Yaquan Chang

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EDUCATION

2020.10- **PhD.**, ETH Zurich, Department of Environmental Systems Science. Thesis: *Plant biodiversity and turnover in the Hengduan Mts*. Advisors: Profs. Loïc Pellissier, Niklaus Zimmermann, and Sean Willett

2018.09-2020.08 **MSc.**, University of Copenhagen, Center for Macroecology, Evolution and Climate. Thesis: *Plant functional responses to human and environmental drivers -- Insights from Danish temperate forest communities*. Advisors: Profs. Naia Morueta-Holme and Jacob Heilmann-Clausen, and Dr. Charlie Davison

2017.09-2018.05 **Visiting student**, University of New Brunswick, Faculty of Forestry and Environmental Management. Honour research project (equivalent to bachelor thesis): *Comparing Balsam Fir Potential Species Distribution in two Distinct Areas of New Brunswick, Canada*. Advisor: Dr. Charles P.-A. Bourque

2014.09-2018.06 **BSc.**, Nanjing Forestry University, College of Biology and the Environment, Ecology.

RESEARCH EXPERIENCE

2020.10-present PhD thesis: Impact of climate and geological drivers on plant biodiversity and turnover patterns in the Hengduan Mts, China

2019.09-2020.08 Master thesis: *Plant functional responses to human and environmental drivers -- Insights from Danish temperate forest communities*

2019.07-2019.08 Project out of course scope, Project: *LiDAR-derived variables as a proxy for functional diversity of woody plant and response to forest management intensity*

2019.04-2019.06 Group member, Project: *A Statistical and GIS-based approach to plan and manage the Giant Hogweed in Vordingborg municipality*

2018.08-2019.04 Research Assistant, Project: *Relating Modeled Habitat Suitability for Abies Balsamea to On the Ground Species Structural Characteristics in Naturally Growing Forests of New Brunswick, Canada*

2017.09-2018.05 Visiting Student, University of New Brunswick, completed BSc thesis
- Running Potential Species Distribution (PSD model) in Fortran
- Calculating radial growth rate & aboveground biomass of balsam fir in Matlab
- Comparing site characteristics in two areas of New Brunswick

PUBLICATIONS

Yaquan Chang, Katrina Gelwick; Sean Willett; Xinwei Shen; Camille Albouy; Ao Luo; Zhiheng Wang; Niklaus E. Zimmermann; Loïc Pellissier (2023). Phytodiversity is associated with habitat heterogeneity from Eurasia to the Hengduan Mountains. *New Phytologists.* DOI: 10.1111/nph.19206.

Yaquan Chang, Charles P.-A. Bourque.2019. Relating modelled habitat suitability for *Abies Balsamea* to on the ground species structural characteristics in naturally growing forests. *Ecological Indicators.* DOI: 10.1016/j.ecolind.2019.105981

Haozhou Wang, **Yaquan Chang**, Chuan Li, Qiurong Liu, Min Zhong, Qinxuan Chen. 2017. Analysis of Imagine Capacity in Resources Survey between Two UAV Photogrammetry Softwares: PIX 4D Mapper and Photoscan. *Gansu Science and Technology. 33(22): 46-51* (In Chinese)

Haozhou Wang, **Yaquan Chang**, Zenxin Zhang. 04.2016. Yaira Multidimensional Data Visualization Software. (Software Copywrite. Patent No.: 2016SR178462.; in Chinese)

PROFESSIONAL PRESENTATIONS

Yaquan Chang, Katrina Gelwick; Sean Willett; Camille Albouy; Ao Luo; Zhiheng Wang; Yunhong Tan; Niklaus E. Zimmermann; Loïc Pellissier; The Hengduan phytodiversity is higher than expected from area and habitat heterogeneity. 2022. Geological Society of London. Poster.

Yaquan Chang, Katrina Gelwick; Sean Willett; Zhiheng Wang; Yunhong Tan; Niklaus E. Zimmermann; Loïc Pellissier. 2022. The Hengduan phytodiversity is higher than expected from area and habitat heterogeneity. *The International Biogeography Society 10th Biennial Coference*. Vancouver, Canada. Talk

Katrina Gelwick, **Yaquan Chang**, Sean Willett, Loïc Pellissier, Niklaus Zimmermann, Zhiheng Wang. 2022. Influence of landscape transience on plant biodiversity patterns in the Hengduan Mountains, China. *European Geosciences Union; EGU22*. Major contribute to data/model generating

Katrina Gelwick, **Yaquan Chang**, Sean Willett, Loïc Pellissier. 2021. Influence of landscape transience on plant biodiversity in the Hengduan Mountains, China. *American Geophysical Union; AGU Fall meeting*. Major contribute to data/model generating

Yaquan Chang, Alfred Figueras Anton, Oriol García Antúnez, Andreas Davidsen, Jens Lindgaard. 2019. How to upgrade current management plans for the invasive species Giant Hogweed in Denmark – a case study from Vordingborg municipality, Zealand. *The Euroleague for Life Sciences (ELLS) Scientific Student Conference*. Uppsala, Sweden (Poster presentation)

TEACHING EXPERIENCE

Fall 2023	Teaching Assistant, Environmental System Data Science, ETH zurich
Fall 2020, 2021	Teaching Assistant, Landscape Modelling of Biodiversity: From Global Changes to Conservation, ETH zurich

| Fall 2018 | Teaching Assistant, Environmental Education Online Course, Cornell University |
| Fall 2016 | Undergraduate Mentor, Nanjing Forestry University |

FELLOWSHIPS, AWARDS, AND HONORS

2021	Student travel award for the IBS Vancouver 2022 Conference (Registration waiver: around 340 CAD)
2019	Travel Grant, Faculty of Science, University of Copenhagen (1000 DKK)
2019	Herboms Bog-legat (book grant), University of Copenhagen (3372.23 DKK)
2018	7th Liangxi Merit Award, Chinese Society of Forestry (1000 RMB); *51 national winners out of 75 nominated across all Chinese universities related to forestry area. The only undergraduate student at Nanjing Forestry University was obtaining this award in 2018.*
2018	3+1+1 Scholarship, University of New Brunswick (2000 CAD)
2017-18	International Differential Award, University of New Brunswick (7500 CAD)
2017	Special Award of 14th International Junior Forest Contest, Russian Federal Forest Agency
2016	Star of Innovation and Creation, College of Biology and the Environment, Nanjing Forestry University
2015-18	Merit Student, Nanjing Forestry University (3000 RMB in total)

COURSES AND PROFESSIONAL CERTIFICATIONS

2020.02	IBS Julia Workshop
	• Basic functions in Julia
	• Run species distribution models in Julia
2018.06	*Principles and Applications of Species Distribution Model Summer Course,* Peking University;
	• Modelling, testing, ensemble, and Climate change projections for SDMs in R
	• Introduction to BIOMOD2 in R
2016.06	Urban Environmental Education Certificate, Cornell University

VOLUNTEER SERVICE AND APPOINTMENTS

2022.09	Co-chair. : SE Tibet - Emile Argand session in Geological Society of London Conference: Asian Climates tectonics and biodiversity
2021.10-	External reviewer, Methods in Ecology and Evolution
2021.07-present	Editor, Eco-share Wechat Official account
2019.09-2020.07	(Volunteer) Editor, Wiley Ecology China Wechat Official account
2019.01	Conference Assistant, 13th Annual Danish Water Forum
2018.06-2018.08	Volunteer, Inner Mongolia Project, The Nature Conservancy