



TEXAS TECH UNIVERSITY

Department of  
Biological Sciences

**The Association of Biologists at Texas Tech University  
Announces the CALL FOR ABSTRACTS for the  
8<sup>th</sup> Texas Tech Annual Biological Sciences Symposium  
7 - 8<sup>th</sup> April 2017**

**Texas Tech University  
Department of Biological Sciences  
<http://www.biol.ttu.edu/ttuab/TTABSS.aspx>  
Venue: Texas Tech University Museum  
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 7<sup>th</sup>. Presenters should be at the venue (TEXAS TECH UNIVERSITY MUSEUM) between 4:30 and 5:00 pm for poster set up. Judging of posters will be between 6:30 and 8:30 PM and presenters need to be present at their posters for judging. Poster presentations will be on a first come first-served basis. 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 8<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	
Museum Science	

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 (1<sup>st</sup> place is \$250, 2<sup>nd</sup> place is \$150). Award winners will be announced during the Saturday evening banquet.

**ABSTRACTS:** Please submit abstracts for oral and poster presentations through the registration online. Refer to the **SAMPLE ABSTRACT** at the end of this document for formatting details. **Please contact Taylor Soniat ([taylor.soniat@ttu.edu](mailto:taylor.soniat@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>, 2017.**

**OTHER INFORMATION:** Early Submission and Registration (\$20.00) is due by **March 14<sup>th</sup>** and late registration (\$25.00) is due by **March 20<sup>th</sup>**. Guest registration is \$15 (Does not provide registration bag or t-shirt. \$15 covers attendance and Saturday banquet). All presenters are encouraged to register early to ensure a spot in the program. The registration desk will open at 4:30 pm on Friday, April 7<sup>th</sup> in the Texas Tech University Museum.

Please visit the 2017 TTABSS website (<http://www.biol.ttu.edu/ttuab/TTABSS.aspx>) for registration details.

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

Friday, April 7<sup>th</sup>

4:30 – 5:00 p.m.	Poster Set-up and Registration, Texas Tech University Museum (heavy hors d' oeuvres will be served)
5:00 – 5:15 p.m.	Welcoming by Faculty of Dept. of Biological Sciences
5:30 – 6:30 p.m.	Plenary Talks, Dr. Matt Chumchal
6:30 – 8:30 p.m.	Poster Session, Judging and Vendor Show
8:30 – 9:00 p.m.	Poster Takedown

Saturday, April 8<sup>th</sup>

Morning

7:30 – 8:30 a.m.	Registration and Coffee, Texas Tech University Museum
8:15 – 8:30 a.m.	Welcoming by Faculty of Dept. of Biological Sciences
8:30 – 10:00 a.m.	Presentations, TTU Museum
10:00 – 10:15 a.m.	Coffee Break
10:15 – 12:00 p.m.	Presentations, TTU Museum
12:00 – 1:30 p.m.	Lunch Break (No lunch is to be provided, however a guide to nearby restaurants will be provided)

Afternoon/Evening

1:30 – 3:00 p.m.	Presentations, TTU Museum
3:00 – 4:00 p.m.	Plenary Talks, Dr. Dan Riskin



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## Department of Biological Sciences™

4:00 – 5:00 p.m.

Self-Guided Tour of TTU Museum (optional)

6:00 – 9:00 p.m.

Awards Banquet and Dinner – TTU Museum

**CONTACT INFORMATION:** Emily A. Wright, TTABSS Chair, Association of Biologists, Department of Biological Sciences, Texas Tech University, [emily.a.wright@ttu.edu](mailto:emily.a.wright@ttu.edu)

### 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, Museum Science, 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 – 2000 characters or less (includes spaces)
- Paragraph Spacing – Justified
- Font & spacing – Arial, 11 point, single-spaced

### EXAMPLE

Education – Graduate

Category – Oral/Ecology

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

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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.