

## **Professional development grant final report**

**Jorista van der Merwe**

**Project Title:** Do habitat conditions and female health determine sex ratio of offspring in white-tailed deer?

**Activity:** Attendance of: Ecological Society of America annual meeting in Portland, OR, Aug 5<sup>th</sup>-11<sup>th</sup> 2017

**Principle Investigator:** Dr. Jorista van der Merwe

**College:** CNHS

**Department:** Biology

**Amount that was requested/granted:** \$2,046.00

**Amount that was used:** \$2,299.77

**Amount used from Biology account:** \$ 253.77

## **B. Professional Enhancement opportunity**

I applied for the Professional Development Grant as a means to acquire funds to attend the annual meeting of the Ecological Society of America (ESA), in Portland, OR (6-11 August 2017). The research that I presented is being done at Arkansas Tech University, in collaboration with the Arkansas Game and Fish Commission (AGFC) and deals with the factors that influence sex ratios in white-tailed deer offspring. Many factors are thought to influence the number of fetuses and the sex of the fetuses in white-tailed. I am investigating which factors show the greatest impact, some of which include habitat conditions, health of the female, and time of conception.

With the detection of chronic wasting disease (CWD) in white-tailed deer in Arkansas in early 2016, deer-related research has been on the increase. The analyses and presentation of the sex-ratio data will likely lead to more research opportunities and potentially research funds from AGFC to support research by faculty and student in the department.

## **C. Review of Conference experience**

I attended the meeting and successfully presented the results of the work done in collaboration with AGFC (see attachment). My oral presentation was well attended and I received good questions and feedback afterwards.

## **D. Summary**

As a result of this presentation, my main collaborator at AGFC already presented our results at an intra-agency meetings a few weeks ago. I was also made aware of future collaborations with AGFC that all sprung from this conference presentation. The conference enhanced professional

networking and provided me with the opportunities to view other scientists at the top of their field, gather information and establish new contacts.



## COS 88 - Life History Theory And Evolution

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### Meeting Information

[Meeting Website](#)  
[Meeting Registration](#)  
[ESA Website](#)  
[About Portland](#)

 Wednesday, August 9, 2017: 8:00 AM-11:30 AM

E142, Oregon Convention Center

- |                    |          |   |
|--------------------|----------|---|
| 8:00 AM            | COS 88-1 | <p><a href="#">Comparative demography through a stochastic lens</a><br/>           Jennifer McDonald, University of Exeter; Miguel Franco, University of Plymouth; Stuart Townley, University of Exeter; David J. Hodgson, University of Exeter, Cornwall Campus</p>  |
| 8:20 AM<br>Cancell | COS 88-2 | <p><a href="#">Intraspecific competition can promote the evolution of ecological specialization</a><br/>           Abdel H. Halloway, University of Illinois at Chicago; Joel S. Brown, Moffit Cancer Center</p>  |
| 8:40 AM            | COS 88-3 | <p><a href="#">Corticosterone prevents a paedomorphic life history strategy in the salamander <i>Ambystoma talpoideum</i></a><br/>           Jason R. Bohenek, The University of Mississippi; Christopher J. Leary, The University of Mississippi; William J. Resetarits Jr., The University of Mississippi</p> |
| 9:00 AM            | COS 88-4 | <p><a href="#">The effect of nest type on shaping the initial avian microbiome</a><br/>           Felipe Campos-Cerda, University of Oregon; Jorge H. Vega Rivera, Estación de Biología Chamela, Instituto de Biología, UNAM; Brendan J.M. Bohannon, University of Oregon</p>                                   |
| 9:20 AM            | COS 88-5 | <p><a href="#">Loggerhead sea turtle ontogenetic growth patterns deviate from theoretical predictions</a><br/>           Matthew D. Ramirez, Oregon State University; Larisa Avens, NOAA NMFS; Jeffrey</p>  |

Seminoff, NOAA NMFS; Lisa R. Goshe, NOAA NMFS; Selina S. Heppell, Oregon State University

9:40  
AM

COS 88-

[Break](#)

9:50  
AM

COS 88-  
6

[The evolutionary stability of partial migration under different forms of density dependence](#)

Haley A Ohms, Oregon State University; Anushaya Mohapatra, Oakland University; David A. Lytle, Oregon State University; Patrick De Leenheer, Oregon State University

10:10  
AM

COS 88-  
7

[Sons or daughters? The impacts of maternal health on fetal sex ratios of white-tailed deer \(\*Odocoileus virginianus\*\)](#)

Jorista Van Der Merwe, Arkansas Tech University; Ralph Meeker, Arkansas Game and Fish Commission

10:30  
AM

Cancell

COS 88-  
8

[Constructing a precise, continuous measure of fitness in a long lived mammal](#)

Caroline Glidden, Oregon State University; Brianna Beechler, Oregon State University; Anna E. Jolles, Oregon State University

10:50  
AM

COS 88-  
9

[On the latitudinal patterns of thermally varying life history traits in ectotherms](#)

Daniel J. Smith, University California Los Angeles; Priyanga Amarasekare, University of California, Los Angeles

11:10  
AM

COS 88-  
10

[Costs of tolerance to pesticides in two wetland organisms, \*Lithobates sylvaticus\* and \*Daphnia pulex\*](#)

Devin G. DiGiacopo, Binghamton University; Jessica Hua, Binghamton University

See more of: [Contributed Talks](#)

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