



TEXAS TECH UNIVERSITY

Department of  
Biological Sciences

**The Association of Biologists at Texas Tech University  
Announces the CALL FOR ABSTRACTS for the  
6<sup>th</sup> Texas Tech Annual Biological Sciences Symposium  
10 - 11<sup>th</sup> April 2015  
Texas Tech University  
Department of Biological Sciences  
<http://www.biol.ttu.edu/ttuab/TTABSS.aspx>  
Venue: Biological Sciences & Experimental Sciences Building  
Lubbock, TX- 79409**

The Texas Tech Annual Biological Sciences Symposium (TTABSS) is a great opportunity for all levels of undergraduate and graduate researchers to present proposals, preliminary results, and completed projects. We encourage presenters to use this event to gain experience in making research presentations. Judges are qualified in several biological fields and provide a great resource for networking and discussing science.

**POSTER AND ORAL PRESENTATIONS:**

The Poster Session will take place Friday evening, April 10<sup>th</sup>. Presenters should be at the venue (TEXAS TECH UNIVERSITY MUSEUM) between 5:00 and 5:30 pm for poster set up. Judging of posters will be between 6:00 and 8:00 PM and presenters need to be present at their posters for judging. Poster dimensions should be no more than **34" high by 46" wide**.

**Categories:** Undergraduate Student  
Graduate Student

Oral presentations will take place on Saturday, April 11<sup>th</sup>. The talk format will follow a 12 and 3-minute timeframe for presentation and questions, respectively. Visual aid media available for oral presentations include PowerPoint (PC on site only, bring your own laptop if Mac compatibility is requested), overhead projectors, and laser pointers. If presenter will be using on site PC, please prepare presentations in 1997-2003 PowerPoint (.ppt) saved to a USB drive that will be uploaded at the beginning of your session. Therefore, please arrive at your session early enough for file transfer to occur. Judging of the presentations, by a volunteer committee of Biology faculty and instructors from across the region, will be based on the scientific merit (e.g., methods, design, interpretation) and presentation quality.

<b>Categories:</b> Cell & Molecular Biology	Ecology
Evolutionary Biology	Proposal
Undergraduate	Toxicology
Plant and Soil Sciences	Microbiology
Natural Resource Management	Conservation



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The entrant must determine which category matches the subject matter of their presentation. This will help us to distribute individuals among the categories evenly.

**AWARDS:** Prizes are to be in the form of monies to be used for the advancement of the research described in the presentation (amount to be announced). Award winners will be announced during the Saturday evening banquet.

**ABSTRACTS:** Please submit abstracts for oral and poster presentations by emailing a formatted abstract as a 1997-2003 Word Document (.doc) to **Brandon Gross (brandon.gross@ttu.edu)**. Refer to the **SAMPLE ABSTRACT** at the end of this document for formatting details. **Please contact Brandon Gross (brandon.gross@ttu.edu) if you encounter any problems with abstract submission procedures.** To ensure inclusion in the program, all abstracts, and registration forms, or online registrations must be received by **March 20<sup>th</sup>**.

**OTHER INFORMATION:** Early Submission and Registration (\$20.00) is due by **March 13<sup>th</sup>** and late registration (\$25.00) is due by **March 20<sup>th</sup>**. Guest registration for the Saturday night banquet is \$15. All presenters are encouraged to register early to ensure a spot in the program. The registration desk will open at 5:00 pm on Friday, April 10<sup>th</sup> in the Texas Tech University Museum.

Please visit the 2015 TTABSS website (<http://www.biol.ttu.edu/ttuab/TTABSS.aspx>) for registration details.

### **TENTATIVE SCHEDULE OF EVENTS:**

Friday, April 10<sup>th</sup>

5:00 – 9:00 pm - Poster Session and Vendor Show – Texas Tech University Museum (heavy hors d' oeuvres will be served)

Saturday, April 11<sup>th</sup>

Morning

7:30 – 8:30: Registration and Coffee, Biological Sciences Lobby

8:15 – 8:30: Welcoming by Dr. Lou Densmore, Dept. Chair of Biological Sciences, TTU

8:30 – 12:30: Presentations, Biological Sciences and Experimental Sciences Building

12:30 – 1:30: Lunch Break (No lunch is to be provided, however a guide to nearby restaurants will be provided)

Afternoon/Evening

1:30 – 3:30 Presentations, Biological Sciences and Experimental Sciences Building

11:00am, 4:00 pm - Plenary Talks: Dr. Wyndylyn von Zharen, and Dr. Christopher Brochu. Titles: '*TBD*'

7:00 – 9:00 pm - Awards Banquet and Dinner – Texas Tech University Museum

**CONTACT INFORMATION:** Brandon A. Gross, President, Association of Biologists, Department of Biological Sciences, Texas Tech University, [brandon.gross@ttu.edu](mailto:brandon.gross@ttu.edu)



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### SAMPLE ABSTRACT FORMATTING GUIDELINES:

- Education level – Please indicate **Undergraduate** or **Graduate**
- Presentation category – Please indicate **Poster** or **Oral**, and which of the 9 categories: **Cell & Molecular Biology, Ecology, Evolutionary Biology, Microbiology, Natural Resource Management Conservation, Plant and Soil Science, Proposal, Toxicology, or Undergraduate-if giving an oral presentation.**
- Presentation title – **boldfaced, ALL CAPS**
- Authors – First Name, Middle Initial, Last Name
- Author affiliations – Designated using superscripts (indicate presenter with an asterisk)
- Abstract body – 250 words or less
- Paragraph Spacing – Justified
- Font & spacing – Arial, 11 point, single-spaced
- File type – 1997-2003 Word Document (.doc)

### EXAMPLE

Education – Graduate

Category – Oral/Ecology

### **ISOMETRIC SCALING IN HOME-RANGE SIZE OF MALE AND FEMALE BOBCATS (*LYNXRUFUS*)**

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For solitary carnivores a polygynous mating system should lead to predictable patterns in spaceuse dynamics. Females should be most influenced by resource distribution and abundance, whereas polygynous males should be strongly influenced by female spatial dynamics. We gathered mean annual home-range size estimates for male and female bobcats (*Lynx rufus* (Schreber, 1777)) from previous studies to address variation in home-range size for this solitary, polygynous carnivore that ranges over much of North America. Mean annual home ranges for bobcats (171 males, 214 females) from 29 populations covering the entire north to south and east to west range demonstrated female home-range sizes varied more than an order of magnitude and that, on average, males maintained home ranges 1.65 times the size of females. Male home-range sizes scaled isometrically with female home-ranges sizes indicating that male bobcats increase their home-range size proportional to female home-range size. Using partial correlation analysis we also detected an inverse relationship between environmental productivity, estimated using the normalized difference vegetation index, and homerange size for females but not males. This study provides one of the few empirical assessments of how polygyny influences home-range dynamics for a wide-ranging carnivore.