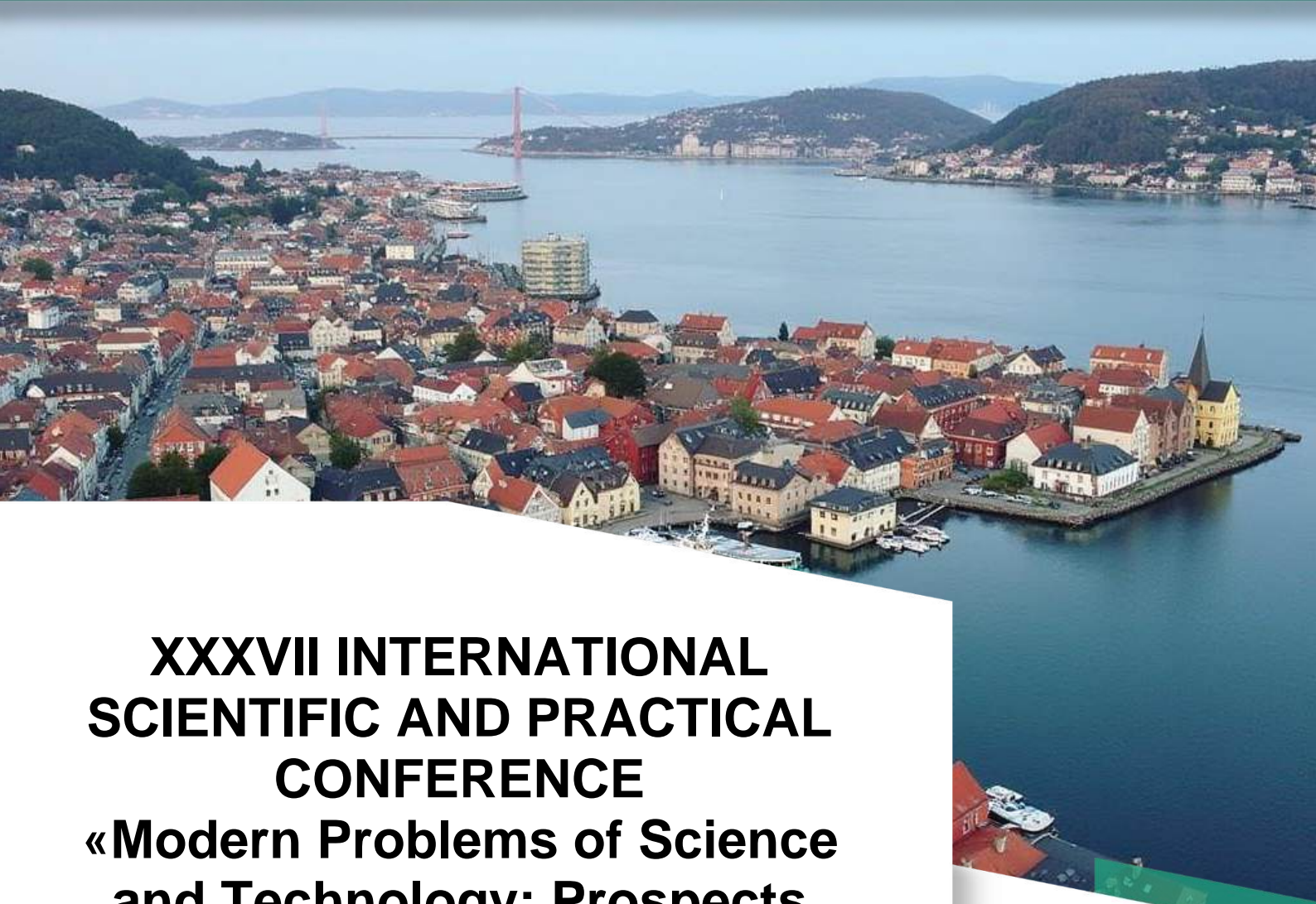




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«Modern Problems of Science  
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## CONTENTS

### SECTION: AGRICULTURAL SCIENCES

- Kalinichenko A., Kolomiets Yu., Statkevych O.**  
PHYTOSANITARY EVALUATION OF BLACK CURRANT (RIBES NIGRUM L.) PLANTATIONS IN THE FOREST-STEPPE OF UKRAINE..... 9

### SECTION: ARCHITECTURE AND CONSTRUCTION

- Tugay O.A., Troyan R.O.**  
MECHANISM FOR IMPLEMENTING FIDIC INTERNATIONAL STANDARD CONTRACT FORMS IN UKRAINE..... 12

- Тугай О.А., Хохлін Д., Божинський М.**  
ПРЕВЕНТИВНЕ ПІДСИЛЕННЯ ЗАЛІЗОБЕТОННОЇ ФЕРМИ, ЩО МАЄ АВАРІЙНИЙ ТЕХНІЧНИЙ СТАН ЧЕРЕЗ ВТРАТУ КОНСТРУКТИВНОГО ЕЛЕМЕНТУ, ЯК СКЛАДОВА ОРГАНІЗАЦІЙНО-ТЕХНОЛОГІЧНОГО РІШЕННЯ З ЛІКВІДАЦІЇ НАСЛІДКІВ ТАКОЇ АВАРІЇ..... 14

- Костюченко О., Цвіркун Д.**  
ФАКТОРИ, ЩО ВПЛИВАЮТЬ НА ФОРМУВАННЯ БАГАТОРІВНЕВИХ ПАРКІНГІВ..... 17

- Мартинов В., Россоха А.**  
КЛАСИФІКАЦІЯ МОРСЬКИХ ПАСАЖИРСЬКИХ ТЕРМІНАЛІВ..... 19

- Курілович К.В., Бабенцова О.С., Вербовецька В.В., Сліпченко В.Р.**  
ІННОВАЦІЙНІ АРХІТЕКТУРНІ РІШЕННЯ ДЛЯ АДАПТАЦІЇ ДО ЗМІНИ КЛІМАТУ..... 21

### SECTION: BIOLOGY AND MICROBIOLOGY

- Коц С.М., Коц В.П., Коц В.В.**  
ПИТАННЯ ПРОФІЛАКТИКИ ТА ДІЙ ЗА ГІПЕРТЕНЗИВНОГО КРИЗУ..... 24

### SECTION: BOTANY AND FORESTRY

- Zymaroyeva A.A., Vasylichuk R.A., Teleus S.Yu., Freund R.A.**  
CURRENT TRENDS IN REFORESTATION PROCESSES IN THE STATE ENTERPRISE "KOROSTEN FORESTRY APC"..... 27

**Карташова О.Г., Попатенко І.В.**  
ВИКОРИСТАННЯ ТЕХНОЛОГІЇ ПЛЕЙБЕК-ТЕАТРУ ДЛЯ  
ВІДНОВЛЕННЯ ОСОБИСТОСТІ ПІСЛЯ ТРАВМАТИЗАЦІЇ..... 152

**Научитель О.Д., Фаворова К.М.**  
ОСОБЛИВОСТІ ПРОЯВУ СТРЕСУ У ЖІНОК-БІЖЕНЦІВ З  
УКРАЇНИ..... 154

**Циганська В., Берегова Н.**  
ПРОБЛЕМИ ТА ВИКЛИКИ, З ЯКИМИ СТИКАЮТЬСЯ РОДИНИ  
ВІТЕРАНІВ..... 159

### **SECTION: TECHNICAL SCIENCES**

**Kara I., Ostapenko R., Hulaia Ye.**  
ANALYSIS OF STRESS-STRAIN STATE OF OFFSHORE DEEP-  
WATER PLATFORM'S BEARING STRUCTURES IN OPERATION  
MODES..... 163

**Олех Т.М.**  
ВИКОРИСТАННЯ ІНФОРМАЦІЙНІЙ СИСТЕМИ УПРАВЛІННЯ  
ПРОЕКТАМИ У ВІДДАЛЕНІЙ РОБОТІ..... 165

**Zhang X., Borysevych V.**  
BILLET OPTIMIZATION DESIGN FOR NON-AXISYMMETRIC DIE  
FORGINGS BASED ON FORWARD SIMULATION ANALYSIS  
METHOD..... 169

### **SECTION: TOURISM AND HOTEL AND RESTAURANT BUSINESS**

**Тумчук S.V.**  
ECOLOGICALLY ORIENTED MANAGEMENT OF TOURISM  
RESOURCES FOR THE PRESERVATION OF THE NATURAL  
ENVIRONMENT AND THE DEVELOPMENT OF TOURISM AND  
RECREATION..... 175

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AND RESTAURANT BUSINESS**

**ECOLOGICALLY ORIENTED MANAGEMENT OF  
TOURISM RESOURCES FOR THE PRESERVATION OF  
THE NATURAL ENVIRONMENT AND THE  
DEVELOPMENT OF TOURISM AND RECREATION**

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In today's world, there is a growing awareness of the need to preserve the natural environment and create conditions for the sustainable development of tourism and recreation. Reducing the impact of tourism on ecosystems and preserving biodiversity has become one of the main tasks of tourism resource management. Ecologically oriented management of tourism resources not only contributes to the conservation of nature but also opens up new opportunities for tourism development by creating unique and environmentally safe tourist products and services. The further development of tourism requires a comprehensive approach to environmental conservation and the consideration of ecological aspects in all areas of tourism activity.

Ecologically oriented management of tourism resources is a strategy or approach to tourism management that aims to preserve the natural environment and reduce the negative impact of tourism activities on ecosystems. Its key principles include the balanced use of natural resources, minimizing waste and pollution, considering the needs of the local population, and preserving biodiversity [1]. It is designed to ensure the sustainability and preservation of the ecological value of natural sites that attract tourists and to ensure the long-term development of tourism in harmony with nature.

Tourist flows can negatively impact various natural resources, leading to the destruction of ecosystems and loss of biodiversity. The most vulnerable natural resources include ecosystems, water resources, wildlife, cultural landscapes, and archaeological sites. Tourism can disrupt the natural balance in ecosystems such as forests, coral reefs, mountain regions, and other unique natural areas. Over-visitation can result in vegetation destruction, soil erosion, and the loss of local species. Tourism often leads to water pollution due to improper waste disposal, the use of chemicals for cleaning, and other activities that can threaten aquatic ecosystems.

The increase in tourist flows can affect local wildlife, particularly wild animals that may lose their habitats due to environmental destruction and migration obstacles. Additionally, excessive tourism pressure can cause damage to archaeological sites, historical structures, and cultural landscapes [2]. These factors highlight the need for careful planning and management of tourist flows to preserve nature and ecosystems.

Various tools and strategies can be used to protect the natural environment in tourist regions (Figure 1).

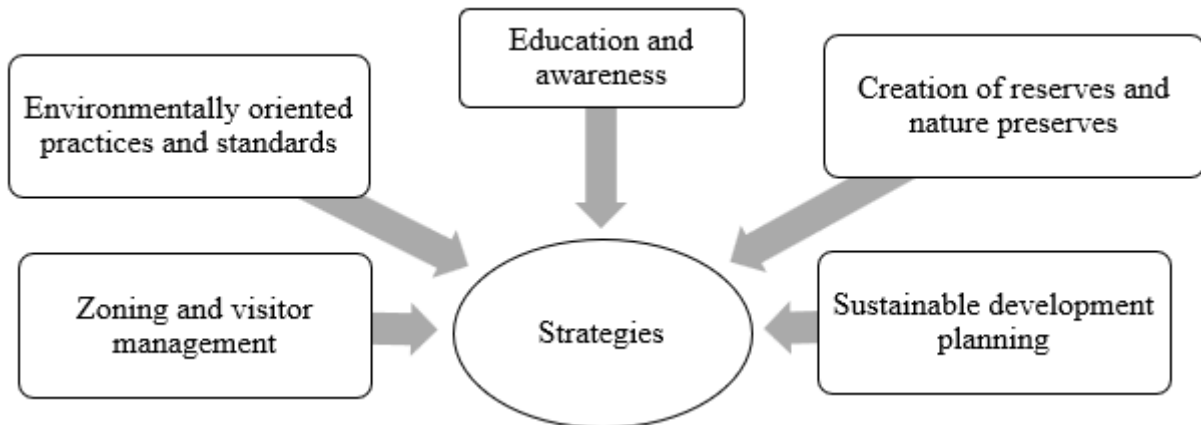


Figure 1. Strategies for Conservation of the Natural Environment in Tourist Regions \*  
\* author's development

Various tools and strategies can be employed to preserve the natural environment in tourist regions. For example, zoning and visitor management help regulate the tourism load on natural resources. The implementation of environmentally oriented practices in the tourism sector is also crucial, as they help reduce the negative impact on nature. Raising public awareness and education regarding environmental issues is another important strategy. Moreover, the creation of reserves and nature preserves ensures the protection of the most valuable areas, while sustainable development planning helps maintain the region's ecological value as its tourism potential grows [3].

Environmentally oriented management of tourism resources can positively impact the quality of tourist services and meet visitor needs in several ways. It promotes the creation of naturally balanced tourism offerings that take into account the needs and expectations of tourists while ensuring the preservation of the natural environment. Firstly, eco-friendly and sustainable tourism products can create more attractive conditions for leisure and recreation, contributing to increased satisfaction with the experience. Additionally, the implementation of environmental standards and practices can improve service quality, for example, by reducing waste, ensuring safe drinking water, and creating comfortable living conditions. This enhances the overall impression of the vacation and fosters greater customer loyalty. Furthermore, eco-oriented tourist attractions and services are often more appealing to environmentally conscious tourists, which can lead to an increase in visitor numbers and a better overall impression of the destination.

Environmentally oriented approaches can stimulate the development of tourism and recreation in tourist regions through several key mechanisms. Firstly, such approaches create unique and attractive natural sites for tourists, offering eco-friendly and distinctive recreational experiences. This can attract more tourists who value nature and seek to spend time in well-preserved environments. Additionally, environmentally oriented tourist attractions and services can be aligned with high standards of quality and sustainable development, making them more appealing to tourists and enhancing their competitiveness in the tourism market [5].

Furthermore, the development of eco-friendly infrastructure and services can promote tourism growth in underdeveloped or remote regions where there is potential for creating eco-tourism routes and alternative forms of recreation. Finally, environmentally oriented approaches can help preserve natural resources and ecosystems, which are the foundation of tourism activities, ensuring their sustainable use for future generations.

There are numerous examples around the world of successful implementation of environmentally oriented tourism resource management. For instance, Manuel Antonio National Park in Costa Rica is renowned for its beaches, tropical forests, and biodiversity. The park has implemented strict visitation rules, such as time limits on beach access and quotas on the number of tourists allowed in the park at one time. The Galápagos Islands in the Pacific Ocean are famous for their unique animal species, such as giant tortoises and marine iguanas. The Ecuadorian government has established stringent rules for visiting the islands, restricting tourist access to certain areas and controlling their movements. New Zealand is known for its scenic landscapes and active eco-tourism. The government offers eco-tourism routes with minimal environmental impact and provides information on responsible tourism practices. Iceland invests in eco-friendly transportation systems and provides tourists with clean energy sources, such as geothermal energy. Kenya is renowned for its safaris and wildlife, with strict regulations on hunting and poaching, and ensures that a fair share of tourism revenue goes to local communities [6].

Sustainable management of tourism resources plays a crucial role in preserving the natural environment and developing tourism. Implementing environmentally oriented approaches helps conserve biodiversity, reduce the negative impact of tourism on nature, and enhance ecosystem resilience. Moreover, eco-friendly tourism not only serves as a means of environmental preservation but also supports local economic development and improves the quality of life for local communities. This approach to tourism resource management opens up new opportunities for sustainable tourism development, preserving natural wealth for future generations.

### References

1. Neshchadim, L.M., Tymchuk, S.V., Kozhukivska, R.B. (2019). Ecotourism as the Basis for Effective Development of the Tourism Business in Ukraine. *Priazovsky Economic Bulletin*, Issue 3 (14), pp. 232-327.
2. Korzh, N.V., Basiuk, D.I. (2017). *Management of Tourist Destinations: Textbook* / N.V. Korzh, D.I. Basiuk. – Vinnytsia: "PP ТД Edelweiss and K", 322 pp.
3. *Regional Tourism Development Management: Textbook* / Edited by V.F. Semenov. (2011). – Odesa, 225 pp.
4. Tymchuk, S.V. (2016). Ecotourism as a Direction of Socio-Economic Development of Rural Areas. *Visnyk TNEU*, No. 1(11), pp. 35-41.
5. Tishchenko, S.V., Osipchuk, A.S. (2022). Development of Ecotourism in the Context of the Functioning of the National Tourist Organization of Ukraine. *Black Sea Economic Studies*, No. 76, pp. 79-86.
6. Free Encyclopedia "Wikipedia" URL: <https://uk.wikipedia.org/>

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