedings, Riparian Habitat Joint Venture, Sacramento, CA.
- Hatten, J., A. Averill-Murray, and W. Van Pelt. 2003. Characterizing and Mapping Potential Jaguar Habitat in Arizona. Nongame and Endangered Wildlife Program Technical Report #203, Arizona Game and Fish Department, Phoenix, AZ.
- Averill-Murray, A. and R.C. Averill-Murray. 2002. Distribution and density of desert tortoises at Ironwood Forest National Monument, with notes on other vertebrates. Nongame and Endangered Wildlife Program Technical Report #193, Arizona Game and Fish Department, Phoenix, AZ.
- Van Pelt, W., A. Averill-Murray, and T.K. Snow. 2001. Interagency Management Plan for Black-tailed Prairie Dogs in Arizona. Public Comment Draft. Arizona Game and Fish Department, Phoenix, AZ.
- Morrison, M.L. and A. Averill-Murray. 2002. Evaluating the Efficacy of Manipulating Cowbird Parasitism on Host Nesting Success. *The Southwestern Naturalist* 47(2): 236-243.
- Averill-Murray, A., S. Lynn, and M.L. Morrison. 1999. Cowbird Parasitism of Arizona Bell's Vireos (*Vireo bellii arizonae*) in a Desert Riparian Landscape: Implications for Cowbird Management and Riparian Restoration. *Studies in Avian Biology* 18: 109-120.
- Averill-Murray, A., T.E. Corman, and C.J. Wise. 1997, 1998, & 1999. Arizona Breeding Bird Atlas Project Progress Reports. Nongame and Endangered Wildlife Program Technical Reports, Arizona Game and Fish Department, Phoenix, AZ.
- Averill-Murray, A. and M.L. Morrison. 1998. Lower Colorado River Valley Cowbird Control Project. Report to U.S. Fish and Wildlife Service.
- Lynn, S., A. Averill, and M.L. Morrison. 1996. Neotropical Migratory Bird Monitoring Project in the Lower Colorado River Valley. Report to U.S. Fish and Wildlife Service.

