

Arkansas Chapter of the Wildlife Society

Newsletter

VOLUME 36

December 2014

NUMBER 2

2015 Officers

President

Allison Fowler allison.fowler@agfc.ar.gov

Past-President

Tom Nupp tnupp@atu.edu

Secretary-Treasurer

Rachael Urbanek rurbanek@atu.edu

Member-at-large

Keith Weaver keith_weaver@fws.gov

Newsletter Editor

Blake Sasse Blake.Sasse@agfc.ar.gov

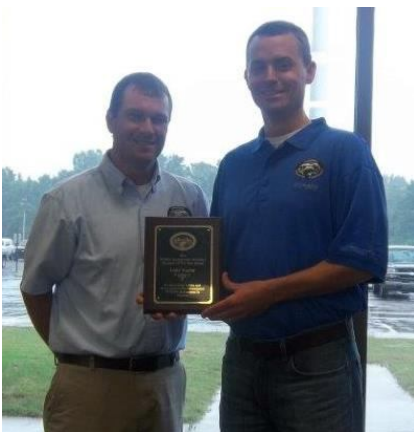
Arkansas Chapter Web Site

<http://www.wildlife.org/arkansas>

Arkansas Game and Fish Commission Awards

Earlier this year, the Arkansas Game and Fish Commission's Wildlife Management Division announced their annual employee awards.

Luke Naylor, Waterfowl Biologist, was named as the Wildlife Biologist of the Year.



Sandee Schultz, Administrative Specialist at the Little Rock office, was named Wildlife Technician of the Year.



Special Recognition Awards were earned by Jeremy Brown for his work on duck blind removal projects in northeast Arkansas and by JP Fairhead for his work in the feral hog program.

Fall Meeting Minutes 11 September 2014 Arkansas State University, Jonesboro AR

Attendance (Field Trip): Cancelled
Attendance (Meeting): 49

The meeting was supposed to begin with field demonstrations at St. Francis Sunken Lands WMA but was cancelled due to poor weather conditions.

Following lunch, the group convened at the Arkansas State University in Jonesboro for the plenary session and business meeting. Dr. Tom Nupp, President, opened the session by welcoming everyone and thanking Dr. Virginie

Rolland, Arkansas State University, Allison Fowler, President-Elect, and Dr. Rachael Urbanek, Secretary-Treasurer for organizing the meeting. A detailed agenda for the afternoon session is included.

Dr. Rich Grippo from Arkansas State University (ASU) presented first on ASU's biological field stations. ASU recently acquired Harp Field Station in Rush, AR, in 2009. It is located near the Buffalo National River (10-15 min drive to river access) and is adjacent to wilderness land. It includes a 1960s-era deluxe home with 4 bedrooms, an attached garage, and 4-bay detached garage. Currently, Harp Field Station is being used for ASU field trips but Dr. Grippo and Dr. Tom Risch have received an NSF Planning Grant to update the lands for more biological and education opportunities. The other field station, Bearitage Farms, is a restored wetland that was bequeathed to ASU upon the death of Mr. Scott House. The property has L'Anguille River cutting through the center and there is a building set up as a research center with a dormitory and classroom. Currently, the property is in probate court. Drs. Risch and Grippo encourage collaboration across the state with other agencies and universities to use these field stations.

Clint Johnson, a Private Lands Biologist from AGFC reviewed the AGFC Private Lands Program next. Clint explained that there are 33 million acres that comprise Arkansas and 82% of that land is privately owned. Although Arkansas appears to have a lot of public land, the conservation and management practices on public lands are a part of a metapopulation within a non-managed or conserved private-lands matrix. Private lands biologists make site visits and comprehensive management plans for private landowners. They also conduct habitat restoration on working lands and recreational lands to create or improve habitat for both game and non-game species. These biologists provide technical advice in management tools and conduct the Deer Management Assessment Program. In addition, they conduct outreach and education including workshops and field days for the public. In 2013, the Private Lands Program included 52,000 acres of private land.

Next, Bubba Groves, another Private Lands Biologist from AGFC, reviewed his moist soil habitat reclamation on a wetland easement

project. This pilot project included 2 wetland easements (formerly a part of the Wetland Reserve Program). Bubba explained that the Private Lands Program received \$200,000 on short notice and this project was a quick pilot program with some success. In addition to disking overgrown wetland easement, they were able to mail information to WRP land owners explaining that the landowners can request help on enhancement opportunities through the Private Lands Program.

Chris Thigpen, a M.S. student from ASU presented next on his early ideas for his thesis proposal. Chris explained that in 2011 a landowner found 16 Fowler's toads and 1 dwarf American toad and of this collection, the majority had visible abnormalities. The abnormalities included loss of entire limbs and curvature of the spine. The toads were collected opportunistically, euthanized, photographed and radiographed for museum collection. Chris is exploring reasons as to why such a high prevalence of abnormalities exist in the toad populations at this study area and provided a brief overview of his plans for this research project.

The business meeting was led by President Dr. Tom Nupp. Dr. Rachael Urbanek, Secretary-Treasurer, presented the fall meeting minutes; the minutes were approved by the attendees. Rachael reviewed the chapter financial report and membership report and these reports were also approved. Rachael requested that leaders of the student chapters provide her with updated current student member lists for the 2014-15 academic year.

Robert Floyd, President of the student chapter of University Arkansas – Monticello (UAM) presented updates for his chapter. Robert stated that the UAM chapter was in a rebuilding year since many students have graduated but was pleased to report that 30 students participated in the first meeting. He reported that the student chapter held their Annual Hamburger Cookout in the spring and raised \$400. The chapter's future events include an archery with youth program, creating undergraduate research opportunities, organizing more group activities, and participating in conclave.

Geoffrey Payne, President of the student chapter of ASU was next to report updates for his

chapter. As of spring semester, the student chapter had 78 members. The ASU chapter participated in conclave and finished 18th overall and placed 2nd in wildlife photography and 3rd in radiotelemetry. Geoffrey also mentioned they are continuing to maintain their 1-mile stretch of road for trash clean-up.

Lisa Kleinschmidt reported that the first meeting for the Arkansas Tech University student chapter had 55 attendees. The chapter has already participated in their first event, Bow Jam, which is an archery for youth program. Upcoming events for the chapter include their annual volunteerism at Bearcat Hollow and a field day geared toward introducing freshman fish and wildlife students to field techniques.

President Tom Nupp explained a proposal developed by the ARTWS Executive Board to change the bylaws of ARTWS. Currently, the bylaws state "The regular meeting in September shall be known as the Annual Meeting." The Executive Board is proposing to eliminate the month in the text so that the bylaws read "The regular meeting shall be known as the Annual meeting." The current members attending the meeting submitted written votes for support or rejection of this proposed change. Absentee ballots will be sent to all current members (i.e., current on dues) that were not present at the meeting. Final results will be calculated by the end of September and results of the vote will be disseminated via the email listserv.

Members attending the meeting also elected a new Member-at-Large position which replaces part of the duties held by Blake Sasse. Blake will continue as the Historian, Newsletter Editor, and Webmaster. Nominations for the new Member-at-Large included Mary Lane, USFS, and Keith Weaver, USFWS. Keith Weaver was elected for the position of Member-at-Large by the attending members.

President Dr. Tom Nupp showed an email from the Conservation Affairs Committee (CAC) leader of the Southeastern Section of TWS. The CAC is asking for volunteers from each state chapter to be state liaisons for disseminating regional and national legislation. Tom explained that this type of work is traditionally held by the President and suggested that Allison Fowler, President-Elect take on these duties. Allison accepted the position and Tom announced that

anyone else that would like to also help out should contact Tom or Allison for details.

The business meeting ended with a few comment from President Dr. Tom Nupp regarding the timing of our meetings. He mentioned that the fall meeting is often problematic for university members due to the semester getting started and that the Executive Board will be looking for input as to when the best time for a meeting is for each member. There may be a survey distributed to members in the future regarding the timing and ideas for a multi-day meeting.

Kathryn Brautigam, a M.S. student from UAM presented after the business meeting on the preliminary results of her thesis project. Kathryn's objective was to test the effect of deer feeders on the survival of chicken eggs in artificial ground nests in Lincoln and Drew counties. She hypothesized that eggs within nests near feeders would have lower survival rates due to an increase of mesopredators in the area. Her study area included 5 private lands in which she placed 1 feeder plot with corn and 1 control that had an empty feeder. In a 300m radius around each feeder, she placed 32 nests randomly, each with 5 brown fresh chicken eggs. Using 170 game cameras, she assessed the depredation of the eggs and what species came to the feeders in the summer of 2013 and 2014. Due to extremely low survival of all eggs in all nests, her results did not provide any evidence that deer feeders were an indirect cause of low egg survival.

Another M.S. student from ASU, Daniel Istvanko, was next to present on his thesis work on evening bats. Daniel explained that there is a paucity of information regarding sex-specific foraging habitat in the species. Although the species is considered a habitat generalist, some research has indicated there may be differences in habitat use by males and females. His objectives for his thesis were to estimate foraging size of both male and female evening bats, characterize diurnal roost sites, and determine if sex-specific habitats were being utilized. Daniel captured bats in 2013 and 2014 and placed radiotransmitters on 70. He obtained >30 locations on 14 male bats and 11 females for his analyses. Males had smaller foraging ranges than females using both a fixed kernel estimate and a minimum convex polygon

estimate. Daniel also located and characterized 73 roosts (15 female, 58 male) and his preliminary results indicate that there are differences between the sexes for habitat use.

Dr. Don White, Jr. presented on the black bear genetic work he has collaborated on with Thea Kristensen over the past several years. Hair snares were used to collect hair for DNA extraction in the Ouachita Mountains from 2006-2008 and in the Ozark Mountains from 2009-2011. Their genotyping from fragment analyses work revealed an estimated 60-80 bears (minimum) in the Ouachita Mountains and approximately 200 bears in the Ozark Mountains at time of collection. Dr. White reviewed previous literature that explained the Alt-Rogers Paradigm: female bears are philopatric and males disperse. He explained that recent studies have questioned this paradigm and his newest study tested it. Dr. White collected DNA data from regional bear biologists of source populations and expanding populations in the Southeastern part of the United States. His results supported the Alt-Rogers Paradigm and recommends that future studies combine demographic methods gathered from mark-recapture and radiotelemetry studies with genetic approaches to further understand this paradigm.

Prior to the adjournment of the meeting, Dr. Tom Nupp announced that his term as President is complete and Allison Fowler is now the President. Allison presented Tom with a commemorative plaque and thanked him for time and effort as the leader of ARTWS.

Team from the Ozark National Forest Receives Award for their work in Forest Restoration

The Ozark Highlands Ecosystem Restoration Collaborative Forest Landscape Restoration Project Coordination Team received the Chief's Honor Award in the Sustaining Forests and Grasslands Category.

The team was comprised of Jimmie Dixon, Jeremy Eubakns, Rhea Whalen, and William Carromero.

This ten-year restoration project returned prescribed fire and woodlands ecological conditions to the landscape; restored woody debris to local streams for aquatic biodiversity; improved stream and lake habitat; controlled invasive species; improved and enhanced habitat for rare and declining species, and reduced the likelihood of wildfire. Improvements in the treated areas promoted forest health and reduced the impacts of red oak borer, a significant cause of oak decline in this area.

The project brought fourteen partners together, including Arkansas Game and Fish Commission, The Nature Conservancy, National Wild Turkey Federation, Natural Resources Conservation Service, Fish and Wildlife Service, University of Arkansas and Arkansas Wildlife Federation. During the lifetime of the project, partners will treat 217,892 acres in the Ozark-St. Francis National Forests.

The project leveraged partner contributions to produce far more wildlife habitat restoration than originally anticipated while improving habitats for endangered and threatened species. The united efforts of partners brought together by this project created improvements in the ecosystem that would not otherwise have been accomplished. The project created early seral stage habitat that benefits endangered Indiana and Ozark Big-eared bats, Eastern Small-footed Myotis, and Bachman's Sparrow foraging, and created woodland conditions for these species to shelter. Restoration thinning, understory removal and prescribed burning promoted structured and diverse forest conditions that promote Ozark Chinquapin and Small-headed Pipewort, while reducing the impacts of red oak borer and oak decline.

The partnership also expanded options through collaboration with the Natural Resources Conservation Service (NRCS). NRCS and the USFS submitted a successful Chief's Joint Partnership Initiative proposal to restore an additional 62,000 acres of habitat supporting the endangered Indiana bat.

The unique value of this project is the magnitude of ecosystem restoration and the diversity of management activities that have been and will be accomplished through this vital and progressive partnership.

**EXECUTIVE COMMITTEE
MEETING
15 December 2014
Arkansas Game and Fish
Commission,
Little Rock**

Members Present: Allison Fowler, Tom Nupp,
Keith Weaver, Rachael Urbanek

President Tom Nupp called the Arkansas Chapter of The Wildlife Society (ARTWS) executive committee meeting to order at 9:45 AM Wednesday 16 December 2014. President Tom Nupp began by reviewing the student requests for money. The University of Arkansas-Fayetteville Student Chapter had sent a proposal and budget for attending the Southeast Deer Study Meeting in February 2015 and requested an amount of \$400 to cover registration and hotel costs for 3 students. The Virginia Tech Student Chapter also requested money to sponsor the 2015 Conclave.

The board members discussed their priorities for funding student activities and agreed that the following items (in no particular order) were to be priorities of money allocated for student funding requests: 1) Student travel to professional meetings, 2) Conclave (sponsorship and student travel), and 3) Professional development via workshops and seminars. Much discussion followed regarding the current Student Fund and Allison Fowler, President-Elect, noted that our bylaws stated that money cannot be spent out of the Student Fund until \$10,000 has been reached and then allocations can be made off of the interest. Currently, the Student Fund has only \$1391.50 which was collected via lifetime dues, silent auctions in 2009 and 2010, and a few donations specifically toward the fund. The ARTWS Chapter regularly provides money for student activities out of the general fund.

Tom Nupp proposed that we create a new fund for student activities and allocated \$1,200 per year for student activities. He proposed that for the year 2015, we move this money from the general fund into the new student fund and when that money is allocated no more student requests will be fulfilled in the year 2015. He also proposed that all member dues and any

fundraising income will go back into this new student fund until \$1,200 is collected for the year 2016. Lastly, he suggested that a notice goes out to all student chapters about this funding opportunity and a deadline is set for funding requests. Rachael Urbanek, Secretary/Treasurer, proposed that the deadline for student requests for a given year would be the first week of December in the previous year so that the Executive Board can prioritize the requests at their annual board meeting. She also proposed that the new student fund be called the Student Professional Development Fund to reflect the priorities of funding agreed upon at this meeting. The board members voted on all of these propositions and agreed unanimously to enact these changes:

For the year 2015, \$1,200 will be moved to the Student Professional Development Fund. Since the agreed upon proposal deadline has passed, the board agreed they will entertain requests from students as done previously (i.e., when they are requested throughout the year) for the year of 2015. The board agreed to fund the UAF student chapter for their request of \$400. Rachael Urbanek proposed that ARTWS sponsor Conclave with \$100 and the board agreed upon this allocation. With this sponsorship, ARTWS will be recognized on the Conclave website for 2015: <http://www.tws.org.vt.edu/Conclave/conclave.html>. Thus, there is a total of \$700 remaining for student requests for the year 2015. All requests should be emailed to Rachael Urbanek (rurbanek@atu.edu) with a Word document that includes a short description of the activity including how it relates to the priorities listed above and a budget. In early fall of 2015, a request for student professional development proposals will be sent to all Arkansas student chapters of TWS stating a deadline of the first week of December for 2016 requests. The board will decide which requests will be funded at their annual board meeting in December.

Tom Nupp then brought up the reoccurring idea to have 1 annual meeting. Allison Fowler noted that our bylaws still state that we must have 2 regular meetings a year. Tom Nupp proposed that the board proposes another bylaw change so that it reads "a minimum of 1 regular meeting a year." He explained that this change in wording would allow for the option of 1 large annual meeting or multiple meetings as done in the past.

The board agreed to propose this change in the bylaws and a formal announcement will be made to the members via email 1 month prior to the spring meeting. Members will then be able to vote on the proposed bylaws change at the spring meeting.

The board then discussed what costs and opportunities could be possible if there was a 2-day meeting. Expenses discussed included meeting rooms, a keynote speaker, meals, and a workshop. Allison Fowler suggested that a good keynote speaker would be a TWS section or national representative. Rachael Urbanek discussed possible workshops included chemical immobilization, Information Theoretics (David Anderson, AIC), and Program – R. The board also discussed instituting a regular silent auction at the meeting to fundraise for the Student Professional Development Fund. If the ARTWS members approve the bylaw change in the spring meeting of 2015, the board plans to have a 2-day meeting in 2016 and there would be no fall 2015 meeting.

Lastly, the board reviewed possible dates for the spring 2015 meeting. Based on other known meetings, spring break, and other events, the board is trying for April 9th or April 16th as possible dates. Tom Nupp suggested that the location be central to increase member attendance as seen historically when meetings were held in a central location. Allison Fowler will be looking into the 4-H Center or Ferncliff Camp and Conference Center, both in the Little Rock vicinity, as possible locations for the spring meeting. Allison Fowler suggested that both places would be ideal for a birding workshop and Tom Nupp suggested a possible competition. The board decided that the workshop for the spring meeting will be called the “The Big Morning” and groups of participants will be competing to identify the most bird species. Allison Fowler agreed to look into possible prizes for the competition. She also suggested that a silent auction should be held at the spring meeting; a notice to all members to bring auction items will be made via email 1 month prior to the meeting.

Tom Nupp reminded the board that 2 officer positions will be up for elections at the spring meet: President-Elect and Secretary/Treasurer. Tom Nupp appointed Keith Weaver, Member at Large, as the chair of the nomination committee.

Rachael Urbanek proposed that the board asks the general membership for suggestions of nominations, the board agreed this will provide a democratic opportunity for all members. Keith Weaver asked Rachael Urbanek to send a notice to all members for suggestions and to compile the list. Keith Weaver, Tom Nupp, and Allison Fowler are all not eligible for the election. Rachael Urbanek is eligible for a second term of Secretary/Treasurer or President-Elect. Thus, Keith Weaver, Tom Nupp, and Allison Fowler will make the formal nominations for these positions. The nominated individuals will be listed in an email to the general membership 1 month prior the spring meeting.

The meeting was adjourned at 12:00 PM on 15 December 2014.

Rachael Urbanek, Secretary/Treasurer (13-15)

Arkansas Game and Fish Commission centennial to be celebrated

In a few months, the 100th anniversary of the Arkansas Game and Fish Commission will be celebrated. The date is March 11, 2015. The AGFC was created that day in 1915 and, in following decades, came state agencies dealing with parks, forests, soil and water, along with conservation courses in schools.

A variety of events is planned by the AGFC and partners to celebrate the centennial. Major programs are planned at the State Capitol, Wednesday, March 11, and at open houses at AGFC nature centers, fish hatcheries and other facilities across Arkansas, Saturday, March 15. Keep an eye on the AGFC website – www.agfc.com – and its Facebook page for more information.

Two books published by the AGFC will be on sale in time for Christmas. One is a coffee-table format photo history book. The other is a colorful cookbook with 100 recipes from AGFC staff members.

“We invite everyone in Arkansas to participate in many of the centennial events that will be

coming up,” said AGFC Director Mike Knoedl. “The natural resources of Arkansas belong to all the people, and we are privileged to look after the wildlife and the fish within our borders.”

Ron Duncan, chairman of the AGFC, said, “This is a milestone anniversary for all Arkansas, not just the Game and Fish Commission. We have the abundant and productive hunting and fishing today because of the foresight of Arkansas leaders a century ago. Without the support of citizens, this could not have been successful.”

The outlook for conservation in 1915 was dark for several reasons. Europe had become embroiled in a world war, with the United States would be pulled in just two years later. Mexican revolutionaries crossed into American territory. In Arkansas, elk, bison and swans were gone, deer were drastically reduced, bears extremely scarce, and ducks and geese in decline.

Creation of a state agency to look after wildlife and fish failed in the Arkansas Legislature in 1913. With renewed efforts, it passed two years later through intense efforts by State Sen. J.M. Futrell of Paragould and State Rep. Lee Miles of Little Rock. Act 124 was signed into law March 11, 1915, by Gov. George Washington Hays.

The AGFC’s birth came in a period of nationwide movements to protect natural resources. Spearheaded by President Theodore Roosevelt, numerous state and national agencies were created over a dozen or so years. The Migratory Bird Act passed in 1913, which effectively ended market hunting. The death of the last passenger pigeon came in 1914. Big Lake National Wildlife Refuge was created in northeastern Arkansas in 1915.

Later came amendments to the state Constitution. In 1945, Amendment 35 gave the AGFC semi-autonomous status and in 1996 Amendment 75 gave it secure revenue with the 1/8-Cent Conservation Sales Tax.

Call for Proposals: Workshops, Symposia, Panel Discussions, and Special Poster Sessions

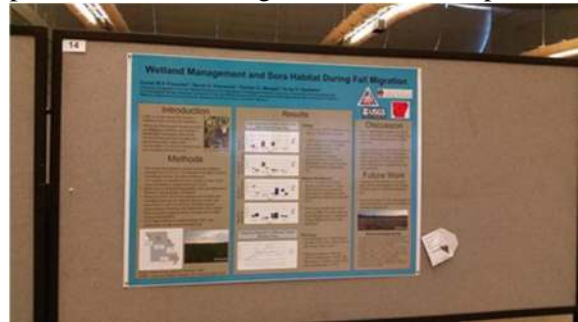
Proposals for workshops, symposia, panel discussions, and special poster sessions are invited for the 22nd Annual Conference of The Wildlife Society with a February 6th deadline. The Wildlife Society invites proposals related to all aspects of wildlife ecology, management and conservation.

Please direct any questions related to proposal preparation or submission to Tricia Fry, Program Committee Coordinator, tricia@wildlife.org.

Student Chapter News

University of Arkansas at Fayetteville

The chapter started the fall semester by participating in the RazorBash, which is hosted yearly by the University Programs Committee to promote clubs and organizations on campus. We



had 200+ students visit our booth and show interest in learning more about our chapter and wildlife in general. We hosted our first meeting of the semester in September and had 17 people attend. We added 9 new members for the year and have more that are expected in the spring (due to fall schedule conflicts). Our meeting this fall included: reptile and amphibian identification, how to age an array of common species of wildlife, and how to obtain a wildlife internship for this following summer.

We had a chapter member (Auriel Fournier) attend and present a poster at the Wildlife Society Annual Conference in Pittsburgh, PA.

Students from our chapter also collected biological data from deer harvested at the



Wedington Wildlife Management Area one weekend in November as a joint endeavor among the Arkansas Game and Fish

Commission, the U.S. Forest Service, and the UAF student chapter of The Wildlife Society.

Our chapter is planning on sending students to the Southeast Deer Study Group in Little Rock, AR and the Southeastern Wildlife Conclave in Smith Mountain Lake, VA this spring.

We will also be hosting an outreach program called “Birds & Breakfast” where we capture birds and teach the local community about why research is important to wildlife. This event is usually well attended. Our members have mentioned that they would like an ATV training course, so we are currently planning that for the spring as well.

Phillip Stephenson, President

Deaths

Charles David Goad, 56, of Wooster, Arkansas passed away on Friday, October 31, 2014 due to a traffic accident. He was born July 17, 1958 in Newport Arkansas. David is survived by his loving wife of 18 years, Wendy Barnes Goad, two daughters; Megan Goad of Paris, and Mattie Goad of the home and one son; Ethan Goad of the home, his father; Dale (Jane) Goad of Bradford, one sister; Kay (Mike) Price of Searcy, as well as many nieces, nephews, and other relatives and friends.

David was an avid sportsman and loved spending time with his family outdoors. He loved watching his children in all their various school and church activities. He loved being their coach and mentor as well as to the other kids in the community.

He worked for the Arkansas Game and Fish as a Wildlife Biologist, Chief of the Wildlife Management Division, and Assistant Director for over twenty five years, retiring in 2014, and

was currently employed by the U.S. Fish and Wildlife.

John Joseph Lane, 48, of Subiaco died Wednesday, Nov. 12, 2014, in his home. He was born Feb. 14, 1966, in Cedar Rapids, Iowa. He attended school in Mt. Vernon, Iowa, earned an associate degree at Iowa Lakes Community College in Estherville, Iowa, earned a bachelor’s of science in fish and wildlife management at Arkansas Tech University in Russellville, and a master’s of science in biology at Tennessee Technological University in Cookeville, Tenn. He worked for USACE Waterways Experiment Station, U.S. Fish and Wildlife Service, Delta Waterfowl Research Station and The Nature Conservancy. He worked for the Arkansas Game and Fish Commission as assistant regional supervisor for southwest Arkansas. He worked for the U.S. Forest Service in Cleveland, Tenn., and the Ocoee Ranger District. He worked for the U.S. Forest Service as recreation program manager for the Boston Mountain and Mt. Magazine Ranger Districts.

Personnel Changes

This spring the AGFC hired Randy Brents as a Biologist Specialist in the Russellville office, Levi Horrell as a Biologist in the Beaver Lake office, and Brian Maddox as a Biologist in the Calico Rock office.

Mitch Wine, who was working with highway-related projects for the U.S. Fish and Wildlife Service’s Conway Ecological Services office is now serving as their karst and cave biologist.

Also this spring, the AGFC promoted Matthew Warriner to Assistant Chief of Wildlife Management. Zack Yancey, of the Jonesboro office, was promoted to Biologist.

Randall Bullington, AGFC Region 6 Supervisor, Ray Wiggs, AGFC Region 7 Supervisor, and Mark Baron, Field Biologist in Region 7 all retired in June.

Ivan Mitchell, AGFC Region 8 wildlife technician retired in December.

Dan Miller, wildlife biologist for the Caddo/Womble Ranger District on the Ouachita National Forest, retired in October.

Arkansas Publications

(send citations to newsletter editor)

Arkansas Game and Fish Commission. 2014. AGFC Strategic Plan Annual Report. <http://www.agfc.com/resources/Publications/Strategic%20Plan%20Annual%20Report%202014.pdf>

Beatty, WS, DC Kesler, EB Webb, AH Raedeke, LW Naylor, and DD Humburg. 2014. The role of protected area wetlands in waterfowl habitat conservation: Implications for protected area network design. *Biological Conservation* 176: 144-152.

Beatty, WS, EB Webb, DC Kesler, AH Raedeke, LW Naylor, and DD Humburg. 2014. Landscape effects on mallard habitat selection at multiple spatial scales during the non-breeding period. *Landscape Ecology* 29(6): 989-1000.

Bobowski, MM, V Rolland, and TS Risch. 2014. Abundance and distribution of overwintering Red-tailed Hawks and American Kestrels in an agricultural landscape in northeastern Arkansas. *Journal of Raptor Research* 48: 273-279.

Bragg, DC, R O'Neill, W Holliman, J Fox, G Thornton, and R. Mangham. 2014. Moro Big Pine: Conservation and Collaboration in the Pine Flatwoods of Arkansas. *Journal of Forestry* 112(5): 446-456.

Carroll, JM and DG Kremetz. 2014. Density and abundance of Wilson's snipe *Gallinago delicata* in winter in the Lower Mississippi Flyway, USA. *Wildlife Biology* 20(2): 108-114.

Chiavacci, SJ, TJ Bader, and JC Bednarz. 2014. Preferred nest site characteristics reduce predator-specific predation risk in a canopy-nesting raptor. *Journal of Wildlife Management* 78(6): 1022-1032.

Chiavacci, SJ, JC Bednarz, and TJ Benson. 2014. Does flooding influence the types and proportions of prey delivered to nestling Mississippi Kites?. *The Condor* 116(2) 215-225.

Connior, MB, DC Cagle, HE Peek, CR Ellington, and JL Hunt. 2014. Reproductive cycle of Baird's pocket gopher (*Geomys breviceps*) in northern Louisiana. *Southwestern Naturalist*, 59:115-117.

Foth, JR, JN Straub, RM Kaminski, JB Davis, and TD Leininger. 2014. Aquatic Invertebrate Abundance and Biomass in Arkansas, Mississippi, and Missouri Bottomland Hardwood Forests During Winter. *Journal of Fish and Wildlife Management*: 5 (2): 243-251.

Jordan, PN, PR Moore, EL Pannkuk, and TS Risch. 2014. Captures of the Tome's Sword-nosed Bat (*Lonchorhina aurita*) (Chiroptera, Phyllostomidae), from Ometepe Island, Nicaragua, and Range Implications for this Species. *Mastozoología Neotropical* 21: in press.

Kelley, JB, JL Hunt, and MB Connior. 2013. Scarab beetles (Coleoptera: Scarabaeidae) in the dung of native Arkansas mammals. *Journal of the Arkansas Academy of Science* 67:66-69.

Kesler, DC, AH Raedeke, JR Foggia, WS Beatty, EB Webb, DD Humburg, and LW Naylor. 2014. Effects of Satellite Transmitters on Captive and Wild Mallards. *Wildlife Society Bulletin* 38(3): 557-565.

Kremetz, DG., R Crossett, and SE Lehnen. 2014. Nocturnal field use by fall migrating American woodcock in the Delta of Arkansas. *The Journal of Wildlife Management*, 78: 264-272.

Neu, J, PD Jones, Stephen Demarais, AW Ezell, SK Riffell, and TB Wigley. 2014. Retained Woody Structure in 1- to 2-Year-Old Loblolly Pine (*Pinus taeda* L.) Plantations in Mississippi, Louisiana, and Arkansas: Implications for Wildlife Conservation. *Journal of Sustainable Forestry* 33(2): 152-172.

Neupane, D., RL Johnson, and TS Risch. 2014. Temporal and Spatial Patterns of Human-Elephant Conflict in Nepal. Pp. 856-888 in 2013 International Elephant & Rhino Conservation & Research Symposium Proceedings. August 26 -30, 2013. Pittsburgh Zoo & PPG Aquarium. 1511p.

Pannkuk, EL, NW Fuller, PR Moore, DF Gilmore, BJ Savary, and TS Risch. 2014. Fatty Acid Methyl Ester Profiles of Bat Wing Surface Lipids. *Lipids* 49:1143-1150.

Pannkuk, EL, HB Blair, AE Fischer, CL Gerdes, DF Gilmore, BJ Savary, and TS Risch. 2014. Triacylglyceride composition and fatty acyl saturation profile of a psychrophilic and psychrotolerant fungal species grown at different temperatures, *Fungal Biology* 118:792-799.

Pannkuk, EL, LP McGuire, D Gilmore, BJ Savary, and TS Risch. 2014. Glycerophospholipid analysis of Eastern red bat (*Lasiurus borealis*) hair by electrospray ionization tandem mass spectrometry. *Journal of Chemical Ecology* 40:227-235.

Puckett, EE, TV Kristensen, CM Wilton, SB Lyda, KV Noyce, PM Holahan, DM Leslie Jr., J. Beringer, JL Belant, D White Jr., and LS Eggert. 2014. Influence of drift and admixture on population structure of American black bears (*Ursus americanus*) in the Central Interior Highlands, USA, 50 years after translocation. *Molecular Ecology* 23: 2414–2427.

Reilly, BM, JC Bednarz, and JD Brown. 2014. A test of the Swainson's warbler habitat suitability index model. *Wildlife Society Bulletin* 38: 297-304.

Robinson, T J, LM. Siefferman, AB Bentz, and TS Risch. 2014. The separate effects of egg size and parental quality on the development of ornamental plumage colouration. *Ibis* 156:415–423.

Sasse, DB, S Weinstein, and DA Saugey. 2014. Interspecific aggression by a rabid eastern red bat (*Lasiurus borealis*). *Journal of Wildlife Diseases*: 50 (3): 694-695.

Smith, KG, and MH Lehmann. 2014. Friedrich Gerstäcker's natural history observations in Arkansas 1838-1842. *Arkansas Historical Quarterly* 73:17-30.

Upcoming Meetings

Southeast Deer Study Group, February 23-25.
Little Rock.

<http://www.agfc.com/hunting/Pages/SEDSG2015.aspx>

Arkansas Academy of Science, April 10-11,
2015. Henderson State University.