

# Curriculum Vitae

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11-2-2022

## PERSONAL INFORMATION

**Michael G. Newbrey**  
Senior Lecturer  
Department of Biology  
Columbus State University  
Columbus, GA 31907-5645 USA  
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## EDUCATION

**Ph.D. in Zoology**, North Dakota State University. July 2007. Advisor: Allan C. Ashworth.  
Dissertation Title: Climate change and evolution of growth in North American  
Hiodontidae, Esocidae, and Percidae.

**M.S. in Natural Resources**, University of Wisconsin - Stevens Point (an emphasis in fisheries).  
August 2002. Advisor: Michael A. Bozek. Thesis Title: Morphologic and meristic  
characteristics of lacustrine coarse woody structure as fish habitat.

**B.S. in Biology**, University of Wisconsin - Stevens Point. May 1998. Biology with emphases in  
fisheries and limnology.

## ACADEMIC APPOINTMENTS

**Senior Lecturer**, Department of Biology, Columbus State University. Full-time. August, 2021  
to present.

**Lecturer**, Department of Biology, Columbus State University. Full-time. August, 2015 to  
August, 2021.

**Adjunct Curator of Fishes**, Canadian Fossil Discovery Centre. Volunteer position. August,  
2015 to 2020.

**Instructor**, Department of Biology, Columbus State University. Part-time. August, 2013 to July,  
2015.

**Postdoctoral research fellow**, Royal Tyrrell Museum of Palaeontology. April, 2010 to August, 2013. Hosts: Andrew G. Neuman and Donald B. Brinkman, Royal Tyrrell Museum of Palaeontology.

**Postdoctoral research fellow (two ½ appointments)**, University of Alberta and the Royal Tyrrell Museum of Palaeontology. August, 2007 to April, 2010. Hosts: Mark V.H. Wilson and Alison M. Murray, University of Alberta; Andrew G. Neuman and Donald B. Brinkman, Royal Tyrrell Museum of Palaeontology.

## **AREAS OF SPECIAL INTEREST WITHIN DISCIPLINE**

I am an Ichthyologist and Ecologist, and I am particularly interested in climate change ecology; for example, fish age and growth characteristics with regard to climate change. I also publish on fish dispersal and distribution, feeding ecology, and habitat. I regularly publish about traditional aspects of Ichthyology. For example, I publish on new species of sharks, rays, and bony fishes, but I include aspects of ecology into the descriptions.

## **PROFESSIONAL MEMBERSHIPS**

American Fisheries Society, 2005 to 2013, 2019-present  
GA Chapter of the American Fisheries Society, 2019-present  
Society for Integrated and Comparative Biology, 2019-2020  
American Society of Ichthyologists and Herpetologists, 2006 to 2013  
American Elasmobranch Society, 2008 to 2013  
American Quaternary Association, 2006 to 2012  
Geological Society of America, 2003 to 2010  
National Association of Biology Teachers, 2004 to 2007  
Society for Conservation Biology, 2005 to 2006  
Society of Vertebrate Paleontology, 2000 to 2015

## **SERVICE TO COMMUNITY**

2008 - 2019 – GK-12 schools, introduction to research, and sharks and other fishes.

2009-2013 – Royal Tyrrell Museum of Paleontology Science Camp volunteer for grades 6-9, Drumheller, Alberta.

2005 - Co-Facilitator; Fossil Event, Grades 7-12, North Dakota Science Olympiad, Fargo, North Dakota.

### **SERVICE TO COMMUNITY (continued)**

2004 - Co-Facilitator; Fossil Event, Grades 7-12, North Dakota Science Olympiad, Fargo, North Dakota.

2003 - Facilitator; Fossil Event, Grades 7-12, North Dakota Science Olympiad, Fargo, North Dakota.

1996-2005 - Grades K-12 Classroom Guest Lecturer, The study of fossils and paleoecology, numerous classes.

### **SPECIAL AWARDS, FELLOWSHIPS AND OTHER HONORS**

#### **Awards and scholarships**

2019 – Co-nominated (with Ely Klar) for CSU Researcher of the Year, but not awarded

2018 – Honorary Coach, CSU Women’s Basketball, selected by Kristian Carter, December 5

2017 – Delta Zeta, Teacher of the Month, September

2017 – Favorite Teacher Award, CSU Women’s Soccer, selected by Bria Riancho, October.

2015 – Excellence in Teaching Award: Honors College, Columbus State University, May 3<sup>rd</sup>, nominated by honors students from BIOL 1225H, Biology of Fishing

2005 – Outstanding Graduate School Research Award: College of Science and Mathematics, North Dakota State University (\$1000)

2003 – Outstanding Research Assistant Award: University of Wisconsin - Stevens Point (\$100)

2003 – Outstanding Graduate Assistant Award: College of Natural Resources, University of Wisconsin - Stevens Point (\$1500)

2001 – Worth Scholarship in Fisheries: College of Natural Resources, University of Wisconsin - Stevens Point (\$400)

1997 – Sigma Xi Biology Research Award: University of Wisconsin - Stevens Point

1997 – Royal Anderson Ecology Award: University of Wisconsin - Stevens Point (\$450)

1996 – Brian Eagon Research Award: University of Wisconsin - Stevens Point (\$250)

1996 – Sigma Xi Biology Research Award: University of Wisconsin - Stevens Point

1986 – Eagle Scout Award: Troop 633, Moorhead, Minnesota

## **Fellowships**

- 2007 – Royal Tyrrell Museum Cooperating Society Postdoctoral Fellowship August, 2007-August, 2013 (\$252,666)
- 2006 – NSF Experimental Program to Stimulate Competitive Research Doctoral Dissertation Assistantship: North Dakota State University EPSCoR Program (\$15,544)
- 2006 – USGS Research Fellowship: North Dakota Water Resources Research Institute (\$3,000)
- 2005 – USGS Research Fellowship: North Dakota Water Resources Research Institute (\$15,000)
- 2004 – USGS Research Fellowship: North Dakota Water Resources Research Institute (\$14,640)
- 2003 – USGS Research Fellowship: North Dakota Water Resources Research Institute (\$10,279)
- 2002 – NSF Teaching Fellowship: North Dakota State University GraSUS Program (\$21,500)

## **Recognitions**

**New species of fish named in honor of me, *Hispanamia newbreyi*:** Martín-Abad, H., and F.J. Poyato-Ariza. 2017. A new genus of species for the amiiform fishes previously assigned to *Amiopsis* from the Early Cretaceous of Las Hoyas, Cuenca, Spain. *Zoological Journal of the Linnean Society* 181:604-637.

## **MAJOR COMMITTEES**

### **Committees**

- 2021 - Biology Department Chair Search Committee
- 2020 – present - Biology Course and Faculty Scheduling Committee
- 2019 – 2021 - Department of Biology Standards Committee
- 2019 - Faculty search committee (external committee member), Earth and Atmospheric Sciences, CSU
- 2016 – 2017 - Chair, Committee for updating Principles of Biology (BIOL 1215K, non-majors).
- 2010 - Royal Tyrrell Museum Web Committee
- 2006 - Search committee for a Dean's position, College of Science and Math, North Dakota State University.

### **Committees (continued)**

2005 - Search committee for a Postdoctoral position under Craig Stockwell, Department of Biological Sciences, North Dakota State University.

2004 - Search committee for an Associate Professor position in Geography and GIS, Department of Geosciences, North Dakota State University.

## **PROFESSIONAL GROWTH AND DEVELOPMENT**

### **Courses Taught**

#### Columbus State University

**Ecology**, Biology 3217, lecture and two 4 hr labs, 40 students/term

**Ichthyology**, Biology 5525, lecture and 3 hr lab, 20 students/term

**Mammalogy**, Biology 5525, taught 33% of lectures for the course, 20 students/term

**General Biology II**, Biology 1232, lecture and 2 hr lab, 48-96 students/term

**General Biology I**, Biology 1231, lecture and in charge of 2 hr lab, 72 students/term

**Principles of Biology**, Biology 1215, lecture and 2 hr lab, 96-432 students/term

**Integrated Science, Life and Earth Science**, ISCI 2001, lecture and lab, 20 students/term

**Biology of 'Fishing'**, Biology 1225K, 1225H, lecture and lab, 24 students/term

**Diversity of Life** (non-majors), Biology 1125, lecture, 24 students/term

#### University of Alberta

**Freshwater Ecology**, Biology 364, guest lecturer, lecture dates 10/2 – 10/9, 2009

#### North Dakota State University

**Skills for Academic Success**, University 189, lecture

**Conservation Biology**, Biology 675, guest lecturer, lectures for the dates of 9/2 – 9/7, 2005

**Quaternary Biology**, Geology 640, guest lecturer for the dates of 4/6 – 4/22, 2005

## **Courses Taught (continued)**

### West Fargo High School

**Biology**, NSF Teaching Fellow, Biology. August 2002 – August 2003

## **Supervision of Student Research**

### Graduate Training (mentor)

2021 Jessica Cooper, Department of Biology, Columbus State University. Project title: Effects of a thermal gradient on age and growth characteristics of various species of Centrarchidae (panfishes) in North America. Ongoing project.

### Undergraduate Training

- 2021 Elva Lucero, Biology student, Columbus State University, LSAMP funded. Project title: The effects of a thermal gradient on the age and growth characteristics of Black and White crappies, *Pomoxis nigromaculatus* and *P. annularis*. Ongoing project.
- 2021 Mitdalia Alonso, Biology, Columbus State University, LSAMP funded. Project title: The effects of a thermal gradient on the age and growth characteristics of Smallmouth Bass (*Micropterus dolomieu*)
- 2021 Jiayu Wang, Biology student, Columbus State University. Project title: The effects of a thermal gradient on the age and growth characteristics of Spotted Bass, *Micropterus punctulatus*. Ongoing project.
- 2021 Amber Mazzola, Biology student, Columbus State University. Project title: The effects of a thermal gradient on the age and growth characteristics of the European Common Toad (*Bufo bufo*). Ongoing project.
- 2021 Simran Chhina, Biology student, Columbus State University. Project title: The carotenoids in Largemouth Bass (*Micropterus salmoides*) eggs and their potential as a bioindicator of aquatic system health. Ongoing project.
- 2021 Likhita Aluri, Biology, Columbus State University, Project title: Carotenoid allocation to the eggs of Bluegill in Lindsey and Weracoba Creeks, Columbus, GA
- 2021 Matthew Gilbert, Biology student, Columbus State University. Project title: The age and growth of sawfish (*Pristis*) during the Early Eocene Thermal Maximum, Nanjemoy Formation, Virginia. Ongoing project.

Undergraduate Training (continued)

- 2021 Kendra Swayne, Biology student, Columbus State University, LSAMP funded. Project title: Yellow Bullhead health in Weracoba and Lindsey creeks, Columbus, GA. Ongoing project.
- 2019–2020 Mary Davis, Biology student, Columbus State University. Project title: Factors that affect dental extractions in the small animal veterinary practice. Completed.
- 2018–2021 Meenal Joshi, Biology student (Honors research)(second reader and assisted with research), Columbus State University. Project title: Background levels of intersex in the testes of feminized male Largemouth Bass from the Chattahoochee River. Completed.
- 2018–2021 Abigail Abernathy, Biology student (Honors research) (second reader and assisted with research), Columbus State University. Project title: Variation in the location of clusters of oocytes in testes of feminized male Largemouth Bass from the Chattahoochee River. Completed.
- 2018–2021 Caroline Murphy, Biology student, Columbus State University. Project title: Vertebral centrum morphology, age and growth of a new species of lamniform shark, *Cretalamna* sp. Ongoing project.
- 2018–2020 Abby Grace Moore, Biology student, Columbus State University. Project title: A new species of bowfin, *Amia* from the Sentinel Butte Formation (Paleocene), Medora, ND. Completed (Honors Thesis).
- 2018–2020 Tatiana White, Biology student, Columbus State University. Project title: Morphology of vertebral centra and the relationship between vertebral diameter and total length of angelsharks (*Squatina*). Completed.
- 2018–2020 Amanda Cruz, Biology student (Honors research), Columbus State University. Project title: Tooth replacement in Largemouth Bass, *Micropterus salmonoides*. Completed.
- 2018–2019 Nyla Johnson, Biology student (co-mentored with Ely Klar), Columbus State University. Project title: Degree of tissue change in spleens of Largemouth Bass as an indicator of water quality. Completed.
- 2017–2020 Persia Tillman, Biology student, Columbus State University. Project title: Estimating taxonomic diversity using centrum growth profiles and stinger morphology of 36 million year old stingrays from North Dakota. Completed (Honors Thesis).

Undergraduate Training (continued)

- 2017–2019 Chloe Englebert, Biology student, Columbus State University. Project title: Freshwater occurrences of Bull Shark, *Carcharhinus leucas*. Experience completed.
- 2017–2019 Mary Claire Halbrook, Biology student, Columbus State University. Project title: Effects of thermal gradient on age and growth of Largemouth bass, *Micropterus salmonoides* in the Chattahoochee River drainage, GA. Completed.
- 2017–2019 John Duckworth, Biology student, Columbus State University. Project title: Age and growth in density dependent Largemouth Bass, *Micropterus salmonoides* from a small stream compared to the Chattahoochee River, GA. Completed.
- 2017–2018 Malina Rollins, Biology student, Columbus State University. Project title: Comparison of chronological age of otoliths and vertebral centra in Largemouth Bass, *Micropterus salmonoides*. Completed.
- 2016–2018 Frances Woolfolk, Accounting student, Columbus State University. Project title: Age and growth of coelacanths, *Latimeria chalumnae* and *Latimeria menadoensis*. Completed.
- 2016–2019 Cherish Jordan (co-mentored with Ely Klar), undergraduate student, Columbus State University. Project title: The occurrence of intersex in Spotted Bass, *Micropterus punctulatus*, in the Chattahoochee River. Completed.
- 2016–2017 Paul Arnold, Biology student, Columbus State University. Project title: Freshwater occurrences of Bull Shark, *Carcharhinus leucas*. Completed.
- 2016–2017 Amy Adams (second reader, mentored by Ely Klar), undergraduate student, Columbus State University. Project title: Seasonality of intersex in Largemouth bass, *Micropterus salmonoides*, in the Chattahoochee River. Completed.
- 2016–2017 Jeramy Belt (second reader, mentored by Ely Klar), undergraduate student, Columbus State University. Project title: The occurrence of intersex in Largemouth bass, *Micropterus salmonoides*, in the Chattahoochee River. Completed.
- 2015–2016 Marie Singletary (second reader, project mentor Jennifer Newbrey), undergraduate student, Biology, Columbus State University. Project title: Hatching failure rates of the Eastern Bluebird (*Sialia sialis*). Completed.
- 2013–2014 Lillian Chandley, undergraduate student, Columbus State University. Project title: Freshwater occurrences of Bull shark, *Carcharhinus leucas*. Completed.



Undergraduate Training (continued)

2011–2013 Alycia Wilson, undergraduate student, University of Calgary, Alberta, Canada. Project title: Age and growth of *Myledaphus bipartitus*, a Late Cretaceous guitarfish from Alberta. Wilson published this research in the Canadian Journal of Earth Sciences. Completed.

**PROFESSIONAL ACTIVITIES**

**Published Scientific Papers (Peer-reviewed)**

Williams, M.A., J.L. Newbrey and **M.G. Newbrey**. 2022. Laying-sequence variation in carotenoid concentrations and egg metrics of House Sparrows in Georgia, USA. The Wilson Journal of Ornithology 134(3):455-463.

Murray, A.M., D.B. Brinkman, A.G. Neuman and **M.G. Newbrey**. 2020. Earliest North American articulated freshwater acanthomorph fishes (Teleostei: Percopsiformes) from the Late Cretaceous of Alberta, Canada. Geological Magazine 157(7):1087-1096.

Siversson, M., T.D. Cook, H.E. Ryan, D.K. Watkins, N. Tataric, P. Downes and **M.G. Newbrey**. 2018. Anacoracid shark teeth and calcareous nannofossil stratigraphy of the mid-Cretaceous Gearle Siltstone and Haycock Marl in the lower Murchison River area, Western Australia. Alcheringa 43:85-113.

Martín-Abad, H., **M.G. Newbrey**, F. Woolfolk\* and C. Blanco-Moreno. 2017. Characterization of coelacanth scales from the Early Cretaceous freshwater locality of Las Hoyas, Upper Barremian (Cuenca, Spain). Spanish Journal of Paleontology 32(2):331-342. \***CSU undergraduate student**.

Moore, G.I. and **M.G. Newbrey**. 2016. Whale Shark on a White Shark's menu. Marine Biodiversity (published as an Oceanarium) 46:745-746.

Murray, A., **M.G. Newbrey**, A.G. Neuman and D.B. Brinkman. 2016. New articulated osteoglossomorph from Late Cretaceous freshwater deposits (Maastrichtian, Scollard Formation) of Alberta, Canada. Journal of Vertebrate Paleontology 36(4):e1120737-14.

**Newbrey, M.G.**, M. Siversson, T.D., Cook, A.M. Fotheringham and R.L. Sanchez. 2015. Vertebral morphology, dentition, age, growth, and ecology of the large lamniform shark *Cardabiodon ricki*. Acta Palaeontologica Polonica 60(4):877–897.

**Newbrey, M.G.** and T. Konishi. 2015. A new lizardfish (Teleostei, Aulopiformes) from the Late Cretaceous Bearpaw Formation of Alberta, Canada with a revised diagnosis of *Apateodus* (Aulopiformes, Ichthyotringoidei). Journal of Vertebrate Paleontology 35(3):e918042 (19 pages).

**Published Scientific Papers (Peer-reviewed, continued)**

- Siverson, M., J. Lindgren, **M.G. Newbrey**, P. Cederström and T.D. Cook. 2015\*. Late Cretaceous sharks of *Cretalamna appendiculata* type. *Acta Palaeontologica Polonica* 60(2):339–384. **\*Most cited paper in Acta Palaeontologica Polonica, for 2016.**
- Konishi, T., **M.G. Newbrey** and M. W. Caldwell. 2014. A small, exquisitely preserved specimen of *Mosasaurus missouriensis* (Squamata: Mosasauridae) from the upper Campanian of the Bearpaw Formation, western Canada and the first stomach contents for the genus. *Journal of Vertebrate Paleontology* 34(4):802–819.
- Cook, T.D., J.G. Eaton, **M.G. Newbrey** and M.V.H. Wilson. 2014. A new genus and species of freshwater stingray (Myliobatiformes, Dasyatoidea) from the latest middle Eocene of Utah, U.S.A. *Journal of Palaeontology* 88:497-503.
- Cook, T.D., **M.G. Newbrey**, D.B. Brinkman and J.L. Kirkland. 2014. Freshwater euselachians from the Hell Creek Formation of Montana with a comparison to other Maastrichtian North American localities, pp. 229-246. *In* G.P. Wilson, W.A. Clemens, J.R. Horner and J.H. Hartman, eds., *Through the End of the Cretaceous in the Type Locality of the Hell Creek Formation in Montana and Adjacent Areas: Geological Society of America, Special Paper 503*, doi:10.1130/2014.2503(08).
- Brinkman, D.B., **M.G. Newbrey** and A.G. Neuman. 2014. Diversity and paleoecology of actinopterygian fish from vertebrate microfossil localities of the Maastrichtian Hell Creek Formation of Montana. *In* G.P. Wilson, W.A. Clemens, J.R. Horner and J.H. Hartman, eds., *Through the End of the Cretaceous in the Type Locality of the Hell Creek Formation in Montana and Adjacent Areas: Geological Society of America, Special Paper 503:247-270*, doi:10.1130/2014.2503(09).
- Newbrey, M.G.**, A.M. Murray, M.V.H. Wilson, D.B. Brinkman and A.G. Neuman. 2013. A new species of the paracanthopterygian *Xenyllion* (Sphenocephaliformes) from the Mowry Formation (Cenomanian) of Utah, USA, pp. 363-384. *In* *Mesozoic Fishes 5 – Global Diversity and Evolution*; edited by G. Arratia, H.P. Schultze, and M.V.H. Wilson. Verlag Dr. Friedrich Pfeil, Munich, Germany.
- Newbrey, M.G.**, D.B. Brinkman, D.A. Winkler, E.A. Freedman, A.G. Neuman, D.W. Fowler and H.N. Woodward. 2013. Teleost centrum and jaw elements from the Late Cretaceous Nemegt Formation (Campanian – Maastrichtian) of Mongolia and a re-identification of the fish centrum found with the theropod *Raptorex kreigsteini*, pp. 291-303. *In* *Mesozoic Fishes 5 – Global Diversity and Evolution*; edited by G. Arratia, H.P. Schultze, and M.V.H. Wilson. Verlag Dr. Friedrich Pfeil, Munich, Germany. **Invited paper.**
- Liston, J., **M.G. Newbrey**, T.J. Challands and C.E. Adams. 2013. Growth, age and size of the Jurassic pachycormid *Leedsichthys problematicus* (Osteichthyes: Actinopterygii), pp. 145-175. *In* *Mesozoic Fishes 5 – Global Diversity and Evolution*; edited by G. Arratia, H.P. Schultze, and M.V.H. Wilson. Verlag Dr. Friedrich Pfeil, Munich, Germany.

**Published Scientific Papers (Peer-reviewed, continued)**

- Brinkman, D.B., **M.G. Newbrey**, A.G. Neuman and J. Eaton. 2013. Freshwater Osteichthyes from the Cenomanian to middle Campanian of Grand Staircase-Escalante National Monument, Utah, pp. 195-236. *In*: A. Titus, Ed., The Late Cretaceous of southern Utah: Critical window into end Mesozoic ecosystems. Indiana University Press, Bloomington.
- Wilson, A.E., **M.G. Newbrey**, D.B. Brinkman, T.D. Cook and A.G. Neuman. 2013. Age and growth in *Myledaphus bipartitus*, a Late Cretaceous freshwater guitarfish from Alberta, Canada. Canadian Journal of Earth Sciences 50:930–944. **Student paper.**
- Cook, T.D., M.V.H. Wilson, A.M. Murray, G. Plint, **M.G. Newbrey** and M.J. Everhart. 2013. A high latitude euselachian assemblage from the early Turonian of Alberta, Canada. Journal of Systematic Palaeontology 11:555–587.
- Cook, T.D., **M.G. Newbrey**, A.M. Murray, M.V.H. Wilson, K. Shimada, G.T. Takeuchi and J.D. Stewart. 2011. A partial skeleton of the Late Cretaceous lamniform shark, *Archaeolamna kopingensis*, from the Pierre Shale of western Kansas. Journal of Vertebrate Paleontology 31(1):8-21.
- Newbrey, M.G.**, A.M. Murray, D.B. Brinkman, M.V.H. Wilson and A.G. Neuman. 2010. A new articulated freshwater fish (Clupeomorpha, Ellimmichthyiformes) from the Horseshoe Canyon Formation, Maastrichtian, of Alberta, Canada. Canadian Journal of Earth Sciences 47(9):1183-1196.
- Eberle, J.J., H.C. Fricke, J.D. Humphrey, L. Hackett, **M.G. Newbrey** and J.H. Hutchison. 2010. Seasonal variability in Arctic temperatures during early Eocene time. Earth and Planetary Science Letters 296(3-4):481-486.
- Cook, T.D., M.V.H. Wilson and **M.G. Newbrey**. 2010. The first record of the large Cretaceous lamniform shark, *Cardabiodon ricki*, from North America and a new empirical test for its presumed antitropical distribution. Journal of Vertebrate Paleontology 30(3):643-649.
- Newbrey, M.G.**, A.M. Murray, M.V.H. Wilson, D.B. Brinkman and A.G. Neuman. 2009. Seventy-five-million-year-old tropical tetra-like fish from Canada tracks Cretaceous global warming. Proceedings of the Royal Society, B 276(1672):3829-3833.
- Newbrey, M.G.**, M.V.H. Wilson and A.C. Ashworth. 2008. Climate change and evolution of growth in Late Cretaceous to Recent North American Esociformes, pp. 311-350. *In* Mesozoic Fishes 4 - Homology, and Phylogeny; *edited by* G. Arratia, H.P. Schultze, and M.V.H. Wilson. Verlag Dr. Friedrich Pfeil, Munich, Germany.
- Newbrey, M.G.**, M.V.H. Wilson and A.C. Ashworth. 2007. Centrum growth patterns provide evidence for two small taxa of Hiodontidae in the Cretaceous Dinosaur Park Formation. Canadian Journal of Earth Sciences 44(7):721-732.

**Published Scientific Papers (Peer-reviewed, continued)**

**Newbrey, M.G.**, M.A. Bozek, M.J. Jennings and J.E. Cook. 2005. Branching complexity and morphological characteristics of coarse woody structure as lacustrine fish habitat. *Canadian Journal of Fisheries and Aquatic Sciences* 62(9):2110-2123.

**Newbrey, M.G.** and A.C. Ashworth. 2004. A fossil record of colonization and response of lacustrine fish populations to climate change. *Canadian Journal of Fisheries and Aquatic Sciences* 61(10):1807-1816.

**Newbrey, M.G.** and M.A. Bozek. 2003. Age, growth, and mortality of *Joffrichthys triangulpterus* (Teleostei: Osteoglossidae) from the Paleocene Sentinel Butte Formation, North Dakota, USA. *Journal of Vertebrate Paleontology* 23(3):494-500.

**Newbrey, M.G.** and M.A. Bozek. 2000. A new species of *Joffrichthys* (Teleostei: Osteoglossidae) of the Sentinel Butte Formation (Paleocene), of North Dakota, USA. *Journal of Vertebrate Paleontology* 20(1):6-14.

**Published Scientific Papers (Symposia)**

**Newbrey, M.G.** and M.V.H. Wilson. 2005. Recognition of annular growth on centra of Teleostei with application to Hiodontidae of the Cretaceous Dinosaur Park Formation. *In* Dinosaur Park Symposium; *edited by* D.R. Braman, F. Therrien, E.B. Koppelhus, and W. Taylor. Special Publication of the Royal Tyrrell Museum, Drumheller, Alberta. pp. 61-68. (*Refereed*).

**Published Scientific Papers (Extended Abstracts)**

**Newbrey, M.G.**, M.V.H. Wilson and A.C. Ashworth. 2005. Growth characteristics of Cretaceous and Cenozoic North American Esociformes: Implications for systematics. *In* Fourth International Meeting on Mesozoic Fishes - Systematics, Homology, and Nomenclature, Extended Abstracts; *edited by* F.J. Poyato-Ariza; Madrid, Servicio de Publicaciones de la Universidad Autónoma de Madrid / UAM Ediciones. pp. 201-204.

**Published Teaching Papers (Peer-reviewed)**

Baltezore, J.M. and **M.G. Newbrey**. 2007. The infection dynamics of a hypothetical virus in a high school: Use of an ultraviolet detectable powder. *The American Biology Teacher* 69(2):99-103.

**Newbrey, M.G.** and J.M. Baltezore. 2006. Poster presentations: Conceptualizing, constructing and critiquing. *The American Biology Teacher* 68(9):550-554.

## Oral Presentations

- Halbrook, M.C.\* , **M.G. Newbrey**, W.S. Gunter, R.C.P. Beamesderfer and J.A. North. 2020. Age and growth characteristics of the subspecies of Largemouth Bass (*Micropterus salmoides*) exhibit differential responses to a thermal gradient. Georgia Chapter of the American Fisheries Society annual meeting, Augusta, GA, January 28-30. \*CSU **graduate student**.
- Newbrey, J.L. Q. Love\* and **M.G. Newbrey**. 2020. Differences in Yolk Carotenoid Concentrations of Three Songbird Species Breeding in Nest Boxes in Georgia, USA. Society for Integrated and Comparative Biology annual meeting, Austin, TX, January 3-7. \*CSU **undergraduate student**.
- Barkhouse, J.M.\* , J.L. Newbrey and **M.G. Newbrey**. 2020. Laying-Sequence Variation in Yolk Carotenoids of Eastern Bluebirds. Society for Integrated and Comparative Biology annual meeting, Austin, TX, January 3-7. \*CSU **undergraduate student**.
- Tillman, P.\* , **M.G. Newbrey**, C. Boyd and T.D. Cook. 2019. Estimating taxonomic diversity using growth profiles and stinger morphology of 34 million year old stingrays from North Dakota. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. Also presented at CSU's Tower Day, April 17. \*CSU **undergraduate student**.
- Woolfolk, F.R.\* , Hugo Martín-Abad, **M.G. Newbrey** and J.G. Maisey. 2018. A new interpretation of chronological ages of *Latimeria chalumnae* and other coelacanth. Association of Southeastern Biologists 79th Annual Meeting. Myrtle Beach, SC, March 28-31, 2018. Also presented at CSU's Tower Day, April 12. \*CSU **undergraduate student**.
- Adams, A.L.\* , E.A. Klar and **M.G. Newbrey**. 2017. The seasonal variability of the prevalence of female sex cells in gonads of male Largemouth Bass (*Micropterus salmoides*) from the Chattahoochee River System. Beta Beta Beta District II at Association of Southeastern Biologists 78th Annual Meeting. Montgomery, AL, March 29 – April 1. \*CSU **undergraduate student**.
- Newbrey, J.L., R.C. Paiva\* and **M.G. Newbrey**. 2016. Seasonal variation in yolk carotenoid concentrations and egg metrics in Eastern Bluebirds breeding in West-central Georgia. North American Ornithological Conference IV. Washington, D.C. \*CSU **undergraduate student**.
- Williams, M.A.\* , J.L. Newbrey and **M.G. Newbrey**. 2016. Laying-sequence variation in yolk carotenoids and egg characteristics in the House Sparrow (*Passer domesticus*). North American Ornithological Conference IV. Washington, D.C. \*CSU **undergraduate student**.

**Oral Presentations (continued)**

- Williams, M.A. \*, J.L. Newbrey and **M.G. Newbrey**. 2016. Variation in carotenoid concentrations of House Sparrow (*Passer domesticus*) eggs across the laying sequence. Association of Southeastern Biologists Annual Meeting, Concord, NC. \***CSU undergraduate student**.
- Newbrey, M.G.**, M. Machaleski, M. Siversson and H. Martín-Abad. 2015. Vertebral centra of Upper Albian sharks and rays (Chondrichthyes: Euselachii) from Anopol, Poland. 5<sup>th</sup> Manitoba Palaeontology Symposium. Morden, Manitoba, Canada, September 26-27. **Invited and keynote presentation**.
- Newbrey, J.L., R.C. Paiva\*, **M.G. Newbrey** and J.E. Clarke\*. 2015. Seasonal variation in yolk carotenoid concentrations and egg metrics in Eastern Bluebirds breeding in West-central Georgia. Association of Southeastern Biologists Annual Meeting, Chattanooga, TN. \***CSU undergraduate students**.
- Martín-Abad, H., **M.G. Newbrey** and F. J. Poyato-Ariza. 2014. Fish trophic guilds in the palaeoecology of Las Hoyas (Cuenca, Spain). XII annual meeting of the European Association of Vertebrate Palaeontologists - Abstracts Book.
- Martín-Abad, H. and **M.G. Newbrey**. 2014. New information on some old fishes: age and growth of Cretaceous amiiforms. In: Arreguín-Rodríguez, G., Colmenar, J., Díaz-Berenguer, E., Galán, J., Legarda-Lisarrri, A., Parrilla-Bel, J., Puértolas-Pascual, E. & Silva-Casal, R. (eds.): New Insights on Ancient Life, 87-89. Annual meeting of Encuentro de Jóvenes Investigadores en Paleontología. April 9-12, 2014. Boltana, Spain.
- Newbrey, M.G.**, S.Z. Gibson, D.B. Brinkman and A.G. Neuman. 2013. A new semionotiform from the Upper Cretaceous Scollard Formation (Maastrichtian), Alberta, Canada. Mesozoic Fishes 6 – Diversification and Diversity Patterns, Vienna, Austria, August 4–10.
- Newbrey, M.G.**, T.D. Cook, D.B. Brinkman, A.G. Neuman, R. Sanchez and D. Tanke. 2013. A partial orectolobiform skeleton from the freshwater Scollard Formation (Maastrichtian), Alberta, Canada. Mesozoic Fishes 6 – Diversification and Diversity Patterns, Vienna, Austria, August 4–10.
- Brinkman, D.B., **Newbrey, M.G.** and A.G. Neuman. 2013. Nonmarine teleost fish from the Late Cretaceous and early Paleocene of the Western Interior of North America – Evidence from Vertebrate Microfossil Localities. Mesozoic Fishes 6 – Diversification and Diversity Patterns, Vienna, Austria, August 4–10.

**Oral Presentations (continued)**

- Konishi, T., **M.G. Newbrey** and M.W. Caldwell. 2013. Who gets to eat what: niche partitioning between phylogenetically closely related but morphologically disparate mosasaurs (Mosasauridae: Mosasaurinae), *Mosasaurus missouriensis* and *Prognathodon overtoni*, based on new material from the upper Campanian Bearpaw Formation, Alberta, Canada. To be presented at the Society of Vertebrate Paleontology 73<sup>rd</sup> Annual Meeting, Los Angeles, California, October 30 – November 2.
- Brinkman, D.B., J.G. Eaton, **M.G. Newbrey**, J. Kirkland and A.G. Neuman. 2011. Latitudinal differentiation of vertebrate assemblages of the Late Cretaceous of Western North America – Evidence from vertebrate microfossil localities. Society of Vertebrate Paleontology 71<sup>st</sup> Annual Meeting. Las Vegas, Nevada, November 2-5. Journal of Vertebrate Paleontology 31(supplement to 6):78A.
- Brinkman, D.B., J.G. Eaton, **M.G. Newbrey** and A.G. Neuman. 2011. Latitudinal differentiation of vertebrate assemblages of the Late Cretaceous of Western North America. Canadian Society for Ecology and Evolution Annual Meeting, May.
- Newbrey, M.G.**, A.G. Neuman and D.B. Brinkman 2010. The Pisces Point locality (Scollard Formation, Maastrichtian). A new look at an old locality in Alberta, Canada. Fifth International Meeting on Mesozoic Fishes, Saltillo, Coahuila, Mexico, August 1-7.
- Newbrey, M.G.**, M.V.H. Wilson, A.G. Neuman, A.M. Murray and D.B. Brinkman. 2010. A new genus of Percopsiformes from the Upper Cretaceous Scollard Formation of Alberta, Canada. Fifth International Meeting on Mesozoic Fishes, Saltillo, Coahuila, Mexico, August 1-7.
- Brinkman, D.B., **M.G. Newbrey**, A.G. Neuman and J.G. Eaton. 2010. Non-marine actinopterygians fish assemblages from the Late Cretaceous of the Western Interior of North America – Evidence from vertebrate microfossil localities. Fifth International Meeting on Mesozoic Fishes, Saltillo, Coahuila, Mexico, August 1-7.
- Cook, T.D., **M.G. Newbrey**, A.M. Murray, M.V.H. Wilson, K. Shimada, G.T. Takeuchi and J.D. Stewart. 2010. A partial skeleton of the Late Cretaceous lamniform shark, *Archaeolamna kopingensis*, from the Pierre Shale of western Kansas. Fifth International Meeting on Mesozoic Fishes, Saltillo, Coahuila, Mexico, August 1-7.
- Brinkman, D.P., **M.G. Newbrey** and T.D. Cook. 2009. Fish of the Hell Creek Formation. Ninth North American Paleontological Convention (NAPC 2009), University of Cincinnati, Ohio, June 21-26, page 125.
- Newbrey, M.G.**, A.M. Murray, M.V.H. Wilson, D.B. Brinkman and A.G. Neuman. 2008. Paleolatitudinal response of Characiformes (Teleostei: Ostariophysi) to Cenozoic climate change. Society of Vertebrate Paleontology 68<sup>th</sup> Annual Meeting. Cleveland, Ohio, October 15-18. Journal of Vertebrate Paleontology 28(supplement to 3):121A.

**Oral Presentations (continued)**

- Newbrey, M.G.**, M.V.H. Wilson and A.C. Ashworth. 2005. Growth characteristics of North American Hiodontidae (Teleostei) from the Late Cretaceous to Recent. Society of Vertebrate Paleontology 65<sup>th</sup> Annual Meeting. Mesa, Arizona, October 19-22. *Journal of Vertebrate Paleontology* 25(supplement to 3):96A.
- Newbrey, M.G.**, M.V.H. Wilson and A.C. Ashworth. 2005. Growth characteristics of Cretaceous and Cenozoic North American Esociformes: Implications for systematics. Fourth International Meeting on Mesozoic Fishes, Miraflores de la Sierra, Madrid, Spain, August 8-13.
- Newbrey, M.G.**, A.C. Ashworth and M.V.H. Wilson. 2005. Geographic trends in North American Freshwater Fishes from the Cretaceous to the Pliocene: A climatic effect? Northern Plains Biological Symposium, Fargo, North Dakota (abstract included in abstract volume available from the library of North Dakota State University).
- Newbrey, M.G.**, A.C. Ashworth and M.V.H. Wilson. 2004. Geographic trends in North American Freshwater Fishes from the Cretaceous to the Pliocene. Society of Vertebrate Paleontology 64<sup>th</sup> Annual Meeting. Denver, Colorado, November 3-6. *Journal of Vertebrate Paleontology* 24(supplement to 3):98A.
- Harings, N., K. Kleczka, M.A. Bozek and **M.G. Newbrey**. 2004. Behavioral observations and dietary analysis of bullfrog (*Rana catesbeiana*) tadpoles to determine the utilization of submerged riparian trees on Lake Katherine, Oneida County. Midwest Fish and Wildlife Conference 66th Annual Meeting.
- Micklich, N. and **M.G. Newbrey**. 2010. Growth cessation marks in bowfins -- a tool for biological and paleoecological reconstructions. Fifth International Meeting on Mesozoic Fishes, Saltillo, Coahuila, Mexico, August 1-7.
- Newbrey, M.G.** and A.C. Ashworth. 2003. Fish community dynamics, growth of yellow perch, and correlations with climate and fire in an early Holocene lake in North Dakota. Society of Vertebrate Paleontology 63<sup>rd</sup> Annual Meeting. St. Paul, Minnesota, October 15-18. *Journal of Vertebrate Paleontology* 23(supplement to 3):82A-83A.
- Newbrey, M.G.** and M.A. Bozek. 2002. Growth of *Esox tiemani* of the Paleocene Sentinel Butte Formation of North Dakota with evidence to estimate mean annual temperature. Society of Vertebrate Paleontology 62<sup>nd</sup> Annual Meeting. Norman, Oklahoma, October 9-12. *Journal of Vertebrate Paleontology* 22 (supplement to 3):92A.
- Bozek, M.A., B.J. Achuff, **M.G. Newbrey** and J.E. Cook. 2002. A dynamic model linking riparian area tree recruitment to submerged woody habitat in lakes. Annual Meeting of the American Society for Oceanography and Limnology. Victoria, BC, Canada.



**Oral Presentations (continued)**

- Bozek, M.A., B.J. Achuff, **M.G. Newbrey** and J.E. Cook. 2002. Development of a dynamic model linking riparian area wood recruitment with submerged woody habitat. Wisconsin Chapter American Fisheries Society 31<sup>st</sup> Annual Meeting.
- Bozek, M.A., B.J. Achuff, **M.G. Newbrey** and J.E. Cook. 2002. Development of a dynamic model linking riparian area wood recruitment with submerged woody fish habitat. 132<sup>nd</sup> Annual Meeting of the American Fisheries Society. Baltimore, MD.
- Achuff, B.J., M.A. Bozek, J.E. Cook and **M.G. Newbrey**. 2002. Developing a dynamic model linking riparian area forests with littoral zone coarse woody structure in a temperate lake. Annual Meeting of the Ecological Society of America. Tucson, AZ.
- Achuff, B.J., M.A. Bozek, J.E. Cook and **M.G. Newbrey**. 2002. Development of a riparian land-use model for the sustainable recruitment of coarse woody structure to lakes as fish habitat. North Central Division of the American Fisheries Society Meeting. Bettendorf, IA.
- Newbrey, M.G.**, M.A. Bozek and M.J. Jennings. 2001. Differences in architectural complexity of submerged deciduous versus conifer trees in relation to fish habitat. Midwest Fish and Wildlife Conference 63<sup>rd</sup> Annual Meeting. Ames, Iowa.
- Newbrey, M.G.** and B.R. Erickson. 2001. The fish assemblage of Wannagan Creek Quarry, Bullion Creek Formation (Paleocene: Tiffanian), North Dakota. Society of Vertebrate Paleontology 61<sup>st</sup> Annual Meeting. Bozeman, Montana, October 3-6. Journal of Vertebrate Paleontology 21(supplement to 3):83A.
- Newbrey, M.G.**, M.A. Bozek and M.J. Jennings. 2001. Architectural complexity of submerged trees: Riparian and littoral zone management of fish habitat. Wisconsin Chapter American Fisheries Society 30<sup>th</sup> Annual Meeting. Superior, Wisconsin. *Invited*.
- Achuff, B.J., M.A. Bozek, J.E. Cook and **M.G. Newbrey**. 2001. Linking riparian forest complexity and littoral zone habitat in a northern temperate lake. Midwest Fish and Wildlife Conference 63<sup>rd</sup> Annual Meeting.
- Newbrey, M.G.**, M.A. Bozek and M.J. Jennings. 2000. Architecture of submerged trees as fish habitat: Implications for riparian and littoral zone management. Midwest Fish and Wildlife Conference 62<sup>nd</sup> Annual Meeting. Minneapolis, Minnesota.
- Newbrey, M.G.** and M.A. Bozek. 1999. Growth of *Esox tiemani* and a new species of *Joffrichthys* of the Sentinel Butte Formation (Paleocene) near Almont, North Dakota. Proceedings of the North Dakota Academy of Science 53:208. Grand Forks, North Dakota.

### **Oral Presentations (continued)**

**Newbrey, M.G.** and M.A. Bozek. 1997. A description of the fossil fish assemblage of the Sentinel Butte Formation (Paleocene) near Almont, North Dakota including two new species. *Proceedings of the North Dakota Academy of Science* 51:211. Grand Forks, North Dakota.

**Newbrey, M.G.** and M.A. Bozek. 1996. A morphological comparison of fossil fish scales and fish from the Sentinel Butte Formation (Paleocene) near Almont, North Dakota. *Proceedings of the Iowa Academy of Sciences*. Vol. 103.

### **Invited Lectures**

**Newbrey, M.G.**, T.D. Cook, D.B. Brinkman, A.G. Neuman, R. Sanchez, and D. Tanke. 2015. A partial orectolobiform skeleton from the freshwater Scollard Formation (Maastrichtian), Alberta, Canada. *North Dakota Geologic Survey, Bismarck, North Dakota*, November 26.

**Newbrey, M.G.**, T.D. Cook, D.B. Brinkman, F. Therrien, A.G. Neuman, D. Eberth, D. Braman, A. Wilson, R. Sanchez, D. Tanke, C. Price, P. Buhler and M. Syvertsen. 2014. Who are the freshwater sharks and rays of the Cretaceous Scollard Formation, Alberta? *Royal Tyrrell Museum Speaker Series*, March 7, Drumheller, AB, Canada.

**Newbrey, M.G.** 2012. Effects of climate change on the growth and geographic distribution of freshwater fishes. *Columbus State University, Columbus, GA*.

**Newbrey, M.G.**, T.D. Cook and M. Siverson. 2011. The effects of climate change on the growth biology and geographic distribution of Cretaceous sharks. *Royal Tyrrell Museum Speaker Series*, April 1. See the presentation on Youtube: <http://www.youtube.com/watch?v=yxm2BeKm6SQ>, Drumheller, AB, Canada.

**Newbrey, M.G.** 2010. Fishes and other fossils from the Pisces Point locality, Scollard Formation (Maastrichtian), Dry Island Buffalo Jump Provincial Park, Alberta. *Royal Tyrrell Museum 2010 Speaker Series and the University of Calgary*. April and May.

**Newbrey, M.G.** 2008. Evidence for two taxa of Hiodontidae in the Cretaceous Dinosaur Park Formation, Alberta. *Microvertebrate Workshop, Dinosaur Provincial Park*.

**Newbrey, M.G.** 2008. Examination of growth provides insight into biology and diversity of Dinosaur Provincial Park fossil fishes. *University of California, Berkeley Museum of Paleontology seminar series*.

**Newbrey, M.G.** 2008. Climate change and evolution of Late Cretaceous to recent teleost growth. *University of Alberta*.

### Invited Lectures (continued)

- Newbrey, M.G.** 2007. Examination of growth provides insight into diversity and the effects of climate change on Dinosaur Provincial Park fossil fishes. Seminar series presentation, Royal Tyrrell Museum, Drumheller, Alberta (abstract not published).
- Newbrey, M.G.** and A.C. Ashworth. 2005. If fossil fish could talk we would hear stories about drought: An examination of a late Pleistocene deposit near Jamestown, North Dakota. North Dakota Geological Society, Bismarck, North Dakota. May 17th. Abstract included in the North Dakota Geological Society 2005 annual report.
- Newbrey, M.G.** 2005. Science and Writing: Who, why, what, where, and how... in 45 minutes. English 324. Instructor: Dr. Dale Sullivan, North Dakota State University. November 16.
- Newbrey, M.G.** 2005. Preparation and applications for graduate school. Student Chapter of the Wildlife Society, North Dakota State University.
- Newbrey, M.G.** 2002. Dissertation Research: Growth of fossil and living fish in North America with a procedure to estimate mean annual temperature in the geologic record. West Fargo High School.
- Newbrey, M.G.** 2001. The fish, taphonomy, and limnology of Wannagan Creek Quarry, Paleocene Bullion Creek Formation, North Dakota. Science Museum of Minnesota. December 16.
- Newbrey, M.G.** 1995. Animal fossils from the Sentinel Butte Formation (Paleocene) near Almont, North Dakota. Proceedings of the Iowa Academy of Sciences. Vol. 102.

### Poster Presentations

- Newbrey, M.G.**, Woolfolk, F.R.\*, Hugo Martín-Abad and J.G. Maisey. 2020. Chronological ages from scales and bones of the coelacanths *Latimeria chalumnae* and *Axelrodichthys araripensis* suggest long lifespans. Georgia Chapter of the American Fisheries Society annual meeting, Augusta, GA, January 28-30. **\*CSU undergraduate student.**
- Moore, A.G.\*, **M.G. Newbrey**, H. Martín-Abad, C. Boyd, J. Hoganson and M.A. Bair\*\*. 2020. Earliest known material of *Amia*, bowfin, from the Sentinel Butte Formation (Paleocene), Medora, North Dakota. Society for Integrated and Comparative Biology annual meeting, Austin, TX, January 3-7. **\*CSU undergraduate student. \*\*CSU graduate student.**
- Abernathy, A.\*, E. Klar, C. Jordan\*, M. Joshi\* and **M.G. Newbrey**. 2020. Comparison of intersex severity between two types of histological sections using testes of Largemouth Bass (*Micropterus salmoides*) and Spotted Bass (*M. punctulatus*) from the Chattahoochee River, Georgia. Society for Integrated and Comparative Biology annual meeting, Austin, TX, January 3-7. **\*CSU undergraduate student.**

**Poster Presentations (continued)**

- Joshi, M.M.\*, E.A. Klar, A. Abernathy\*, A. Sibley\*\*, J.M. Belt\*\* and **M.G. Newbrey**. 2020. Comparison of intersex severity between two types of histological sections using testes of Largemouth Bass (*Micropterus salmoides*) and Spotted Bass (*M. punctulatus*) from the Chattahoochee River, Georgia. Society for Integrated and Comparative Biology annual meeting, Austin, TX, January 3-7. \***CSU undergraduate student**. \*\***CSU graduate student**.
- Newbrey, M.G.**, Woolfolk, F.R.\*, Hugo Martín-Abad and J.G. Maisey. 2020. Chronological ages of the coelacanth *Latimeria chalumnae* and *Axelrodichthys araripensis* by comparing ages from scales and bones. Society for Integrated and Comparative Biology annual meeting, Austin, TX, January 3-7. \***CSU undergraduate student**.
- Murphy, C.\*, **M.G. Newbrey**, M. Siversson and D. Ehret. 2019. Centrum morphology, age, and growth of *Cretalamna* sp. (Lamniformes, Otodontidae), a shark, from the Cretaceous Mooreville Chalk Formation (Santonian to Campanian), Alabama. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. \***CSU undergraduate student**.
- Moore, A.G.\*, **M.G. Newbrey**, H. Martín-Abad, C. Boyd, J. Hoganson and M.A. Bair\*\*. 2019. New fossil material of the bowfin, *Amia*, from the Sentinel Butte Formation (Paleocene), Medora, North Dakota. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. Also presented at CSU's Tower Day, April 17, 2019. \***CSU undergraduate student**. \*\***CSU graduate student**.
- Halbrook, M.C.\*, **M.G. Newbrey**, W.S. Gunter, R.C.P. Beamesderfer and J.A. North. 2019. The effect of a thermal gradient on age and growth characteristics of Largemouth Bass (*Micropterus salmoides*). Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. Also presented at CSU's Tower Day, April 17, 2019. \***CSU undergraduate student**.
- Jordan, C.H.\*, E. Klar and **M.G. Newbrey**. 2019. Occurrence of intersex in male Spotted bass, *Micropterus punctulatus*, Chattahoochee River, Columbus, Georgia. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. \***CSU undergraduate student**.
- Abernathy, A.\*, E. Klar, C. Jordan\*, M. Joshi\* and **M. Newbrey**. 2019. Histological techniques reveal differences in intersex occurrence and severity in Largemouth bass (*Micropterus salmoides*) and Spotted bass (*Micropterus punctulatus*). Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. Also presented at CSU's Tower Day, April 17, 2019. \***CSU undergraduate student**.

**Poster Presentations (continued)**

- Joshi, M.M.\*, E.A. Klar, A. Abernathy\*, A. Sibley\*\*, J.M. Belt\*\* and **M.G. Newbrey**. 2019. Histological analysis reveals background levels of intersex in male Largemouth bass (*Micropterus salmoides*) of the Chattahoochee River and two tributaries, Columbus, GA. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. Also presented at CSU's Tower Day, April 17, 2019. \***CSU undergraduate student**. \*\***CSU graduate student**.
- Sibley, A.A.\*, E.A. Klar and **M.G. Newbrey**. 2019. Histopathological comparison of livers of Largemouth bass (*Micropterus salmoides*) from the Chattahoochee River and a tributary, Columbus, Georgia. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. \***CSU graduate student**.
- Belt, J.M.\*, E.A. Klar, A. Abernathy\*\*, M. Joshi\*\* and **M.G. Newbrey**. 2019. Chronological age and the prevalence of intersex within Largemouth bass (*Micropterus salmoides*), lower Chattahoochee River near Columbus, Georgia. Association of Southeastern Biologists 80th Annual Meeting. Memphis, TN, April 3-6. \***CSU graduate student**. \*\***CSU undergraduate student**.
- Tillman, P.\*, **M.G. Newbrey**, C. Boyd and T.D. Cook. 2018. Comparison of age and growth biology of 34 million year old stingrays from North Dakota to the extant *Dasyatis pastinaca*. Association of Southeastern Biologists 79th Annual Meeting. Myrtle Beach, SC, March 28-31, 2018. Also presented at CSU's Tower Day, April 12, 2018. This poster won the **Award of Excellence** for the Tower Day Poster Presentation. \***CSU undergraduate student**.
- Bair, M.A.\*, **M.G. Newbrey**, H. Martín-Abad and J.G. Maisey. 2018. Age and growth of *Pachyrhizodus caninus* (Teleostei, Crossognathiformes) from the Late Cretaceous Western Interior Seaway. 78th Annual Meeting of the Society of Vertebrate Paleontology, Albuquerque, New Mexico, October 17-20. \***CSU graduate student**.
- Rollins, M.M.\*, **M.G. Newbrey**, E.A. Klar and J.M. Belt\*\*. 2018. A comparison of the number of growth cessation marks in otoliths and centra of Largemouth Bass, *Micropterus salmoides*. Association of Southeastern Biologists 79th Annual Meeting. Myrtle Beach, SC, March 28-31. Also presented at CSU's Tower Day, April 12, 2018. \***CSU undergraduate student**. \*\***CSU graduate student**.
- Sibley, A.A.\*, E.A. Klar, J.M. Belt and **M.G. Newbrey**. 2018. Comparison of histopathological evaluations to assess the effects of pollution in two creeks of Columbus, GA using livers of Largemouth Bass (*Micropterus salmoides*). Association of Southeastern Biologists 79th Annual Meeting. Myrtle Beach, SC, March 28-31, 2018. \***CSU graduate student**.

**Poster Presentations (continued)**

- Belt, J.M.\*, A. Sibley, E.A. Klar and **M.G. Newbrey**. 2018. The influence of chronological age on the occurrence of intersex in Largemouth Bass, *Micropterus salmoides*, in the Chattahoochee River drainage, Georgia. Association of Southeastern Biologists 79th Annual Meeting. Myrtle Beach, SC, March 28-31, 2018. **\*CSU graduate student.**
- Lam, K\*, J.L. Newbrey and **M.G. Newbrey**. 2018. Effects of Female Condition on the Reproductive Success of Eastern Bluebirds (*Sialia sialis*) Breeding in West-Central Georgia. Association of Southeastern Biologists 79th Annual Meeting. Myrtle Beach, SC, March 28-31, 2018. **\*CSU undergraduate student.**
- Martín-Abad, H., **M.G. Newbrey**, F. Woolfolk\* and C. Blanco-Moreno. 2017. Classification and size distribution of scales suggest niche partitioning of an Early Cretaceous coelacanth of Las Hoyas (Spain). 61st Annual Meeting of the Palaeontological Association, London, England, December 17-19. **\*CSU undergraduate student.**
- Bair, M.A.\* and **M.G. Newbrey**. 2017. Further description of *Apateodus busseni*, a lizardfish (Teleostei, Aulopiformes) from the Late Cretaceous, Smoky Hill Member, Niobrara Chalk (early Campanian), Kansas, USA. Society of Vertebrate Paleontology Annual meeting, Calgary, AB, August 23-26. **\*Graduate student.**
- Bazzi, M.\*, E. Einarsson, **M.G. Newbrey**, N.E. Campione, B.P. Kear and M. Siversson. 2017. A large *Squalicorax* (Chondrichthyes: Lamniformes) from the Late Cretaceous of Sweden and the association of sharks and mosasaurs. Society of Vertebrate Paleontology Annual meeting, Calgary, AB, August 23-26. **\*Graduate student.**
- Newbrey, J.L., J. Clarke\* and **M.G. Newbrey**. 2017. Effects of human disturbance level on yolk carotenoid allocation in Carolina Chickadees. American Ornithological Society (135th Stated Meeting), Michigan State University, July 31 to August 5. **\*CSU undergraduate student.**
- Belt, J.M.\*, E.A. Klar and **M.G. Newbrey**. 2017. Chronological age and the occurrence of intersex within Largemouth bass (*Micropterus salmoides*), of the lower Chattahoochee River watershed, Georgia. Beta Beta Beta District II at Association of Southeastern Biologists 78th Annual Meeting. Montgomery, AL, March 29 – April 1. **\*CSU undergraduate student.**
- Brinkman, D.B., A.M. Murray, **M.G. Newbrey** and A.G. Neuman. 2016. Articulated teleost fish from the Pisces Point locality, Late Cretaceous, Scollard Formation, Alberta, Canada, and the identification of isolated elements from vertebrate microfossil localities. Society of Vertebrate Paleontology 76th Annual Meeting, Salt Lake City, Utah, October 26 – 29.

**Poster Presentations (continued)**

- Singletary, M. J. \*, J. L. Newbrey and **M. G. Newbrey**. 2016. Effects of human disturbance on hatching failure rates of Eastern Bluebirds (*Sialia sialis*) in West-Central Georgia. Association of Southeastern Biologists Annual Meeting, Concord, NC. **\*CSU undergraduate student.**
- Newbrey, M.G.**, T.D. Cook, M. Siverson, M.V.H. Wilson and A.G. Neuman. 2013. Anacoracid vertebral morphology and comparison to Lamniformes and Carcharhiniformes suggest an ordinal assignment. Society of Vertebrate Paleontology 73<sup>rd</sup> Annual Meeting, Los Angeles, California, October 30 – November 2.
- Frampton, E.K., T.D. Cook and **M.G. Newbrey**. 2013. Preliminary investigations of chondrichthyan and actinopterygian fishes from the Fish Scales Formation (Albian to Cenomanian), Birch Mountains, Alberta, Canada. Society of Vertebrate Paleontology 73<sup>rd</sup> Annual Meeting, Los Angeles, California, October 30 – November 2.
- Cullen, T.M.\* M.J. Ryan, C. Capobianco, **M.G. Newbrey** and D.C. Evans. 2013. A vertebrate microfossil site with a terrestrial-dominated faunal assemblage from the upper Foremost Formation of Alberta. To be presented at the Society of Vertebrate Paleontology 73<sup>rd</sup> Annual Meeting, Los Angeles, California, October 30 – November 2. **\*Graduate presentation.**
- Cook, T.D., M. Siverson, **M.G. Newbrey** and M.V.H. Wilson. 2013. Ontogenetic variation in the dentition of a new anacoracid shark from the Haycock Marl (latest Cenomanian) of Western Australia. Mesozoic Fishes 6 – Diversification and Diversity Patterns, Vienna, Austria, August 4–10.
- Martín-Abad, H. \*, **M.G. Newbrey**, D.B. Brinkman, A.G. Neuman and F.J. Poyato-Ariza. 2012. Diversity and paleoecology of the Amiidae of the Upper Cretaceous Oldman and Dinosaur Park formations (Campanian) of Alberta, Canada. Society of Vertebrate Paleontology 72<sup>nd</sup> Annual Meeting, Raleigh, North Carolina, October 17-20. **\*Graduate presentation.**
- Wilson, A.E. \*, **M.G. Newbrey**, D.B. Brinkman and A.G. Neuman. 2012. Age and growth in *Myledaphus bipartitus*, a Late Cretaceous freshwater guitarfish from Alberta, Canada. Society of Vertebrate Paleontology 72<sup>nd</sup> Annual Meeting, Raleigh, North Carolina, October 17-20. **Undergraduate presentation.**
- Redman, C., D.B. Brinkman, **M.G. Newbrey**, A.G. Neuman and J.G. Eaton. 2010. Long-term trends in the richness of freshwater actinopterygians from the Late Cretaceous (Cenomanian-Maastrichtian) of the Western Interior of North America. Geological Society of America Annual Meeting, Denver, Colorado, USA. 31 October – 3 November.

**Poster Presentations (continued)**

- Cook, T.D., **M.G. Newbrey**, A.M. Murray, M.V.H. Wilson, and K. Shimada. 2010. Estimated age and size of the Late Cretaceous shark *Archaeolamna kopingensis*. Society of Vertebrate Paleontology 70<sup>th</sup> Annual Meeting. Pittsburgh, PA, USA, October 10-13.
- Newbrey, M.G.**, T.D. Cook, M.V.H. Wilson, A.G. Neuman and G.T. Takeuchi. 2009. Growth characteristics of some Late Cretaceous lamniforms (Elasmobranchii) of North America. Society of Vertebrate Paleontology 69<sup>th</sup> Annual Meeting. Bristol, United Kingdom, September 23-26. *Journal of Vertebrate Paleontology* 29(supplement to 3):155A.
- Newbrey, M.G.**, A.M. Murray, M.V.H. Wilson and S.L. Cumbaa. 2007. Palatine morphology and the presence of fixed canine teeth in Cenozoic *Esox* (Teleostei: Esocidae) of North America. Society of Vertebrate Paleontology 67<sup>th</sup> Annual Meeting, Austin, Texas, October 17-20. *Journal of Vertebrate Paleontology* 27(supplement to 3):123-124A.
- Newbrey, M.G.**, M.V.H. Wilson and A.C. Ashworth. 2006. Evidence for two taxa of Hiodontidae in the Cretaceous Dinosaur Park Formation, Alberta. Society of Vertebrate Paleontology 66<sup>th</sup> Annual Meeting. Ottawa, Ontario, October 18-21. *Journal of Vertebrate Paleontology* 26(supplement to 3):105A.
- Newbrey, M.G.**, K. Lepper, A.C. Ashworth and T.D. Kummer. 2006. Reassessment of the fishes, paleoenvironment, and age of the Ree Heights fossil fish locality, South Dakota. American Quaternary Association, Program and Abstracts of the 19<sup>th</sup> Biennial Meeting, pages 131-132, August 17-20, Bozeman, MT.
- Newbrey, M.G.** and M.V.H. Wilson. 2005. Recognition of annular growth on centra of Teleostei with application to Hiodontidae of the Cretaceous Dinosaur Park Formation. Dinosaur Park Symposium, Royal Tyrrell Museum, Drumheller, Alberta. September 24-25.
- Newbrey, M.G.** and J.L. Newbrey. 2004. Evidence for long-term abundance fluctuations of piscivorous birds in North Dakota from a fossil record of fish populations responding to climate change. North Dakota Chapter of the Wildlife Society Annual Meeting, Fargo ND.
- Newbrey, M.G.** and A.C. Ashworth. July 2003. A new method to estimate early Holocene mean annual temperature using growth characteristics of fossil *Perca flavescens* (yellow perch). XVI International Union for Quaternary Research Congress.
- Newbrey, M.G.** presented poster authored by Drummond, D. and D. Comez. October 2002. Graduate Student University-High School Collaboration. NSF GK-12 3<sup>rd</sup> Annual Meeting. Washington D.C. (abstract not published).



## Professional Reports

Newbrey, M.G., M.A. Bozek and C.J. Edwards. 2001. Effects of stream barriers as impediments to warmwater fish movement with an emphasis on culverts and siltation: An annotated bibliography. Final Report to the North Central Research Station. U.S. Forest Service, Grand Rapids, MN submitted November 5, 2001. 52pp.

## Grants and Proposals

### NSF Proposals

Grande, T., W.C. Borden, M.G. Newbrey, M.V.H. Wilson, J.S. Brown and J. Dettmers. 2014. Preliminary Proposal: Gadiform fishes: phylogenetics, evolution of life-history traits, and modeling of responses to past and future exploitation and global change. National Science Foundation: Preliminary Proposal, NSF DEB-Phylogenetic Systematics, NSF 14-503:1429596.

Grande, T., W.C. Borden, M.G. Newbrey and M.V.H. Wilson. 2013. Gadiform fishes: phylogenetics, evolution of life-history traits, and predicting responses to exploitation and global change. National Science Foundation: Preliminary Proposal, NSF DEB-Phylogenetic Systematics, NSF 13-508:1328721.

### Other Proposals

Newbrey, M.G. 2007-2010. Eighteen Royal Tyrrell Museum Cooperating Society travel grants. Funding solicited through proposals. Total \$23,100. **Funded.**

Newbrey, M.G. 2006. Research grant to the Geological Society of America: Age and paleoecology of an ice age fossil site in South Dakota. \$1,300. **Funded.**

### Other Proposals (continued)

Newbrey, M.G. and M.V.H. Wilson. 2006. Postdoctoral fellowship to the Alberta Ingenuity Fund: The effects of climate change on diversity, growth, and evolution of Catostomidae.

Newbrey, M.G. 2004. Research travel grant to North Dakota State Water Commission and ND Water Resources Research Institute. \$1000. **Funded.**

Newbrey, M.G. 2003. Travel Grant to International Union of Quaternary Research XVI Congress, Reno, Nevada. The National Academies. \$750. **Funded.**

Newbrey, M.G. 2003. Research travel grant to the Geological Society of America. \$3000.

Newbrey, M.G. 2002. Equipment grant to Max McGraw Wildlife Foundation. \$1,199.95.

Ashworth, A.C., Newbrey, M.G., and C.A. Stockwell. 2002. Research grant to Research Development Support Program, North Dakota State University. \$9,995.83.

Newbrey, M.G. 2000. Travel grant to the Midwest Fish and Wildlife Conference, Minneapolis, MN. UPDC Grant (Student Research Fund # 71.26) University of Wisconsin - Stevens Point, Stevens Point, WI. \$300. **Funded.**

Newbrey, M.G. 1996. Travel grant to the University of Alberta for study of comparative materials. UPDC Grant (Student Research Fund # 76.25) University of Wisconsin - Stevens Point, Stevens Point, WI. \$500. **Funded.**

## **Student Funding**

### **2021**

- Mazzola, A., Student Research and Creative Endeavors (SRACE) Application No. 568108-1. \$236.

### **2019**

- Belt, J., Student Research and Creative Endeavors (SRACE) Application No. 448108-1. \$300.
- Halbrook, M.C., Biology Foundation, \$300.
- Moore, A.G., Student Research and Creative Endeavors (SRACE) Application No. 447103-1. \$175.
- Moore, A.G., Student Research and Creative Endeavors (SRACE) Application No. 413090-1. \$115.50.
- Murphy, C. Student Research and Creative Endeavors (SRACE) Application No. 413096-1. \$115.50.
- Tillman, P., Student Research and Creative Endeavors (SRACE) Application No. 413109-1. \$115.50.

### **2018**

- Belt, J., Student Research and Creative Endeavors (SRACE) Application No. 401083-1. \$460.49.
- Duckworth, J., Student Research and Creative Endeavors (SRACE) Application No. 413093-1. \$75.
- Halbrook, M.C., Student Research and Creative Endeavors (SRACE) Application No. 413098-1. \$100.
- Sibley, A., Student Research and Creative Endeavors (SRACE) Application No. 400086-1. \$630.75.
- Tillman, P., Student Research and Creative Endeavors (SRACE) Application No. 371089-1. \$250.

## **Student Funding (continued)**

### **2017**

- Rollins, M., Flora Clark Biology Scholarship, \$400.
- Rollins, M., Student Research and Creative Endeavors (SRACE), \$439.
- Tillman, P., Honor's Grant, \$250.
- Woolfolk, F., Honors College Scholarship, for research, \$1200.

### **2016**

- Woolfolk, F. Student Research and Creative Endeavors (SRACE), \$300.

## **Service to Societies**

Webmaster. 2010. Mesozoic Fishes.

Session Moderator. 2013. Sixth International Meeting on Mesozoic Fishes, Vienna, Austria, August 5.

Session Moderator. 2010. Fifth International Meeting on Mesozoic Fishes, Saltillo, Coahuila, Mexico, August 3.

Session Moderator. 2004. Society of Vertebrate Paleontology 64<sup>th</sup> Annual Meeting, Technical Session XI. Denver, Colorado, November 3-6.

## **Reviewer for Peer-Reviewed Journals**

2021 – *Gondwana Research*, China

2020 – *Acta Paleontologica Polonica*, Poland

2018 – 2021 - *Cretaceous Research*, U.S.A.

2018 - *Bulletins of American Paleontology*, U.S.A.

2017 - *Marine Ecology Progress Series*, Germany

2017 - *Journal of Systematic Palaeontology*, United Kingdom

2017 - *Transactions of the Kansas Academy of Sciences*, U.S.A.

2015–2016 - *Vertebrate Anatomy, Morphology, Palaeontology*, Canada

2013 - *Geologica Belgica*, Belgium

**Reviewer for Peer-Reviewed Journals (continued)**

2012 – 2019 - *Journal of Vertebrate Paleontology*, U.S.A.

2012–2014 - *Memoirs of the Queensland Museum*, Australia

2012 - *PALAIOS*, U.S.A.

2011–2013 - *Copeia*, U.S.A.

2010–2013 - *Geological Society of America, Special Papers*, U.S.A.

2010 - *Paleobiology*, U.S.A.

2009–2013 - *National Science Foundation*, U.S.A.

2008–2013 - *Mesozoic Fishes* and *Verlag Dr. Friedrich Pfeil*, München, Germany

2004–2012 - *Canadian Journal of Fisheries and Aquatic Sciences*, Canada

**Published Art**

**Cover Art**

**Newbrey, M.G.** 2013. Cover art, ammonium chloride dusted fish, *Xenyllion stewarti*, competitive submission, *Mesozoic Fishes 5 – Global Diversity and Evolution*; edited by G. Arratia, H.P. Schultze, and M.V.H. Wilson. Verlag Dr. Friedrich Pfeil, Munich, Germany.