

ANNE E. PRATT
Water Quality Scientist

EDUCATION

Bachelor of Science: August 2003-May 2007

Ball State University, Muncie, IN

Major: Aquatic Biology and Fisheries Management

Masters of Science: August 2007-May 2010

Ball State University, Muncie, IN

Area of interest: Stream Ecology

Thesis title: Habitat Use and Separation among Congeneric Darter Species

PROFESSIONAL EXPERIENCE

Fisheries Biologist, Muncie Bureau of Water Quality, Muncie, IN: May, 2006-August 2006

- Electrofished streams/ivers to assess local populations and abundances of fish
- Identified all species collected on-site or in lab
- Measured parameters of fish including: total length, weight, anomalies, and counts
- Created and maintained museum specimens
- Maintained field equipment

Graduate Assistant, Department of Biology, Muncie, IN: August 2007-May 2009

Teaching Assistant for Invertebrate Zoology and Aquatic Entomology

- Helped in laboratory preparation
- Assisted students with identification of aquatic insects
- Supervised laboratory sessions and exams
- Graded student work

GIS Technician and Field Planning

- Accumulated data from online sources
- Created metadata for layers and maps
- Designed and created maps of Ball State's Field Station and Environmental Education Center properties
- Assisted in developing boundary, property, soil, hydrology, and vegetation layers for these properties
- Utilized ArcMap programs/extensions such as ArcCatalog, ArcReader, ArcToolbox, ArcEditor, Spatial Analyst, and 3D Analyst

Naturalist Aide, Indiana Department of Natural Resources, Edinburgh, IN: June 2009-February 2010

- Assessed Indiana's streams and rivers for fish using backpack electrofishing, seining, trawling, and gill nets
- Performed qualitative mussel surveys
- Used radio transmitters to track lake sturgeon movements
- Identified mussel and fish species for museum specimens
- Entered data into Excel spreadsheets

Aquatic Toxicologist, Commonwealth Biomonitoring, Indianapolis, IN: March 2010-Present

- Performed both chronic and acute toxicity tests using *Pimephales promelas* larvae to measure survival and growth and *Ceriodaphnia dubia* neonates to measure survival and reproduction over a seven day period
- Performed acute toxicity tests using *Daphnia magna*
- Measured water chemistry including: dissolved oxygen, pH, conductivity, total chlorine, ammonia, alkalinity, and hardness
- Completed written reports containing results from toxicity testing for clients
- Supervised part-time lab workers
- Electrofished streams to assess fish populations
- Maintained laboratory cultures of fish and water fleas
- Created maps and data using ArcGIS10
- Written and published data for watershed diagnostic studies

SKILLS

Field Sampling

- Collected fish using backpack, tote barge, and boat electrofishing as well as seining, trawling, and setting gill nets
- Conducted microhabitat analysis of darter species (flow, depth, substrate, and vegetation)
- Collected water chemistry samples
- Collected and identified macroinvertebrates using kick nets
- Collected and identified mussels both visually and with kick nets
- Measured discharge and other abiotic factors of streams
- Evaluated fish and stream integrity using ECBP-based IBI sampling methods and Rankin's QHEI methods
- Identified fish, mussel, and macroinvertebrate species by common and/or scientific name

Laboratory Work

- Studied fish taxonomy
- Examined darter species collected for proper identification
- Photographed darter species for morphological analysis
- Used tpsDIG for morphological analysis
- Used GIS to find sampling locations and create maps
- Performed water quality analysis such as ammonia, chlorine, etc.

Computer Work

- Created oral/poster presentations using Microsoft PowerPoint
- Entered/managed data and information into Microsoft Excel and Access
- Analyzed data in Minitab, SPSS, SAS, R, PC-Ord, and Excel
- Created maps, layers, and data using ArcGIS software
- Measured fish using tpsDIG

Other

- Trained as open water diver (SCUBA)
- Trained and certified in First Aid/CPR
- Skilled at fixing small mechanical issues with field instruments, computers, etc.
- Can operate a manual transmission

PUBLICATIONS

- Pratt, Anne and Thomas E. Lauer. 2013. Habitat Use and Separation among Congeneric Darter Species. *Transactions of the American Fisheries Society* 142:568-577.
- Bright, Greg R., Anne E. Pratt, and Melody Myers-Kinzie. 2013. Sugar Creek Watershed Diagnostic Study. Prepared for the Soil and Water Conservation Districts of Boone and Clinton Counties, Indiana. http://www.in.gov/dnr/fishwild/files/fw-LARE_Sugar_Creek_Watershed_Diagnostic_Study_Boone_and_Clinton_Counties_Feb_2013.pdf

PROFESSIONAL AFFILIATIONS

- American Fisheries Society
- Indiana Water and Environment Association
- Ohio River Valley Society of Environmental Toxicology and Chemistry
- Indiana Water Monitoring Council