

**TUESDAY 25 MAY 2010: Room 201 Gouaux Hall, Nicholls State  
University (NSU)**

10:00 – 4:00 Gar Aging Workshop (Lunch Provided; Pre-registration required)

The goals of this workshop are to compare current techniques for aging garfish, to develop or recommend standard techniques and to identify future research needs.

Workshop participants are asked, but are not required, to bring hard structures for aging, to include but not limited to otoliths, otolith sections, branchiostegal rays, scales, scale sections, fin spines, fin spine sections, and digital images of hard structures. Isomet saws and microscopes will be available for use by participants. If participants need special equipment to demonstrate methods, please contact Allyse Ferrara ([allyse.ferrara@nicholls.edu](mailto:allyse.ferrara@nicholls.edu)).

**WEDNESDAY 26 MAY 2010: 101 Gouaux Hall, NSU**

**8:30 – 4:00 Registration Open**

**9:30 – 10:00 Welcome and Introductory Remarks.** Allyse Ferrara and Dr. Stephen Hulbert, President of Nicholls State University

**10:00 – 10:50 Key Note Address. Season of the Gar: Exploring the Ecotone Between Science, History, Lepisosteid Management, and Creative Nonfiction.** Mark Spitzer

**10:50 – 11:20 Restoration of Garfish *Atractosteus tropicus* (Pisces: Lepisosteidae) in the Refugio Nacional de Vida Silvestre Caño Negro, Costa Rica: A New Alternative for its Management and Conservation in Costa Rica.** M. Protti Q.\*, G. Márquez – Couturier, A. Sevilla C. and J. B. Ulloa R

**11:20 – 11:40 BREAK**

**11:40 – 12:00 Current Alligator Gar Management Activities in Alabama.** David L. Armstrong\* and Ryan Peaslee

**12:00 – 12:20 Pre- and Post-Regulation Harvest Rates of Alligator Gar *Atractosteus spatula* at Trinity River Bowfishing Tournaments.** Dan Bennett

**12:20 – 1:50 LUNCH ON YOUR OWN**

**1:50 – 2:10 Movements and Habitat Use of Adult Alligator Gar in a Tributary of the Arkansas River.** Edward R Kluender\*, Lindsey Lewis, and Reid Adams

- 2:10 – 2:30 Movement and Habitat Use of Alligator Gar in the Trinity River, TX.** Nathan G. Smith\*, David L. Buckmeier, and Daniel J. Daugherty
- 2:30 – 2:50 A Preliminary Analysis of Range-wide Population Structure in Alligator Gar.** Gregory R. Moyer\* and Brian R. Kreiser
- 2:50 – 3:20 Influence of Anabolic Hormones on Alligator Gar Breeders and Their Effect in Larvae.** Roberto Mendoza\* and Carlos Aguilera
- 3:20 – 3:40 BREAK**
- 3:40 – 5:40 Alligator Gar Technical Committee Meeting (Everyone welcome to attend)**

**THURSDAY 27 MAY 2010: 101 Gouaux Hall, NSU**

- 7:30 – 4:00 Registration Open**
- 8:00 – 8:10 Welcome and Introductory Remarks.** Allyse Ferrara
- 8:10 – 8:30 Effect of Grading Frequency on Production of Alligator Gar Fingerlings in Tanks.** Steve E. Lochmann\* and Lael A. Will
- 8:30 – 8:50 Evaluation of Structure, Forage and Stocking Density on Fingerling Production of Alligator Gar *Atractosteus spatula*.** Peter Perschbacher
- 8:50 – 9:30 Characterization of the Supply Network of the Tropical Gar (*Atracosteus tropicus*) in Tabasco, Mexico.** Vázquez-Navarrete\*, C.J. and G. Márquez-Couturier
- 9:30 – 9:50 Optimal Feed Rates for Juvenile Alligator Gar *Atractosteus spatula* Reared in Recirculating Systems.** Tim A. Clay\*, Mark D. Suchy, Wendell Lorio, Allyse M. Ferrara, and Quenton C. Fontenot
- 9:50 – 10:10 BREAK**
- 10:10 – 10:50 Preliminary Results of the *Atractosteus tropicus* (Pisces: Lepisosteidae) L Larvae Rearing Using Two Different Culture Systems in Costa Rica.** M. Protti Q.\*, G. Márquez-Couturier, A. Sevilla C. and J. B. Ulloa R
- 10:50 – 11:10 Preliminary Results of a Florida Gar *Lepisosteus platrhynchus* Age and Growth Study.** Gintas Zavadzkas\*, Tim Clay, Quenton Fontenot, and Allyse Ferrara

- 11:10 – 11:30 Countergradient Variation in Growth of Spotted Gar (*Lepisosteus oculatus*) From Different Latitudes, With Implications for Conservation.** Solomon David\*, R. Kik IV, M.J. Wiley, E.S. Rutherford, and J.S. Diana
- 11:30 – 11:50 Effects of Ambient Salinity on Plasma Osmolality of Juvenile Alligator Gar *Atractosteus spatula*, Spotted Gar *Lepisosteus oculatus* Paddlefish *Polyodon spathula*, and Lake Sturgeon *Acipenser fulvescens*.** Quenton C. Fontenot\*, Mark Suchy, Tim Clay, Ricky Campbell, Wendell Lorio, and Allyse Ferrara
- 11:50 – 12:10 Effects of Salinity Acclimation on Growth, Plasma Osmolality, and Metabolic Rate of Juvenile Alligator Gar.** Daniel E. Schwarz\* and Peter J. Allen
- 12:10 – 1:30 LUNCH SERVED ON SITE (Plantation Suite of Student Union)**
- 1:30 – 1:50 Standard Metabolic Rate of Alligator Gar *Atractosteus spatula* at Three Temperatures.** Nick Barkowski\*, Brandon Baker, Brett Timmons, Alf Haukenes, and Steve E. Lochmann
- 1:50 – 2:10 Effects of Salinity on Growth and Survival on Larval and Juvenile Alligator Gar *Atractosteus spatula*.** Quenton C. Fontenot\*, Mark Suchy, Tim Clay, Wendell Lorio, and Allyse Ferrara
- 2:10 – 2:30 Mercury Concentrations in the Muscle Tissue of Longnose Gar *Lepisosteus osseus* in Coastal North Carolina with Additional Contributions to the Life History.** Jillian H. Osborne\* and R. A. Rulifson
- 2:30 – 3:10 An Outgroup for Functional Analysis of the Teleost Genome Duplication: The Spotted Gar *Lepisosteus oculatus*.** John Postlethwait\*, Angel Amores, Yi-Lin Yan, Julian Catchen, Allyse Ferrara, and Quenton Fontenot
- 3:10 – 3:40 Functional Analysis of *sox9* in the Spotted Gar *Lepisosteus oculatus*.** Angel Amores\*, John Postlethwait, Yi-Lin Yan, Julian Catchen, Allyse Ferrara, and Quenton Fontenot
- 3:40 – 3:50 BREAK**
- 3:50 – 4:10 Use of Digestive Physiology to Design of Microdiets for the Larviculture of Tropical Gar *Atractosteus tropicus*.** C.A. Frías-Quintana, C.A. Álvarez-González, N. Perales-García, G. Márquez-Couturier, W.M. Contreras-Sánchez\*

- 4:10 – 4:30 Tropical Gar, *Atractosteus tropicus*, Culture in Southeastern Mexico.** Contreras-Sánchez, W.M.\*; Marquez-Couturier, G.; Hernández-Vidal, U.; Hernández-Franyutti, A.; Alvarez-Gonzalez, C.A.; Paramo-Delgadillo, S.; Arias-Rodríguez, L.
- 4:30 – 5:00 Physiological Response of Alligator Gar (*Atractosteus spatula*) to Pollution.** Carlos Aguilera\*, Julio Cruz, Roberto Mendoza, and Ramón Chacón
- 6:00 – 9:00 Crawfish Boil at the Nicholls State University Farm with Live Cajun Music Performed by Treater.**

**FRIDAY 28 MAY 2010: 101 Gouaux Hall, NSU**

- 8:30 – 10:00 Registration open**
- 9:00 – 9:20 Bacteriocidal Activity of Spotted Gar Serum Mediated by Complement Protein.** Justin Merrifield\* and Rajkumar Nathaniel
- 9:20 – 9:40 Reproductive Characterization of Spotted Gar *Lepisosteus oculatus* in the Upper Barataria Estuary, Louisiana.** Olivia A. Smith\*, Allyse M. Ferrara, Quenton C. Fontenot, and Gary J. LaFleur, Jr.
- 9:40 – 10:00 Evaluating Habitat Utilization and Diet of the Threatened Spotted Gar (*Lepisosteus oculatus*) in Rondeau Bay with the Aid of Radiotelemetry and Gastric Lavage.** William Glass\*, Lynda Corkum and Nicholas E. Mandrak
- 10:00 – 10:20 Preliminary Analysis of Alligator Gar *Atractosteus spatula* and Spotted Gar *Lepisosteus oculatus* Diets Collected in a Drainage Canal in Port Sulphur, Louisiana.** Rachel Ianni\*, Allyse Ferrara, and Quenton Fontenot
- 10:20 – 10:40 The Neurotoxic Potency of Gar Oocyte Extract Peaks at Spawning.** Nicole Broussard, Hamilton Farris, Allyse Ferrara, and Gary LaFleur, Jr\*.
- 10:40 – 11:00 Strategies for the Commercial Pilot Scale Culture of Tropical Gar (*Atractosteus tropicus*) in Tabasco, Mexico.** Márquez-Couturier, G. Vázquez-Navarrete\*, C.J. Olive-Alvarez, I.C. Olive-Alvarez, O. Alvarez-González, C.A.
- 11:00 – 11:40 Small-Scale Experimental Culture and Cost Analysis of Tropical Gar *Atractosteus tropicus* in Earthen Ponds in Tabasco, Mexico.** Ulises Hernández-Vidal\*, Alejandro Macdonal-Vera, Juan M. Vidal-López, Wilfrido M. Contreras-Sánchez, Arlette A. Hernández-Franyutti

**11:40 – 12:00 Tropical Gar *Atractosteus tropicus* Culture in PVC-Lined Circular Tanks in Tabasco, Mexico.** Ulises Hernandez-Vidal, Alejandro Macdonal-Vera, Wilfrido M. Contreras-Sánchez , Otilio Mendez-Marin, Sergio Hernandez-Garcia, Lenin Arias-Rodriguez, Arlette A. Hernandez-Franyutti

**12:00 – 12:30 International Gar Network Business Meeting (All are welcome to attend)**

**POSTER SESSION: 101 Gouaux Hall Lobby, NSU**

**Early Growth and Survival of Larval Alligator Gar *Atractosteus spatula* Reared on Artificial Floating Feed With or Without a Live *Artemia* spp. Supplement.** Tim A. Clay, Mark D. Suchy, Wendell Lorio, Allyse M. Ferrara, and Quenton C. Fontenot

**Allometric Growth in Cuban Gar *Atractosteus tristoechus* Larvae.** Yamilé Comabella, Julia Azanza, Andrés Hurtado and Tsai García-Galano

**Molecular Evolution of the Inhibin  $\alpha$ -Subunit in Holostean Fishes.** deGravelle G.L., Moore B.C., McClellan M. I., McLachlan J.A.

**Alternate Aging Techniques for Alligator Gar.** Kayla DiBenedetto

**Comparison of Non-Linear Modeling for Alligator Gar Growth.** Lin Xie, Peter Perschbacher, and Steve Lochmann

**Alligator Gar *Atractosteus spatula* Intensive Culture Program at Warm Springs National Fish Hatchery, Warm Springs, Georgia.** Jaclyn Zelko and Carlos Echevarría