TEXAS TECH UNIVERSITY
Department of Biological Sciences

The Association of Biologists at Texas Tech University Announces the CALL FOR ABSTRACTS for the

11th Texas Tech Annual Biological Sciences Symposium

24th-25th April 2020
Texas Tech University
Department of Biological Sciences
(http://www.depts.ttu.edu/biology/TTUAB/TTABSS/2020/
Venue: Texas Tech University Student Union Building
Lubbock, TX- 79409

The Texas Tech Annual Biological Sciences Symposium (TTABSS) is a great opportunity for all levels of undergraduate and graduate student 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:

Poster Session:

The Poster Session is first come first serve. The first 100 people will be given a spot to present.Poster dimensions should be no more than **34" high by 46" wide**. Please note that the only categories for posters are graduate or undergraduate. There are **no** specific categories (i.e. Ecology & Evolutionary Biology) for posters.

Poster Categories:

Undergraduate Student
Graduate Student

Oral Presentations:

Oral presentations will take place on Saturday, April 25th. 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 PowerPoint (.pptx) saved to a USB drive that will be uploaded at the beginning of your session. Therefore, please arrive at the beginning of your session, so as not to disturb the other presenters before you. 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.

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Oral Presentation Categories:

Wildlife & Fisheries Conservation
Microbiology & Medicine
Undergraduate
Proposal
Ecology & Environmental Biology
Physiology & Evolutionary Biology
Genetics & Genomics
Molecular Biology & Biochemistry
Toxicology
Plant & Soil Science
Mathematical & Computational Biology
Emerging Professionals*

The entrant must determine which category matches the subject matter of their presentation. This will help us to distribute individuals among the categories evenly. If your talk is better suited for a category other than the one you choose, we reserve the right to switch your talk to the more fitting category.

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 submitting a formatted abstract as a Word Document (.docx) to megan.l.matthews@ttu.edu. Abstracts that are submitted for poster and oral presentations should not have been submitted in previous years for consideration. Refer to the **SAMPLE ABSTRACT** at the end of this document for formatting details. **Please contact Megan Matthews (megan.l.matthews@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 18th, 2020.** To ensure a presentation time, online registrations must be received by **April 12th, 2020. FINAL** abstracts deadline is **April 12th, 2020.**

OTHER INFORMATION: Early Submission and Registration ($30) is due by **March 18th at midnight,** regular registration ($40) runs from **March 19th-March 31st**, and late registration ($45) runs from **April 1st- April 23rd**. **We cannot guarantee you a presentation time or event bag if you are within late registration.** Guest registration for the Saturday night banquet is $15. Complete registration at the door with or without presentation is $45. 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 25th in the Texas Tech University Student Union Building.

Please visit the 2020 TTABSS website (http://www.depts.ttu.edu/biology/TTUAB/TTABSS/2020/) for registration details.
*See additional Emerging Professionals Category document for more information (linked on TTABSS website)

CONTACT INFORMATION: Megan Matthews, TTABSS Chair, Association of Biologists**,** Department of Biological Sciences, Texas Tech University, megan.l.matthews@ttu.edu

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SAMPLE ABSTRACT FORMATTING GUIDELINES:

- Education level – Please indicate **Undergraduate** or **Graduate**
- Type of presentation – Please indicate **Poster** or **Oral**
- Presentation Category (Oral presentations only) – Please indicate which of the 12 categories you would like to present in:
  - Wildlife & Fisheries Conservation
  - Microbiology & Medicine
  - Undergraduate
  - Proposal
  - Ecology & Environmental Biology
  - Physiology & Evolutionary Biology
  - Genetics & Genomics
  - Molecular Biology & Biochemistry
  - Toxicology
  - Plant & Soil Science
  - Mathematical & Computational Biology
  - Emerging Professionals*
- 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, 12 point, single-spaced
- File type –Word Document (.docx)

PLEASE NOTE THAT IF YOU DO NOT FOLLOW THE GUIDELINES SET ABOVE, WE RESERVE THE RIGHT TO REJECT YOUR ABSTRACT.

EXAMPLE

Education – Graduate
Presentation Type – Oral
Category – Ecology & Environmental Biology

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

Adam W. Ferguson[1]*, Nathan A. Currit[2], and Floyd W. Weckerly[3]
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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.

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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.

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