



Volunteer Service Model in the U.S. National Park and Its Inspiration: A Case Study of Yellowstone National Park

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Abstract. The volunteer service model in U.S. National Parks has a history of one hundred years, and it has become an important part of management in U.S. National Parks. The process of its planning and construction, the experience and ideas of mechanism formation have significant reference value for exploring the volunteer service system of national parks in China. The author summarizes the related concepts, development process and three vital mechanisms of volunteer service in National Park. These three mechanisms are: perfect laws and acts are important guarantees for the establishment of volunteer service model in national parks; multi-subject participation is the important foundation of volunteer service promotion in national parks; multi-sectors cooperation is important approach to expand and enrich volunteer service in national parks. And with the Yellowstone National Park as an example, make a deep thinking and analysis to the related concepts of national parks volunteer service, service motivation, service contents and service mechanism. At last, it puts forward the suggestions for developing volunteer service of national parks in China based on the current management of nature protected areas.

Keywords: the U.S. National Park; national park volunteer service; Yellowstone National Park.

1 Introduction

The national parks of the United States are large natural or near-natural reserves divided for the protection of ecosystem, with a view to protecting the integrity of its unique species and ecosystem, and to lay the corresponding foundation for the construction of spiritual territory, scientific research environment, educational places and leisure and tourism sites with the integration of environment and culture. In addition to all kinds of regular employees, there is also a group of non-regular employees who help protect the national parks for free, they are collectively known as the national park volunteers. As an important tradition in the construction and management of national parks in the United States, volunteer service has been increasing the number of people since the establishment of national parks. Until now, the volunteers of the national parks are no longer a single public welfare organization, but the reader of the envi-

ronment and history of the United States, the protector of the national natural ecological environment, and has imperceptibly existed in the national park management system. As the first national park to be established, the U.S. Yellowstone National Park has a long cultural history and development experience. Its volunteer service model is typical and cutting-edge, which has a reference and guiding effect for exploring the volunteer service model of National parks in China.

2 The Definition and General Situation of Volunteer Service

2.1 Definition

As an indispensable part of every civilized society, volunteer service refers to the activities that volunteers provide services to improve the society, promote human development, facilitate social progress and develop social welfare undertakings ^[1-2]. Volunteer service promotes the development of nature and wildlife conservation work, and it also strengthens the link between regional volunteer service initiatives and global impact. Through the cross-cultural communication between volunteers and community residents, the mutual understanding between different groups is promoted, and the cultural identity and social communication between volunteers and the destination community are enhanced ^[3-6].

2.2 General Situation of Volunteer Service in National Parks

At present, the necessity for volunteer service to participate in the management of national parks has been widely recognized and adopted internationally. According to late 2019 statistics, the National Park Service stated: " There are about 20,000 permanent, temporary and seasonal workers and more than 279,000 volunteers." In addition, volunteer service activities are closely combined with tourism, and there are some types related to volunteer tourism, such as ecological tourism, educational tourism, combining tourism with ecological protection to realize the sustainable development of tourism and environment ^[5,7]. In recent years, with the support of legislation, the promotion of national volunteer culture and the increasing awareness of personal volunteer service, more and more American citizens not employed by the U.S. National Park Service spontaneously contribute time to national parks as supplementary service personnel.

3 The Development Process and Mechanism of Volunteer Service in The U.S. National Park

3.1 Development Process

In 1864, with the establishment of Yosemite National Park in California, the citizens who protected and supported the park began to promote the formation of the national parks volunteer organization. In 1871, groups represented by John Muir shared their

understanding and comprehension of nature with others, forming the prototype of the early volunteer service organization in the United States [8]. After the establishment of the National Park Service in 1916, the adjusted measures aroused the interest of tourists, the park tourists increased year by year. The park interpretation began to rise, and the volunteer service group also increased year by year. In the 1960s, with the enhancement of people's environmental awareness, environmental interpretation became popular, and volunteer service had a new direction [9-10]. In 1969, the United States Congress passed Volunteers in the Park Act, which encouraged ordinary people to participate in the management of national parks, further expanding the number of volunteers. Nowadays, the American national park volunteer service has been completed, and the volunteer service has become an indispensable part of the management of the national parks.

3.2 The Obligations of International Volunteers and their Requirements of National Park Service

The National Park Service was established on August 25, 1916 under the relevant acts of the United States Congress and was under the United States Department of the Interior. Its mission is to maintain and protect the state and state princes, national historical sites, historical parks and other natural and historical heritage in the United States. The National Park Service has stated the requirements for international volunteers and their obligations in International Volunteers in Parks Program. To become international volunteers, firstly, they must be university students majoring in natural or cultural resources or another park related subject, or professional workers at national parks, protected areas or cultural sites. Then, they should speak English and have park related skills such as natural resource management, search and rescue knowledge, environmental education and historical preservation. What's more, volunteers ought to have resources to support themselves financially, which may include their travel, housing, food, and other personal needs.

They may have these following jobs in national parks: lead or support education and public-facing programs; maintain or rebuild trails or historic buildings; conduct research or monitor wildlife to preserve natural resources; provide park interpretation to visitors in the visitor center; support libraries, archives, and museums in parks to preserve cultural resources; educate train travelers on the natural and cultural heritage of a region through the Trails & Rails program, etc. In addition to fulfilling their work obligations, volunteers must submit a written report to the National Park Service detailing the duties, gains, lessons, suggestions for improvements about park management and other aspects, and provide digital photos of the work.

3.3 Perfect Laws and Acts are Important Guarantees for the Establishment of Volunteer Service Model in National Parks

A series of laws and acts guarantee the establishment of the national park volunteer service model. In 1969, the United States Congress passed the Volunteers in the Park Act, which clarified the volunteer service organization, activity content, volunteer

identity, rights protection, and source of funds, etc., to ensure the smooth realization of volunteer service from the perspective of legislation. This initiative has encouraged ordinary people to participate in the volunteer service in national parks, and further expanded the volunteer service group. In 1989, the United States Congress passed the Domestic Voluntary Service Amendment Act, and in 1991 it passed the Department Appropriations Bill, allowing the permanent use of volunteer funds for volunteer services in various departments of the Interior. In 2005, National Park Service issued Director's Order 7 and volunteer service Reference Manual 7, and revised many times. They provide the direction guidance for the national cultural park executing "national parks volunteer plan", and systematically stipulated the management of volunteer activities, funds and volunteer recruitment, training and other content. They also provide perfect guarantees for the organization and management of volunteer service in national parks. In addition, each National Park system unit has its authorized legislative document. Generally speaking, every enabling act should clear the boundary of the national park unit, its importance and other applicable content to this national park unit. Since it is an independent legislation for each national park unit, the legislation content is very targeted and is an important basis for the management of this national park. The most famous enabling act is the Yellowstone Park Act.

3.4 Multi-subject Participation is the Important Foundation of Volunteer Service Promotion in National Parks

The volunteer service model is an effective way for American national parks to make full use of the civil power, mobilize the enthusiasm of many parties, and attract the public to participate in the publicity and protection of the ecology and resources of national parks. Depending on their participation status, national volunteers are divided into 8 categories: children, adolescent and family volunteers; internship volunteers; study volunteers; national park employees and their family members; foreign citizens; international park volunteers; cooperative association employees; cooperative partner organizations. In addition, there are many types of volunteer service, divided into full-time, temporary, virtual and special talent volunteer service, etc. The U.S. national parks also set up multi-level volunteer positions, which not only provide a wide range of volunteer positions for ordinary people, but also provide specialized volunteer positions for experts with professional skills, such as explanatory training positions for historians and medical assistance positions for medical experts ^[11-14]. It is the participation of many subjects that lays a solid foundation for the promotion of volunteer service.

3.5 Multi-sectors Cooperation is Important Approach to Expand and Enrich Volunteer Service in National Parks

In cooperation with relevant departments and institutions, the National Park Service has expanded the categories and contents of volunteer service activities in national parks, enriched the forms of volunteer activities, and enhanced the depth of volunteers' participation. National Park Service cooperates with environmental organizations,

universities, non-profit organizations and other organizations to promote the "Cooperative Volunteer Program". It aims to maintain the service level of national parks by increasing the number of volunteers and volunteer service categories, making comprehensive use of talents and resources, while maintaining public support and attention, and expand the impact of national parks ^[15]. Such as national park volunteer program and community volunteer program launched "community volunteer ambassador program", is a 50-week paid internship, young people with different professional background is placed in national parks across the country to provide services. In this program, voluntary service is closely linked with social service through individual active participation. In collaboration with the Boy Scouts of America and Youth Conservation Corps, the National Park Service launched youth volunteer programs to deepen their understanding of natural, cultural and historical resources through participating in forest protection work, conducting hiking, and serving as tour guides, etc.

4 Analysis of Volunteer Service Model in Yellowstone National Park

4.1 Yellowstone National Park

Yellowstone National Park is mainly located in Wyoming, United States, partly in Montana and Idaho. Yellowstone National Park is divided into five areas: The Mammoth Hot Spring area in the northwest is dominated by limestone steps, also known as the thermal steps area; The northeast is the Roosevelt area, which still retains the old western landscapes; In the middle is the canyon area, where you can enjoy the Yellowstone Grand Canyon and the waterfalls; in the southeast is Yellowstone Lake area, mainly lakes and mountains; in the west and southwest are geyser areas, filled with geysers, hot springs, steam pools and so on. Yellowstone National Park is the first national park in the world. On March 1, 1872, it was officially named as a national park for protecting wildlife and natural resources, and it was listed on the World Heritage List as the World Natural Heritage Site in 1978. In 1872-1916, from the Yellowstone National Park has just set up to the National Park Service has just established, Yellowstone National Park has many problems in the construction of management system, natural resources protection and tourism development, and it has long been challenged and threatened by settlement, mining, water conservancy, hunting and other utilitarian resources development forces in this period of time. It also became epitomes of the situation of internal troubles and external aggression in the early national parks development ^[16]. Until the establishment of the National Park Service in 1916, and the unified management system was instituted, coupled with the attention of the US government, this chaotic situation gradually came to an end, and the ecological environment and historical sites in the park were gradually restored. Today, under the management and support of the National Park Service, the park offers a wide variety of volunteer services, and volunteers provide more than 100,000 hours of volunteer service every year, making great contributions to the ecological restoration and environmental protection in Yellowstone National Park.

4.2 Volunteer Service Motivation

The first volunteer service began more than 100 years ago, with the main purpose of protecting the core area of the national park and teaching the public about the value of the national park [17-18]. After more than 100 years of development, Yellowstone National Park now has several times the number of staff volunteers to contribute their energy and time to volunteer service every year. The scope of service includes: vegetation maintenance, park history research, environmental explanation, park explanation, scientific data entry, etc. National Park Service popularizes wildlife, natural resources and humanities knowledge of Yellowstone National Park through multiple channels, to publicize the natural, cultural and aesthetic value of Yellowstone National Park, and stimulate the public to yearn, love, experience and protect Yellowstone National Park. According to the volunteers' voluntary reports and insights, the volunteer service motivations of Yellowstone National Park include: protecting the ecological environment of Yellowstone National Park, watching wildlife, getting a deeper understanding of Yellowstone National Park, historical archaeology, hiking and outdoor sports, photography, etc.

4.3 Volunteer Service Content

The volunteer service content of Yellowstone National Park include (Table 1): ecological environment monitoring, educational projects, park interpretation, environmental protection and restoration, historical and cultural research, park facilities maintenance, etc. Recently Yellowstone National Park volunteer service content include: southwest region Geyser Basin conservation [19], managing campsites, conducting scientific research, assisting with medical emergencies, providing educational programs, trail maintenance in corresponding park sections, etc.

Table 1. Volunteer service for Yellowstone National Park

Volunteer project	concrete content
Resource management	In-library services; wildlife monitoring; exotic vegetation eradication; GIS technology application; forest monitoring
Park maintenance	Maintenance and reconstruction of the park facilities; maintenance of the native plant garden; trail maintenance in corresponding park sections
Visitors Center interpretation	Volunteers are responsible for the interpretation of the park and other related content in the visitor center
Education program	Teachers and students are the main body of education, and they can enhance their own knowledge and skills through different forms of activities; To publicize the natural and cultural environment protection of Yellowstone National Park
Ecological environment restoration	Restoration of native vegetation; southwest region Geyser Basin conservation

Source: according to the information on the official website of the Yellowstone National Park (<https://www.nps.gov/yell/index.htm>)

4.4 Analysis of Volunteer Service Mechanism in Yellowstone National Park

4.4.1 Management and Operation of Volunteer Service in Yellowstone National Park

The national park volunteer service system is under the management of the National Park Service, and the main means of implementation is network management. National Park Service websites include links to national parks, with rich content and clear classification. Yellowstone National Park web page covers Yellowstone National Park wildlife, park history and culture, outdoor activities recommended, the notes of visiting the park in different seasons, park volunteers, cooperative partners, science and research, etc. There are also different modules for different groups such as tourists, children, teenagers to introduce different content. The current volunteer vacancies and volunteer opportunities are posted on the park website, and volunteers can be informed in time to arrange time to participate in volunteer service.

Volunteer service is also inseparable from the assistance, support and management of local organizations. In collaboration with universities, Yellowstone National Park hosts students around the country. With the help of generous donations through Yellowstone Forever, 68 teachers brought 1943 students and chaperones to explore the geology, ecology and human history of Yellowstone with regards in residential program. Yellowstone also partnered with Montana State University to study grizzly bears' diet. Scholars are often invited to give lectures by volunteer organizations; Yellowstone National administrators are also invited to university classes to teach students about parks, these actions developed many potential national park volunteers. Yellowstone also participates in a nationwide community science study called the Dragonfly Mercury Project. Employees in Yellowstone coordinate with Youth Conservation Corps members to collect larvae in the park for mercury analysis.

Local governments and non-governmental organizations often hold meetings to discuss many problems in Yellowstone National Park and form solutions then promote their implementation. For example, holding donation meetings for a management of Yellowstone National Park, and gathering artists from volunteers to auction art works based on Yellowstone National Park. Or selling other works, the proceeds needn't pay taxes, all donated to the park. Therefore, there are volunteer services in various aspects such as government support, personnel allocation and fund management. This huge service system operates in an orderly manner and provides support services for national parks.

4.4.2 Technical Support of Volunteer Service in Yellowstone National Park

Since its establishment, Yellowstone National Park has had a difficult process of ecological restoration for nearly a hundred years. Researchers and volunteers have made great efforts and achieved remarkable results, which restored the ecological environment of Yellowstone National Park to the original ecology or near the original ecology [20-23]. In 1995-1997, the "Canis lupus release program" began, and after more than a decade of protection and monitoring, the Canis lupus in Yellowstone National Park were pulled back from the brink of extinction, and as of 2017, Canis lupus in Idaho, Montana and Wyoming were removed from the endangered species list. The

Haliaeetus leucocephalus population grew annually through habitat conservation, restrictions on killing and restrictions on pesticide use, and was removed from the endangered species list in 2007. The Yellowstone population of grizzly bears was designated as threatened with extinction in 1975, in cooperation with the U.S. Fish & Wildlife Service, surrounding states, communities, and American Indian tribes, U.S. Fish & Wildlife Service removes the Yellowstone population of grizzly bears from the threatened species list in 2017^[24]. The park also has a plan to restore local plants. By removing the non-native plants in the park, Yellowstone National Park follows a "broadcast herbicide-plant native seed-spot treat with herbicide" method, which has achieved great results, and the soil microbial communities were recovered very well. The technical support for the ecological restoration and rehabilitation program of Yellowstone National Park comes from many scientific research institutions and academic organizations, such as climate monitoring provided by scientists from the U.S. Weather Bureau and National Park Service, and biotechnology support from the Departments of Forest and Ecology at the University of Montana. Most of these supports are volunteer service, and the theoretical guidance and scientific research of scientists are the prerequisite for the realization of volunteer service projects.

4.4.3 Function Realization of Volunteer Service in Yellowstone National Park

The functions of U.S. national parks include: resource and ecological conservation, environmental and humanistic education, and leisure and recreation. Volunteer service in Yellowstone National Park is to ensure the realization of these three functions, so that to achieve its own functions. Volunteers are the backbone of the Yellowstone National Park. They help supply the personnel shortage during the peak season, maintain the intact trails, clean the equipment in the national park, and effectively promote the management of Yellowstone National Park. During the nearly one hundred years of ecological restoration and rehabilitation work in Yellowstone National Park, volunteers have assisted the park staff in doing a lot of resource conservation work, which has achieved remarkable results, and many species have been removed from the list of endangered species. They are also models of environmental education, with professional knowledge, and responsible for providing interpretation of the natural and cultural resources in the park to tourists, this enriching the park experience to tourists^[25-26]. Both the National Park Service, local communities and even tourists are the beneficiaries of the volunteer service, which is an important guarantee for the better realization of the functions of Yellowstone National Park.

5 Inspirations to Volunteer Service in China National Parks

In November 2013, the third plenary session of the 18th CPC National Committee made the establishment of the national park system a priority reform task, and volunteer service as a part of the national park management, its role cannot be ignored. At present, volunteer service in our country national parks faces the following problems: ① volunteer service foundation is relatively weak ② the range of volunteer service is relatively small and types less ③ domestic volunteer service atmosphere is not high.

The volunteer service model of Yellowstone National Park in the United States has its successful experience in protecting ecological resources, inheriting traditional culture and expanding the influence of parks, which has the following reference significance for the construction and management of volunteer service in China national parks.

5.1 Perfect Relevant Laws and Acts to Provide Solid Guarantee

At present, the legislation of national parks in China is more inclined to the protection and utilization of natural resources and environment ^[8, 27], which is less involved in the volunteer service in national parks. Therefore, it is very important to establish a perfect guarantee mechanism of volunteer service. To perfect and publish the corresponding laws and regulations, making volunteer service participate in management of national parks on the legal level. In addition, laws are supposed to ensure the rights of volunteers in the national park management, and clarify the volunteer service organizations, activity contents, volunteer identities, obligations, etc. At last, we should recognize the value of volunteers in protecting ecological resources and historical and cultural heritage, and encourage more citizens to participate in the volunteer service in national parks ^[28].

5.2 Encourage Multi-sectors Cooperation and Multi-subject Participation to Promote the Development of Volunteer Service

In the national parks, there are fewer types of volunteer services, and volunteer participation is insufficient. Therefore, in order to promote the masses to participate in volunteer activities and give impetus to the development of volunteer service, we should encourage multi-sectors cooperation and multiple subjects to participate in volunteer service under the perfect legal guarantee system, so that can enrich the types of volunteer service and expand the scope of volunteer service. National parks can cooperate with universities or non-profit organizations to conduct educational volunteer activities such as exploring national parks' history, visiting the Park Museum. In addition, the park ought to adhere to the principle of protecting natural resources as the main task and developing tourism as the supplement, and discuss and cooperate with local organizations to deeply explore the characteristics of national parks and local culture ^[29-32]. This can attract visitors to experience the interpretations with local characteristics such as cultural interpretation, environmental interpretation, park culture and history interpretation, and expand the influence of national parks ^[33-35]. At the same time, it also can develop many potential national park volunteers.

5.3 Perfect the Education and Training System to Improve Service Level of Volunteers

Volunteer service in China national parks is in the initial stage, and the national parks are generally located in relatively remote and sparsely populated areas, the quality of training for volunteers is still lacking, and the training system is still not perfect. National parks ought to work with local governments to carry out volunteer training,

environmental education and professional skills training programs to improve the ability of volunteers to participate in the management of the national parks. A certain proportion of the work of the reserve management agency can open to volunteers, who work with employees in the park and participate in the management of the national park. Training courses should also be set up for volunteers with different identities, to maximize their respective advantages, so as to improve the level and quality of volunteer services and promote the development of volunteer services in national parks [36-38].

6 Conclusion

The National Park Service guides the public to love national parks and regards national parks as a symbol of the country. National park volunteer service effectively realizes this aim and also achieves the purpose that national citizens involve in the management of national parks. This paper combs and summarizes the correlative concepts, motivations, contents and mechanism of volunteer service in the U.S. national parks, and take the most representative Yellowstone National Park as an example. But there are still many aspects to be further studied: ① Deeply study the space behavior of national park volunteers ② Different types of national parks have different volunteer service projects, so how to implement the important task of resource and environmental protection to the public operational level should be discussed ③ Volunteer tourism and tourism volunteers derived from the combination of volunteer service and tourism. The similarities and differences between them are worth researching and exploring ④ Nowadays, volunteer service has become a part of management system in the U.S. national parks, and its reference significance for the implementation and construction of China national park system is worth studying. At the same time, it calls on the academic community to pay attention to the theoretical research of volunteer service. Volunteer service in national parks can be a simple trip, or a starting point to change view of life values.

References

1. Rao Huaqing. (2010). Enlightenment of Australian tourist volunteer organization to tourist industries in China. *Journal of Chongqing University of Science and Technology: Social Sciences Edition*, (6), pp. 96-98.
2. Jiang Zequan. (2004). Development of voluntary service in England and its inspiration for China. *Journal of Guangdong College of Young Cadres*, vol. 18, pp. 22-24.
3. Hou Yi, Xu Xiansheng, Chen Youjin, Peng Xueling, Xu Xin. (2021). Community-based Management Model the National Parks in Australia and Its Inspiration. *World Forestry Research*, vol. 34, pp. 107-112.
4. Wang Hui, Sun Jing, Yuan Ting, et al. (2015). The development of ecological protection and tourism development in the U.S. National Parks and Its Enlightenment. *Tourism Forum*, vol. 8, pp. 1-6.

5. Ming Jing, Wang Jinwei. (2010). A study review on overseas volunteer tourism. *Journal Beijing International Studies University*, vol. 31, pp. 31-39.
6. Nancy Gard McGehee & Kathleen Andereck. (2009). Volunteer tourism and the “voluntoured”: the case of Tijuana, Mexico. *Journal of Sustainable Tourism* (1), vol. 17, pp. 39-51.
7. Jeong E, Lee T, Brown AD, Choi S, Son M. (2021). Does a National Park Enhance the Environment-Friendliness of Tourists as an Ecotourism Destination? *Int J Environ Res Public Health*, 18(16):8321.
8. Wang Hui, Liu Xiaoyu, Guo Jianke, Sun Caizhi. (2016). Volunteer service and mechanism in the U.S. national parks: A case study of Channel Islands National Park. *Geographical Research*, vol. 35, pp. 1193-1202.
9. Wang Lianying, Hollenhorst Steven. (2014). Building a unified Chinese national park system: Historical lessons learned from the United States. *Geographical Research*, vol. 33, pp. 2407-2417.
10. Ray Green. (2005). Community perceptions of environmental and social change and tourism development on the island of Koh Samui Thailand. *Journal of Environmental Psychology*, vol. 3, pp. 37-56.
11. Johnson RM, Huettl B, Kocsis V, Chan SB, Kordick MF. (2007). Injuries sustained at Yellowstone National Park requiring emergency medical system activation. *Wilderness Environ Med*, vol. 18, pp. 186-189.
12. Mitka M. (2005). Volunteering overseas gives physicians a measure of adventure and altruism. *JAMA*, vol. 294, pp. 671-672.
13. Smith WWR. (2017). Integration of Tactical EMS in the National Park Service. *Wilderness Environ Med*, 28(2S):S146-S153.
14. Reeves K, Loder R, Handy R, Sleeth D, Schaefer C. (2022). Non-routine Environmental Hazards Encountered by National Park First Responders. *Disaster Med Public Health Prep*, 16(5):1749-1750.
15. Guo Na, Cai Jun. (2017). Volunteer Service and Co-coordinated Volunteer Programs at U.S. National Parks: A Case Study of Yosemite National Park. *Journal of Beijing Forestry University: Social Sciences*, 16(4): 27-33.
16. Gao Ke. (2020). Concept, Interest and Politics: Historical Dilemma of the Early U S. National Park Development from the Perspective of the Yellowstone Park Management. *Historical Research In Anhui*, (6), pp.122-131,168.
17. Zhang Chunhui, Bai Kai, Ma Yaofeng, et al. (2013). Scenic spot endorsement of China tourism image from the perspective of inbound tourists. *Geographical Research*, vol. 32, pp. 924-941.
18. Manzanedo RD, John A, Sethi ML, Theobald EJ, Brosi B, Jenkins J, Kloss-Schmidt A, Lia E, Schiffer A, Sevigny J, Wilson A, Yogeve Y, Hille Ris Lambers J. (2022). MeadoWatch: a long-term community-science database of wildflower phenology in Mount Rainier National Park. *Sci Data*, vol. 9, pp. 151.
19. Barrick KA. (2010). Protecting the geyser basins of Yellowstone National Park: toward a new national policy for a vulnerable environmental resource. *Environ Manage*, vol. 45, pp. 192-202.
20. LaFrance BJ, Ray AM, Fisher RN, Grant EHC, Shafer C, Beamer DA, Spear SF, Pierson TW, Davenport JM, Niemiiller ML, Pyron RA, Glorioso BM, Barichivich WJ, Halstead BJ, Roberts KG, Hossack BR. (2024). A Dataset of Amphibian Species in U.S. National Parks. *Sci Data*, 11(1):32.

21. Koel TM, Tronstad LM, Arnold JL, Gunther KA, Smith DW, Syslo JM, White PJ. (2019). Predatory fish invasion induces within and across ecosystem effects in Yellowstone National Park. *Sci Adv*, 5(3): eaav1139.
22. Ray AM, Sepulveda AJ, Irvine KM, Wilmoth SKC, Thoma DP, Patla DA. (2019). Wetland drying linked to variations in snowmelt runoff across Grand Teton and Yellowstone national parks. *Sci Total Environ*, 666:1188-1197.
23. Servheen C, Gunther KA. (2022). Conservation and management of the culture of bears. *Ecol Evol*, 12(4): e8840.
24. Guglielmi G. (2018). Yellowstone's grizzlies under threat from controversial hunting proposal. *Nature*, vol. 557, pp. 148-149.
25. Wang Hui, Sun Jing. (2015). Research on the U.S. National Park management system progress. *Journal of Liaoning Normal University: Social Science Edition*, vol. 38, pp. 44-48.
26. Zhao Jifang, Li Hongbo, Huang Anmin. (2008). A Revelation from National Park Service System in American to the Management of Scenic Sports in China. *Journal of Taiyuan University*, vol. 9, pp. 14-19.
27. Zhao W. (2022). Beginning: China's national park system. *Natl Sci Rev*, vol. 9, (10): nwac150.
28. Beeco JA, Wilkins EJ, Miller AB, Lamborn CC, Anderson SJ, Miller ZD, Smith JW. (2023). Support for management actions to protect night sky quality: Insights from visitors to state and national park units in the U.S. *J Environ Manage*, 345:118878.
29. Zhang Xiyue, Chen Tian. (2016). Influence mechanism of tourism development on intangible cultural heritages (ICH) based on the perception of tourists: A case study of traditional handicraft Suzhou Embroidery. *Geographical Research*, vol. 35, pp. 590-604.
30. Niu Yu, Wang Degen. (2015). Influence mechanism and innovation of tourism development pattern of historic streets based on the perspective of tourists: A case of Pingjiang Road of Suzhou. *Geographical Research*, vol. 34, pp. 181-196.
31. Chen ZZ, Lei JR, Wu TT, Chen DX, Zhou Z, Li YL, Hong XJ, Yang ZY, Li YD. (2021). Gross ecosystem product accounting of national park: Taking Hainan Tropical Rainforest National Park as an example. *Ying Yong Sheng Tai Xue Bao*, 32(11):3883-3892.
32. Rule A, Dill SE, Sun G, Chen A, Khawaja S, Li I, Zhang V, Rozelle S. (2022). Challenges and Opportunities in Aligning Conservation with Development in China's National Parks: A Narrative Literature Review. *Int J Environ Res Public Health*, 19(19):12778.
33. Song L, Xue Y, Jing Y, Zhang J. (2021). Visitor's Willingness to Pay for National Park Entrance Fees in China: Evidence from a Contingent Valuation Method. *Int J Environ Res Public Health*, 18(24):13410.
34. Yu P, Zhang J, Wang Y, Wang C, Zhang H. (2020). Can tourism development enhance livelihood capitals of rural households? Evidence from Huangshan National Park adjacent communities, China. *Sci Total Environ*, 748:141099.
35. Rashid W, Shi J, Rahim IU, Dong S, Sultan H. (2020). Issues and Opportunities Associated with Trophy Hunting and Tourism in Khunjerab National Park, Northern Pakistan. *Animals (Basel)*, 10(4):597.
36. Feng ZX, Sun XT, Xue L, Zhagn TJ. (2023). National park classification and spatial identification: A case of Yunnan Province, China. *Ying Yong Sheng Tai Xue Bao*, 34 (1): 187-195.
37. Stieglis R, Koster RW. (2022). Volunteer Responders Should Not Be Overlooked During the Night. *J Am Heart Assoc*, 11(3): e024743.
38. Lee SM. (2022). Investigating the Effect of Compassion Fade in Volunteer Tourism. *Behav Sci (Basel)*, 12(9):319.

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