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OUTDOOR SPORTS AND ENVIRONMENTAL PROTECTION IN MOUNTAINOUS AREAS UNDER ECOLOGICAL CIVILISATION

Abstract: Since the mid and late 19th century, people have paid more and more attention to the ecological environment, and environmental awareness and behaviour have been gradually strengthened. The global environmental protection movement is rising daily, and environmental protection will become the focus of human attention in the 21st century. Accelerate the establishment and improvement of the system and mechanism of land and space development, resource conservation and utilisation, and ecological preservation of the environment in the system of ecological civilisation, and promote the formation of a new pattern of harmonious development between man and nature and modernisation. Although China has formulated policies and regulations on environmental protection in outdoor sports development, environmental protection is grim due to problems such as insufficient government supervision, weak public awareness of environmental protection, and relatively backward environmental protection concepts and management methods. During the visit, outdoor sports lovers and club leaders were interviewed. In this context, with the continuous development of outdoor mountain sports driven by the improvement of people's pursuit of life, there began to be contradictions between outdoor mountain sports and the ecological preservation of the environment, which also became the cause of the author's concern and research.

Keywords: ecological civilisation, mountain outdoor sports, environmental protection

Introduction

With the rapid development of China's economy, the advancement of urban industrialisation, and people's excessive exploitation and use of natural resources, the ecological environment system is under the pressure of the world's most populous country and high-speed economic development, which makes the initially fragile ecosystem face more significant threats. Ecological and environmental problems are the most urgent problems faced by human society. The causes of environmental problems are mainly due to the population pressure brought by population growth. The increase in material demand and consumption and irrational utilisation of resources leads to the exploitation of renewable resources exceeding the growth rate. In contrast, using non-renewable resources accelerates its exhaustion rate, unilaterally pursuing economic growth and exchanging economic benefits at the cost of damaging the environment. Human life and survival cannot be separated from the ecological environment endowed by nature. The natural ecological environment has become the cornerstone and source of human life and guarantees human life. As the mountains are relatively ecologically fragile, and human beings have less

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contact with them, human activities will more or less affect the growth of mountain animals and plants. The chemicals in modern society are not easy to absorb and degrade effectively after entering the mountains. Thus, the contradiction between outdoor mountain sports and the ecological preservation of the environment arises. The data show that the overall score of public environmental awareness is 57.05, the score of environmental behaviour is 55.17, and the score of environmental satisfaction is 60.20. The Chinese public's environmental awareness and behaviour have failed, and environmental protection satisfaction has just "passed the pass line" [3].

Given this situation, the public still has the phenomenon of "talking but not practising" in participating in environmental behaviour. The embarrassing scores of two failing grades and one passing grade have sounded another alarm for the Chinese public's environmental awareness and behaviour [4]. Outdoor sports confirm the fragility of the outdoor environment, but out of people's egoism, they always put into practice "declaring war on nature" and "conquering nature"; but, little attention is paid to the feedback of the environment to humans [5]. People meet the diverse needs of self-cultivation and recreation through outdoor sports in the natural environment, and more and more people walk into the embrace of nature. With many people entering the natural environment, environmental problems have followed. Whether individuals, families, or teams travel, they destroy the natural environment invisibly, and scenic places show "walking for a while without knowing the road ahead," which has become the "convenience" of following the garbage to reach the destination nowadays [6].

With the increasingly prominent trend of globalisation and urbanisation, modern people's pace of life and pressure are also increasing. Escaping from trouble and getting in close contact with nature has become an increasingly fashionable leisure. When you come to the mountains, you can feel completely separated from the world. Facing the green mountains and waters, you can breathe fresh air, see flowers and trees, and hear the sounds of nature. This allows people to relax their bodies and balance their minds [7]. The damage of people's activities in the mountains to the natural environment is significant. From the pollution of white garbage to the pollution of water sources to the induction of forest fires, we must call attention to them. The relatively primitive mountain ecosystem is more fragile and should be paid more attention to [8]. Therefore, how to regulate and guide outdoor mountain athletes to protect the ecological environment in outdoor mountain activities, prevent damage and pollution to the ecological environment, and how coordinate the development of outdoor mountain sports and the everyday and harmonious existence of environmental protection in the context of ecological civilisation has become a problem worthy of our deep consideration [9]. With the enrichment of human material civilisation and the crowding of modern big cities, people have gone to the quiet, new, and secluded mountainous areas to open up their places of cultural entertainment and rest. The "invasion" of mountaineering and related cultural activities has made the mountain areas in the past lose the "chastity" of nature, and various kinds of pollution come one after another.

The natural environment protection in mountain areas has been put before people sharply - the impact of the rise of mountaineering exploration on the natural environment of mountain areas. Coordinating their relationship is the critical problem to be solved in this paper [10]. In addition, the mountainous area is relatively fragile due to its little contact with humans. Human activities can easily affect the activities of animals and plants, and the chemicals in modern society are not accessible or even able to be absorbed and degraded

after entering the mountainous area. Therefore, the mountainous area needs our special attention and protection.

Therefore, based on the era background of ecological civilisation, this paper analyses the conflict between outdoor mountain sports and ecological preservation of the environment and then puts forward countermeasures and suggestions to coordinate the relationship between them, which has particular practical significance and theoretical value. Its innovation lies in the following:

- The core content of this paper is to take the ecological preservation of environmental problems caused by China's mountain outdoor sports as the research entry point, carry out scientific analysis and research on them under the background of ecological civilisation construction, and then put forward corresponding reasonable suggestions for the ecological environment damage problems existing in China's mountain outdoor sports, especially at the institutional level, hoping to formulate practical and feasible systems, in order to promote and coordinate the harmonious and sustainable development of outdoor mountain sports and ecological environment.
- Chinese sports scholars primarily study the relationship between sports and the environment from the microcosmic point of view of sports geography. Domestic scholars mainly study the causes, results, and countermeasures of sports and environmental protection. Research on human sports and environmental problems focuses on the relationship between urban sports and the urban environment. They pay attention to the theoretical research of environmental damage in sports development.
- Pais et al. [11] explained the lack of environmental awareness of Chinese people through a large number of data and put forward through analysis that improving the environmental awareness of the whole people is the only way to achieve sustainable development. According to the research, the following ways should be adopted to promote environmental awareness. Li et al. [12] expounded on the present situation of environmental pollution in China and the harm it brought to people, discussed the importance of improving the environmental awareness of the whole people, and put forward some measures to improve the environmental awareness of the whole people. According to the air, water, and noise pollution in sports, Al Mugren [13] points out the environmental damage caused by sports development and discusses the necessity of environmental protection from the dialectical relationship between sports development and the ecological environment. Nyssen et al. [14] pointed out that the coexistence of sports and ecology can be formed by arousing environmental awareness, formulating environmental protection plans, developing environmental cooperation in related fields, and establishing environmental protection supervision mechanisms. Bojko and Kabala [15] mentioned that the "invasion" of mountaineering and its related humanistic activities has made the former mountainous areas lose the "chastity" of nature, and various kinds of pollution have followed. Huang et al. [16] pointed out that most outdoor players need environmental protection concept guidance. The corresponding national supervision and management system needs to be improved, so the impact on the natural environment is becoming increasingly severe. He mainly discussed the soil, animals and plants, water environment, atmospheric environment, etc., from outdoor sports and then proposed that the ecological environment should be protected at all times before and after outdoor sports. Sgroi [17] believes that green environmental awareness emphasises global and holistic thinking and simple, low-carbon, and simple ways to reduce consumption to achieve the

harmonious development of the relationship between human beings and nature and between human beings. It is the value concept and behaviour mode that human beings have been seeking to appropriately and reasonably handle the relationship between human beings and nature [18, 19].

Methodology

As early as the 1970s and 1980s, with the outbreak of various global environmental problems and the social problems caused by the energy crisis, the debate on the issue of "the limit of growth" was raised worldwide. As for how to define the connotation of "ecological civilisation," different scholars have given different definitions, which can be summarised as follows: (1) Ecological civilisation in a broad sense. (2) "Ecological civilisation" in a narrow sense. (3) Ecological civilisation as a development concept. (4) Ecological civilisation with institutional attributes. Mountaineering organisations in China mainly include China Mountaineering Association, outdoor clubs, tourism companies, universities (including school teams, student associations, etc.), private voluntary organisations, and others. The study, formulate, and organise the national competition system, plans, rules, and regulations of outdoor sports, as well as the management of national competitions, organise and implement significant competitions, and be responsible for the unified management of mountain climbing activities for opening to the outside world. Establish a national mountain disaster prevention and rescue system; carry out international and technical exchanges. Put forward the international activities plan of mountaineering, organise and implement the organisation, training, and events of participating teams in international competitions, and be responsible for and guide the examination and approval of international competitions in China and related organisational work. To organise scientific and technological research in mountaineering, research and development of equipment, improve scientific training, and organise publicity and publication; carry out extensive mountaineering and outdoor sports technical training to provide talent guarantee for the development of mountaineering and outdoor sports; inherit and carry forward the spirit of mountaineering, spread mountaineering culture, and strengthen the popularisation of outdoor mountaineering sports among young people. Whether commercial or not, it provides a good platform for people participating in outdoor mountain sports. The emergence of these outdoor mountain sports organisations has specific characteristics of the times - people need to escape from the city and get close to nature. The emergence of these organisations has well-met people’s needs, whether it is "poor travel (money is not high)" or "corrupt travel (activities are conducted in a relaxed way and mainly for pleasure)".

Table 1

Generating links

Starting point, end point	Weight [-]	Starting point, end point	Weight [-]
(1, 2)	7	(1, 2)	10
(2, 3)	8	(2, 3)	8
(3, 4)	7	(3, 4)	2
(4, 5)	9	(4, 5)	8
(5, 6)	12	(5, 6)	18

In the spatial information network, the link weight is allocated by analysing the requirements of the upper layer service on bandwidth, delay, delay jitter, and reliability and combining the actual contribution of the link itself to the above indicators. The weight value of each link will be used as the basis for the subsequent topology control algorithm to select links and nodes. The links included in the generated swelling are shown in Table 1.

Therefore, the Mountaineering Management Centre of the State Sports General Administration, as the highest competent department of outdoor mountain sports, has the responsibility to draft the industry standards for outdoor mountain sports in China and formulate and issue relevant normative documents and guiding opinions in time to actively guide and promote the sustainable development of outdoor mountain sports. At the same time, it is necessary to establish a quality supervision system for outdoor sports equipment in mountainous areas as soon as possible. As a professional activity, outdoor activities in mountain areas have substantial challenges and high risks, and the requirements for sports equipment and equipment are high. A slight mistake may endanger the life of users. Qualification of equipment manufacturers, quality supervision of mountain outdoor sports equipment on the market, and publicity and notification on the portal to ensure the standardisation and safety of outdoor sports equipment and effectively reduce outdoor sports accidents or risks caused by equipment factors.

Result analysis and discussion

Similar to adding a personalised recommendation function to existing outdoor sports platforms. People with many years of experience in the outdoor sports industry serve as system outdoor sports administrators. These administrators generally have outdoor sports training qualification certificates and can serve as outdoor sports training coaches. They are very familiar with outdoor sports. NS2 network simulation tool software is widely used among many network simulation software. NS2 network simulation tool adopts a series of object-oriented design methods. Through a large number of simulation modules, it provides simulation analysis of widely used network protocols and algorithms and can obtain very intuitive system performance analysis. NS evolved from the original version to the more mature version, NS2, and the latest version, NS3, has passed through the world. NS3 lacks functions in wireless network simulation, and the number of users differs from that of NS2, so this paper chooses NS2 as the research object. Under this goal, through the simulation analysis of some performance indexes, the influence of the topology control algorithm on the network performance is investigated. For example, when the network load increases or the number of nodes increases, it is a reliability index based on the performance of network services to examine the ability of the network to transmit and process data. In the simulation of this paper, we analyse the performance of packet delivery rate, control overhead, delay, and throughput. The parameter settings in the simulation are shown in Table 2.

With the increase in the number of nodes, the network throughput of the first two algorithms decreases significantly. In contrast, the network throughput of the convex area fault-tolerant control algorithm has no noticeable change. This is because, with the increase in the number of nodes, the key points in the topology become the bottleneck of the data transmission business. A large number of data are forwarded through the key nodes, which leads to severe network congestion. Many data packets cannot reach the destination node successfully, and the network has to carry out route retransmission, and the rerouting causes

pathfinding request messages and response messages, etc. These control messages occupy more bandwidth resources, seriously affecting the utilisation rate of network bandwidth, resulting in a decrease in network throughput.

Table 2

Simulation parameters

Simulation parameters	Value and type [-]
Number of nodes/number	30
Transmission data type	CBR
Routing protocol	AODV
Payload/(bytes)	512
Number of data streams/Number	802.11
Mac layer protocol	TwoRAYGround
Wireless communication model	30
Antenna mode	OmniAntenna

Not only that, through income analysis and fairness consideration, the income cost of outdoor mountain sports and the cost of ecological loss control, as well as the regulation and control of the tax and fee mechanism of economic balance, will better coordinate and promote the conflict between the development of outdoor mountain sports and the protection of the ecological environment. Therefore, it is necessary to improve the management mechanism to promote the development of outdoor mountain sports, conduct an environmental assessment on the development and implementation of outdoor mountain sports in different regions and locations, and the impact on the ecology, and adopt an economical way to make up for the ecological environment, while charging the individual or collective for carrying out outdoor mountain sports. Taxing the movement can largely compensate for the ecology, prevent the unlimited development of the movement from causing irreparable damage to the environment, and ensure the protection of the ecology through more stringent economic policies.

Conclusion

At present, outdoor sports have increasingly become one of the main ways for the public to carry out leisure sports and sports tourism, and are favoured by people. However, in the early stage of development in China, outdoor sports not only improved people's quality of life but also damaged the natural environment to a certain extent. Therefore, taking ecological civilisation as the background, this paper discusses the contradictions and conflicts between outdoor mountain sports and the ecological preservation of the environment and expounds on the paradox of tourism resource development and ecological preservation of the environment from three aspects: the unity of opposites between man and nature, the dialectical unity between tourism resource development and ecological preservation of the environment, and the realistic dilemma between tourism resource development and ecological preservation of the environment. It also analyses the causes of the conflict between outdoor mountain sports and ecological preservation of the environment. UB-CF, IB-CF, CBF, and the mixed recommendation model are adopted when the system is recommended.

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