

# 108 Enjoyed cultural services and perceived benefits through visitation to Chinese National Parks: A case study of Wuyishan Pilot

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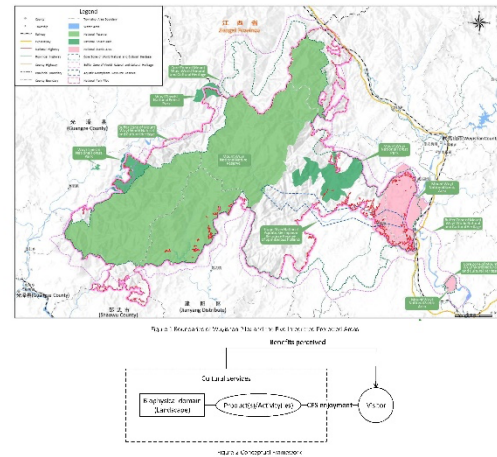
## Introduction

A growing body of research reveals the important contribution that nature exposure and national parks and protected areas (NPPAs) make(s) to human health and well-being (Lemieux et al., 2012; Romagosa et al., 2015). According to the studies, NPPAs can contribute to people’s mental health, psychological and physiological health, scientific/local knowledge accumulation and education, emotional improvement, transcendental experience, happiness, enjoyment, social network, reflection, self-actualization, personal growth, inspiration, quality of life, etc.

Meanwhile, cultural ecosystem service (CES) studies also draw wide attention. The ES framework was promoted by the United Nations to better understand relationships between ecosystem changes and human well-being development. And now, the framework is advocated by many researchers to be used as a decision-making tool to better govern and manage ecosystems and natural resources, and as well as to achieve human/citizen well-being. Scholars pointed out that CES and its contribution to psychological well-being is very important for visitor management (Willis, 2015); ES researchers also explored CES as beneficial outcomes of PA visitor activities (Roux et al., 2020). However, still few attentions were paid to the spatial distribution of visitor CES enjoyment and the corresponding benefit perception in a national park.

In China, many NPPAs have long histories and are homes of local residents. National parks are usually combinations of many different types of protected areas from the former PA system. For example, Wuyishan Pilot (designated in 2016), our study area, is integrated from five former different types of protected areas (Attachment figure 1), which are Wuyishan National Nature Reserve (1979), Wuyishan National Scenic and Historic Area (NSHA) (1982), Jiuqu River National Aquatic Germplasm Resource Reserve of *Spinibarbus hollandi* (2011), Wuyishan National Forest Park (2004) and Wuyi

Tianchi National Forest Park (2013), and five other non-protected tourist resorts. Also, the national park area is largely overlapped with Mount Wuyi World Mixed Nature and Culture Heritage Site Area.



Meanwhile, traditional Chinese and modern global values make dual impacts on Chinese visitors. As traditional Chinese view of environment follows a tian ren he yi (the unity of man and heaven) philosophy, which guide most Chinese PA visitors’ behaviors (Xu et al., 2014), outdoor recreation fashion also influences many other visitors. Their motivational differences and cultural divergences (Cui et al., 2015) can result in totally different national park visitation paradigms, and thus different CES enjoyment and benefits perceptions.

## Conceptual framework and research questions

According to literature review, a conceptual framework is as Attachment figure 2. CES enjoyment is a process composed by landscape enjoyment and product/activity consumption/performing, and through the enjoyment, visitors can perceive different benefits.

Thus, this study aims to investigate: a) what is the CES enjoyment in each zone of a Chinese national park; b) are there any differences between different zones of visitor enjoyed CES, and if yes, why do the differences occur according to the visitors and the zones’ settings; c) what benefits do the visitors

perceive through their visitation and CES enjoyment, and how CES enjoyment relate to the benefit perceptions; and d) how different visitors' demographic characteristics (e.g., age, gender, education), cultural customs, and places of residence relate with their perceived benefits?

### Materials and Methods

Data collection methods used in this study are: onsite observation (to answer question b), onsite visitor survey (a, b, c, d), online recreation track data and review data collection (a, b, c), and interviews with park managers (b).

Components of the questionnaire used for survey are: enjoyed CES options, which are adapted from frameworks put forward by Fish et al., (2016) and Haines-Young & Potschin (2017); perceived benefit scales, which are adapted from Croy et al. (2020), Fish et al. (2016), and Tuo et al. (2020); visitors' demographic characteristics, cultural customs, places of residence, and travel behaviors. The most important data analysis methods are multivariate statistical analysis, GIS mapping, and content analysis.

### Results and further work

From July 15, 2020 to September 1, 2020, we launched our first field work in the Pilot area, and collected onsite observation data and park managers interview data. Also, we collected detailed plan maps and protected area integration map (Attachment figure 1) of the area.

Preliminary results can be obtained. Firstly, in the Mount Wuyi National Scenic Area, cultural

heritage is very important, and visitors mostly come for sightseeing. Also, in the surrounding areas within the Scenic Area, local residents visit for tea leisure; they pursue the tian ren he yi (the unity of man and heaven) status when enjoying tea on the top of the mountain. Secondly, in the Mount Wuyi National Nature Reserve, visitations are limited by the authority, because the area is the most outstanding area for biodiversity in south-east China and a refuge for a large number of ancient, relict species, many of them endemic to China. However, there are communities living alongside the county boundary, which is also a motorized way linking two provinces, so visitors come to the village for countryside experience together with high quality tea mountain sceneries.

Further and in-depth surveys and data collection need to be launched to answer the listed questions.

### Significance of the study

Theoretically, this study could contribute to both ecosystem service field and park visitor management research.

Practically, China has a different context of protected area visitor management and monitoring with most Western countries, but also has similarities with East Asian countries and some other countries. Therefore, this study will not only be able to solve Chinese national park's practical management problems, but also provide insights to other parks under the similar background.

### References

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