

YUNYI SHEN

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EDUCATION

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

RESEARCH PROJECTS

PERIOD	January 2019 —	
ADVISOR	Tim Van Deelen	UW Madison
TITLE	Spatial Explicit Occupancy Modeling of Canidae Community in Apostle Islands, WI USA	
	Develop Ising based model account for interspecies interaction and spatial autocorrelation simultaneously.	
PERIOD	October 2018 —	
ADVISOR	Tim Van Deelen, Dwayne Etter	UW Madison
TITLE	Population Reconstruction of White Tailed Deer under Intensive Harvest	
	Developing integrated population model for white tailed deer population reconstruction, formalized as R package ReCAP. Shinyapp for selective 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 **2020**
 [1] **Yunyi Shen** and Timothy R. Van Deelen. "Spatially Explicit Modeling of Community Occupancy using Markov Random Field Models with Imperfect Observation: Mesocarnivores in Apostle Islands National Lakeshore." *BioRxiv* (submitted,2020).
- 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 **Re**construction of **C**ulled and **A**erial counted **P**opulations. 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	<i>Bo Wu</i> (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

TEACHING

SEMESTER	Fall 2019	
INSTITUTE	UW Madison	
COURSE	General Chemistry (CHEM 103)	TA
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