# Yunyi Shen

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# EDUCATION

DEGREE	November 2019 — Current Master of Science, Statistics University of Wisconsin-Madison	Madison, USA
Degree	August 2018 — Current Master of Science, Wildlife Ecology University of Wisconsin-Madison	Madison, USA
Degree	August 2014 — July 2018 Bachelor of Science, Integrated Science/Physica Peking University	al Biology Beijing, China

# RESEARCH PROJECTS

Period	January 2019 —		
Advisor	Tim Van Deelen UW Madisc	on	
TITLE	Spatial Explicit Occupancy Modeling of Canidae Community		
	in Apostle Islands, WI USA		
	Develop Ising based model account for interspecies interaction and sp.	a-	
	tial autocorrelation simultaneously.		

	tial autocorrelation simultaneously.	_	
Period	October 2018 —		
Advisor	Tim Van Deelen, Dwayne Etter	UW Madison	
$\operatorname{Title}$	Population Reconstruction of White Tailed Deer under Intensive Harvest  Developing integrated population model for white tailed deer popula		
	tion reconstruction, formalized as R package ReCAP. Shir	nyapp for selec-	
	tive harvest simulation see here.		

Period	October 2017 — August 2018		
Advisor	Sheng Li	Peking University	
TITLE	Diversity Pattern of Pheasants in China		
	Distribution modeling of 67 species of pheasants.	Land use is the	
	strongest single variable explaining richness across landscape.		

Period October 2016 — October 2017

Advisor Sheng Li Peking University

TITLE Distribution Mapping of Asiatic Black Bear

Distribution modeling of black bear using data from multiple sources with various spatial resolutions. Developing method for data fusing.

#### **Publications**

# Year **2018**

[1] Jianping Yu, **Yunyi Shen**, Xiaoyou Song, Xiaonan Chen, Sheng Li and Xiaoli Shen "Evaluating the effectiveness of the functional zones for the protection of black muntjac (*Muntiacus crinifrons*) in the Qianjiangyuan National Park" *Biodiversity* (in Chinese)

# Conference Presentations and Posters

#### Year **2020**

[1] Yunyi Shen Dwayne Etter, Tim Van Deelen, "Age structure effects and population control in urban/suburban white-tailed deer, Chicago, IL 1992-2006" 2020 Midwest Fish and Wildlife Conference

#### Year **2019**

[1] Dwayne Etter, John Humphreys, Tim Van Deelen, Gary Roloff, Yunyi Shen "Managing White-tailed Deer Under a Newly Evolving Paradigm: A Demonstration of the Effects of Density-Dependence" 2019 annual TWS Conference

#### Year **2017**

[1] Yunyi Shen, Dajun Wang, Sheng Li "Identify critical knowledge gap and conservation needs of Asiatic Black Bear through high-resolution mapping" *Chinese Chapter of SCB Annual Conference 2017* Best graduate student presentation award

#### Year **2016**

[1] Jinlin Chen, Xier Chen, Haowen Liu, **Yunyi Shen**, Yichao Zeng, Lijie Yin "Biodiversity survey in Chongzuo examined effects of the white-headed langur (*Trachypithecus leucocephalus*) as a flagship species on habitat conservation" Conservation of China's Tropical Diversity (Poster)

#### R Packages

TITLE ReCAP

Description Reconstruction of Culled and Aerial counted Populations. Integrated population model used to reconstruct population dynamics using culling and aerial count data, available on GitHub.

#### TITLE IsingOccu

DESCRIPTION Occupancy model using Ising model as occupancy and detection process, available on GitHub.

# Professional Positions

Period January 2019 — December 2019

EMPLOYER Qianjiangyuan National Park Zhejiang China

TITLE Modeling Specialist

Black muntjac population and distribution modeling

Period June 2017 — July 2018

EMPLOYER Peking University Biology Museum Beijing China

TITLE Docent

Science communication manuscript writing, automatic guiding system

construction, guide visitors

# Outreach Positions

Period **2016** 

EMPLOYER Bo Wu (Chinese National Geography Magazine) Beijing China

TITLE Editor

Edit science communication manuscripts

### Grants

Period November 2018 — November 2019

AGENCY Institute of Zoology, Chinese Academy of Science

Title Basic ecology of black muntjac Biometrician

Amount \$10,000 in total, with 3 other collaborators

# AWARDS AND SCHOLARSHIPS

Year **2020** 

AWARD Finalist of Janice Lee Fenske Memorial Award IL U.S.A.

Year **2019** 

AWARD Conservation Leader for Tomorrow Scholarship IL U.S.A.

Year **2017** 

AWARD Annual Award in Social Works Peking University

Year **2015** 

AWARD Second Award in Jiang Zehan Cup of Modeling Beijing, China

Year **2013** 

AWARD Silver Medal in Chinese Chemistry Olympiad Beijing, China

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# Teaching

Semester Fall 2019

Institute UW Madison

Course General Chemistry (CHEM 103)

Semester	Spring 2019	
Institute	UW Madison	
Course	General Chemistry (CHEM 104)	TA
Semester	Spring 2018	
Institute	Peking University	
Course	ESL for Non-Academic Staffs	Instructor
Semester	Fall 2017 & Fall 2016	
Institute	Peking University	
Course	Evolution of Human Intelligence	TA
Semester	Spring 2016	
Institute	Peking University	
Course	Undergraduate Seminar in Genetics	TA
Semester	Summer 2015 & Summer 2014	
Institute	Xi'an No.1 (2015)/Tieyi (2014) High School	
Course	Chinese Chemistry Olympiad (CChO)	Instructor