

The tourism of collecting: a case study from the Kharkiv region, Ukraine

*Polina Dovzhenko*¹

PhD student, Department of Physical Geography and Cartography,
¹ V. N. Karazin Kharkiv National University, Kharkiv, Ukraine

e-mail: polina.dovzhenko@student.karazin.ua,  <https://orcid.org/0009-0007-6843-0962>;

*Kateryna Borysenko*¹

PhD (Pedagogy), Associate Professor, Department of Physical Geography and Cartography,
e-mail: k.borysenko@karazin.ua,  <http://orcid.org/0000-0002-7435-6857>;

*Vladyslav Popov*¹

Senior Lecturer, Department of Physical Geography and Cartography,
e-mail: v.popov@karazin.ua,  <http://orcid.org/0000-0002-5960-631X>;

*Simon M. Hutchinson*²

PhD (Palaeolimnology), Associate Professor, School of Sciences, Engineering and Environment,
² University of Salford, The Crescent, Salford, United Kingdom,

e-mail: s.m.hutchinson@salford.ac.uk,  <https://orcid.org/0000-0003-0072-1062>

ABSTRACT

Statement of the problem. Collecting tourism in Ukraine is predominantly practiced in an amateur form. Consequently, there is a lack of relevant statistical information, which impedes the execution of comprehensive scientific research. Nevertheless, the existence of a natural resource base highly suitable for the development of collecting tourism across Ukraine, and particularly within the Kharkiv region, underscores the relevance of this topic and the need to study its potential for further development.

The relevance of the work lies in the fact that today there is no reasonable definition of the concept of “collecting tourism”, and this tourist activity in the context of the regions of Ukraine requires a thorough study.

The aim of the study is to outline the peculiarities of collecting tourism and to investigate the impact of physical and geographical prerequisites on the organisation of collecting tourism on the example of the Kharkiv region.

The object of this study is collecting tourism.

The subject is the physical and geographical prerequisites for the development of collecting tourism and the general features of its organisation.

Methods. The descriptive method is essential for systematically characterizing the studied territory and providing a theoretical summary of the collected information. This is complemented by the method of idealization, which is applied to construct “ideal models” of natural-territorial complexes for comparison with the real situation, particularly during the classification stage. The classification method is used to systematize existing knowledge and develop an original classification scheme. The cartographic method involves studying general geographical and thematic maps, as well as deciphering satellite images and utilizing the digital elevation model of the Kharkiv region as auxiliary elements. The comparative method ensures the identification of similarities and differences among the study objects, specifically when analyzing the natural resource base of the territorial communities in the Kharkiv region. The forecasting method is utilized to formulate assumptions about future tourist demand, specifically determining which objects of interest may attract a tourist-collector in the region.

Results. The research analyzed the conceptual and terminological foundation of collecting tourism, revealing a significant gap in both domestic and foreign studies where it is not yet defined as a distinct phenomenon. The authors proposed and substantiated their own theoretical placement of collecting tourism within the scientific system. This work provided the set-up for a practical study of the Kharkiv region’s geological, geomorphological features, and natural resource base in the context of collecting tourism. The study investigated the organisational specifics of this niche tourism and resulted in the development of practical recommendations for constructing specialized collecting tourist routes that account for the narrow focus, aiming to ensure a high-quality final product.

In examining the development prospects, the study confirmed that the Kharkiv region possesses a promising natural resource base highly suitable for collecting tourism; however, current activities are rendered impossible due to the ongoing negative impact of military actions. Additionally, the research analyzed the technical possibilities for route visualization, comparing the capabilities of Google My Maps and ThingLink programs.

Keywords: *collecting tourism, landscape, geographic information system (GIS), map, tourist route, Kharkiv region.*

In cites: Dovzhenko Polina, Borysenko Kateryna, Popov Vladyslav, Hutchinson Simon M. (2025). The tourism of collecting: a case study from the Kharkiv region, Ukraine. *Visnyk of V. N. Karazin Kharkiv National University. Series Geology. Geography. Ecology*, (63), 184-196. <https://doi.org/10.26565/2410-7360-2025-63-14>

Introduction. Today people in Ukraine face a lot of stressful situations: economic crisis, the post-COVID-19 pandemic period, which entailed several bans and restrictions, and war. All these processes put significant pressure on the mental and emotional

state of a person. Tourism and recreation are ways to improve overall human health. Collecting tourism ensures a direct interaction between people and nature, which plays a significant role in restoring the physical and mental strength of tourists.

This type of tourist activity is accessible and popular and in Ukraine it is widespread in an amateur form, i.e. engaged by 'wild' tourists. This, in turn, is reflected in the lack of relevant statistical information, which makes it difficult to conduct any relevant research. Nevertheless, the natural resource base for the existence of collecting tourism in Ukraine, and in particular in the Kharkiv region, indicates the relevance of this topic and the need to study its development and further spread.

Previous experience. Collecting tourism is not a widespread type of recreation in the world, although the practice of collecting is perhaps the oldest type of human activity and, moreover, a way of life since the era of the primary communal (pre-social) structure of human communities. However, in some countries, gathering is restricted by law, mainly because of the threat of destruction of organisms (mainly plants, but also animals) that are on the verge of extinction or threatened with extinction. However, despite the fact that the environmental protection of natural systems is recognised as one of the primary and urgent needs of humanity, the collection business often takes on a predatory character [2]. In certain cases, collecting is allowed even for species restricted by law, most often when it is an indispensable means of subsistence for primary communities or is justified by other significant circumstances, but is limited by quotas and regulated by fee limits [3]. The authors believe that this practice, although seemingly contradictory to the development of collecting tourism, makes sense and should therefore be coordinated with appropriate conservation measures.

A prerequisite for the development of collecting tourism is the "rudimentary" craving of large segments of a population for gathering (along with hunting and fishing) as a form of active recreation. In this sense, we see a prerequisite for the organisation of collecting tourism to become one of the areas of modern ecological business. However, research in this area is still not widespread, and especially in Ukraine. The authors undertook as one of their methodological tasks to present and analyse the existing scattered and sometimes contradictory attempts to include some types of active recreation, such as gathering, in ecotourism to implement gathering in its rather extensive structure [4]. So far, only M.M. Melniychuk and T.P. Bezsmertniuk mention collecting tourism as a form of ecotourism in their work [5].

It is worth noting that, in the authors' opinion, the following definitions are the closest to the concept of "collecting tourism".

Researchers M.P. Kliap and F.F. Shandor define *mushroom tourism* as "a type of tourism aimed at visiting places where edible mushrooms grow,

searching for, consuming and buying mushrooms directly in the mushroom region". The authors also note that this type of tourist activity has long been a component of other types of tourism, which in the context of this paper is important in terms of studying mushroom tourism, as the authors propose to consider mushroom picking as its integral part.

The above-mentioned experts also distinguish such types of tourism as *fruit tourism*, which "aims to visit places of fruit distribution, search, consumption and purchase of fruit directly in the fruit region", and *berry tourism*, which "aims to visit places of wild berries distribution, search, consumption and purchase of berries directly in the berry region".

Another concept that can be considered is *forest tourism* – "a multi-day overnight trip of a group of people along a certain route for the purpose of recreation, physical development, and cognition". The aforementioned M.P. Kliap and F.F. Shandor note that such tourist activity is a combination of recreation and mushroom and berry picking. Forest tourism is also aimed at several activities, including amateur crafts (collection of mushrooms, berries, medicinal plants, collections of forest species) [6].

Analysing the multifaceted nature of this concept, it can be noted that it would be quite appropriate to distinguish from it some of the characteristics for a separate term – collecting tourism.

It is also worth paying attention to the concept of "*rural green tourism*". Researcher V.I. Byrkovych in his scientific article defines it as follows: "a specific form of recreation in private households in rural areas using the property and labour resources of a private peasant, subsidiary or farm, natural and recreational features of the area and the cultural, historical and ethnographic heritage of the region". In the context of this paper, the above term is interesting because the author includes mushroom and berry picking as additional services of this type of tourism [7].

There is a certain prospect of harmonising the collecting tourism with the previously proposed agrotourism [8]. P.A. Horishevskyi et al. define *agritourism* as "recreational tourism that involves the use of agriculture (farming)". This type of tourism, according to the authors, also provides a number of additional services in rural areas, including mushroom and berry picking [9].

Having analysed the works of Ukrainian scientists, it can be concluded that until now, tourism scholars in Ukraine do not distinguish collecting tourism as a separate phenomenon. This result of the review of the existing material is quite natural, since tourism studies is only at the beginning of its development and growth as a scientific discipline in Ukraine, so it is characterised by incompleteness and gaps in certain issues.

Researchers from other countries also distinguish mushroom tourism, but as a component of culinary tourism [10]. In Spain, mushroom tourism is organised directly, without a culinary focus, as a “wild” recreation (wild mushroom picking tourism) [11].

Chinese and Japanese scientists also distinguish *fruit-picking tourism* as a separate type of tourism [12, 13].

Methods. A descriptive method is necessary to conduct a study of collecting tourism. In the context of this work, description is a systematic characterisation of the territory and a theoretical summary of the information obtained, i.e. systematisation, explanation and verbal construction of the theory.

The next method, the method of idealisation, involves designing so-called ideal models and comparing the situation under study with the ideal version. This is a complex method, and its application takes into account the features of some other methods (modelling, analogy, abstraction, etc.). The essence of the method is the formation of ideal objects in relation to all real territorial systems and further study of territorial systems on their models, comparing “adequate” models with ideal ones. In this study, it is implemented at the classification stage to create an “ideal natural-territorial complex”.

The method of classification, which overlaps with the previous one, helps to systematise existing knowledge and identify certain patterns, which is necessary for drawing logical conclusions. Thus, the original classification was developed in this study.

Another way to collect information, in particular when assessing tourist attractiveness, is to study general geographical and thematic maps (relief, climate, fauna and flora, Quaternary sediments), as well as to decipher satellite images. Thus, for this study, maps of tectonic zonation, geological and geomorphological structure, as well as satellite images and a digital elevation model of the Kharkiv region were used as auxiliary elements.

The comparative method consists in finding and identifying similarities or differences in uniform properties (signs, changes, trends) of the objects under study. For example, in this study, the comparison method was used at the stage of analysing the natural resource base of the Kharkiv region, namely, to compare its territorial communities.

The forecasting method is, in fact, current assumptions about the future in order to determine it. Thus, in this study, it is implemented when assuming which objects of interest may be of interest to a tourist-gatherer in the Kharkiv region.

Research results. Based on the above and other studies, as well as some of their own experience, the authors propose a working version of their own definition of collecting tourism. According to the authors, *collecting tourism* is a type of tourism or-

ganised for the purpose of collecting components of the natural environment for basic necessities, i.e. consumption, or satisfaction of cognitive and aesthetic needs. Thus, its hierarchically smaller taxa will be its subtypes: one – for basic necessities (this definition includes the collection of mushrooms, berries, nuts and other plants for further consumption) and the second – for cognitive and aesthetic pleasure (collecting samples of natural components (plants, mushrooms, minerals or fossils, etc.) to replenish one’s own thematic collection) [14].

It is advisable to consider this type of tourist activity as one of the components of a large group of active types of tourism. Based on the fact that active tourism involves all types of tourist trips in a diverse natural environment, which are characterised by an active way of moving along the route, i.e. with the expenditure of appropriate physical efforts of the tourist, it can be argued that collecting tourism falls under this category of tourist activity, as it meets two main criteria: conducting tourist activities in the natural environment and making physical efforts of the tourist [15, 16].

The peculiarity of the authors’ approach to the problem of collecting tourism is the need to introduce a certain scientific and methodological framework, without which collecting tourism as a type of ecotourism cannot be implemented in the latter’s system and obtain the status of an independent type of active recreation and conscious cognitive activity. Here, we mean the need to harmonise collecting tourism with the basics of landscape science theory and determine its connection. Given the subject of this study and the lack of a theoretical framework for collecting tourism, we propose an authors’ classification of natural-territorial complexes by the predominant objects of collecting based on geological and geomorphological conditions (Fig. 1). This classification is aimed at determining the territory that is most attractive to a tourist-gatherer, focusing on his/her objects of interest and relying on certain information about the territory.

The definition of territory types and subtypes is based on three geological and geomorphological conditions that are closely interrelated: exposure, nature of the parent rock and vegetation cover.

In the Hudson Institute of Mineralogy Dictionary, the term “exposure” is defined as “the nature and degree of openness of a slope or place to wind, sunlight, weather, oceanic influences, etc.” [17].

In fact, according to the Small Encyclopedia of Mining, outcrops are “rock exposures on the earth’s surface” [18].

For this classification, a three-stage gradation of outcrops was used, in which the following levels are distinguished:

- steep, typical for areas where the share of

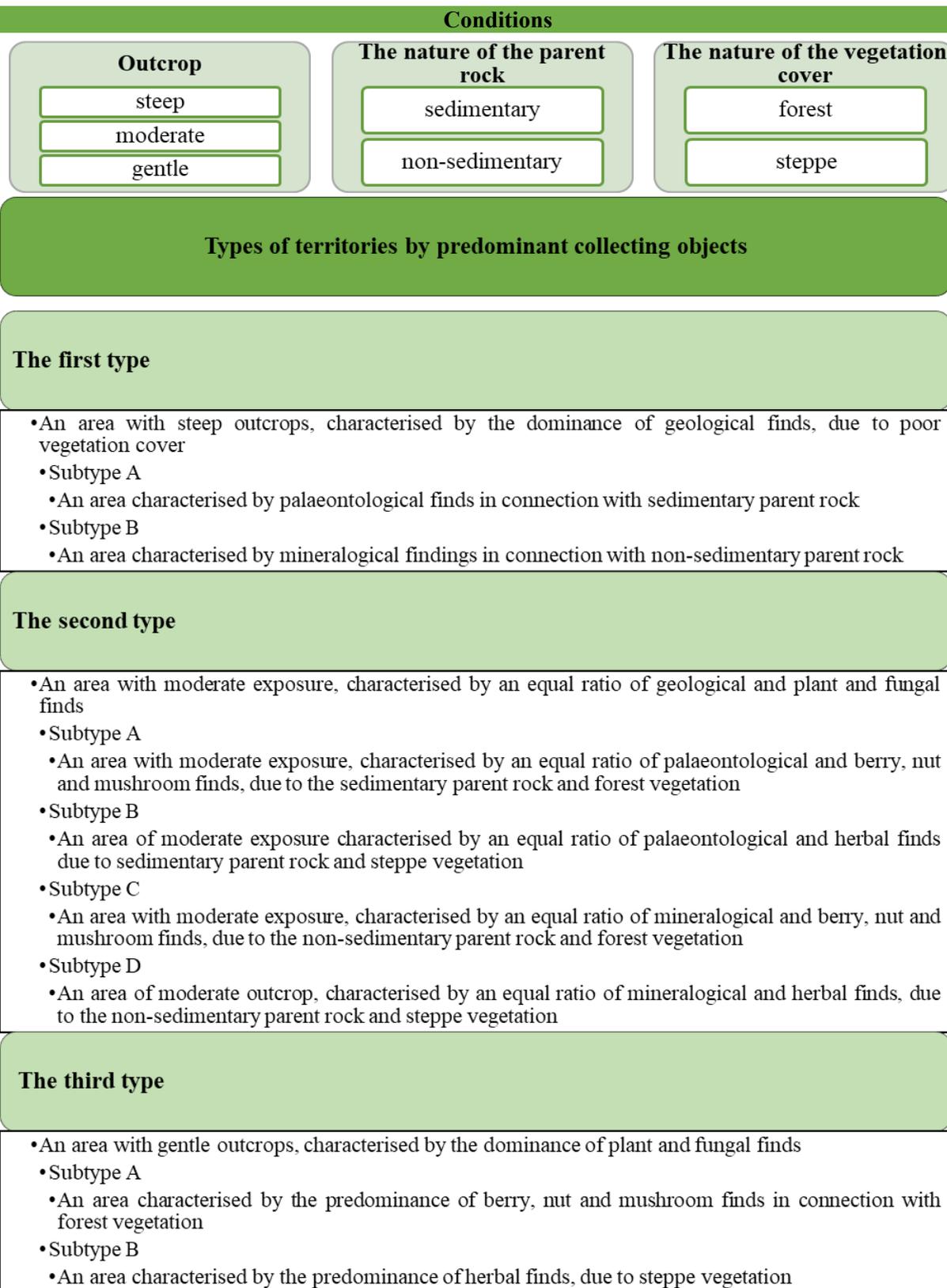


Fig. 1. Classification of natural-territorial complexes by predominant collecting objects based on geological and geomorphological conditions

outcrops is more than 70%;

- moderate, characteristic of areas where the share of outcrops is between 40 and 70%;
- gentle, characteristic of areas where the share of outcrops is less than 40% [19].

It is important to note that this study takes into account outcrops of both natural and anthropogenic origin.

The next condition is the nature of the parent rock. For this classification, we have chosen a con-

ditional division of rocks into sedimentary and non-sedimentary rocks based on the presence of palaeo-remains. Thus, in this case, non-sedimentary rocks combine igneous and metamorphic rocks, which are usually distinguished in the classification by genesis [20]. This division is necessary to characterise geological finds, which can be palaeontological or mineralogical. Paleo-remains, or fossils, include the remains of organisms of past geological epochs or traces of their vital activity preserved in sedimentary rocks; mineralogical finds include various mineral aggregates, the presence of which prevails in non-sedimentary rocks [21].

The third condition is the nature of the vegetation cover, which the authors divided into forest and steppe. This division is general and utilitarian and is based on the classification of vegetation by life forms, which mainly includes three types – woody, shrubby and herbaceous. Therefore, for this author's classification, the first and second types form the basis of forest vegetation, and the third type is steppe vegetation. It is worth noting that under these conditions, the classification should be applied only to the territories located in the natural zones of mixed forests, forest-steppe and steppe.

Thus, by combining one of the proposed options for each of the geological and geomorphological conditions – outcrop, nature of the parent rock and vegetation cover – and thus characterising a certain territory that a tourist-gatherer wishes to visit, he determines the type of gathering objects (paleontological finds, mineralogical finds; berries, nuts and mushrooms, herbs) that will prevail there.

It is also possible to use this classification in reverse: based on the desired type of gathering objects. Thus, focusing on the object of interest, the tourist-collector can determine the characteristics of the territory he needs by the classification.

Let us consider the geological and geomorphological features of the Kharkiv region as a case study. From a geological point of view, the Kharkiv region is located within the southeastern part of a large depression structure known as the Dnipro-Donetsk Depression (DDD). It has a number of zones that differ in the complexity of their structure and the depth of the crystalline basement. The central part of the depression is a large rift, the Dnipro graben.

Sedimentary Paleozoic and Mesozoic deposits, which were formed mainly in marine and lagoonal conditions (limestone, sand, clay and marl), have thick deposits in the Kharkiv region. Fossils of marine organisms, such as gastropods, can be found in their strata. In particular, Mesozoic sediments are important for understanding the natural resources and landscape features of the region. They influence hydrogeological conditions, including the location

of underground water reservoirs, as well as the formation of fertile soils [22].

Cenozoic sedimentary deposits, represented by sands, clays, limestones, marls and coals, are important for understanding climate change, landscape evolution, geological history and natural resources of the region. Paleogene, Neogene and Quaternary deposits are found throughout the region in river valleys, gullies and ravines. Intrazonal alluvial deposits up to 20 m thick cover the ancient river terraces [23, 24].

The relief of the region is characterised as flat and undulating with dissected river valleys, gullies and sloping ravines. The general slope of the surface is directed to the south. Elevations vary from 236 m (in the spurs of the Middle Russian Upland northwest of Zolochiv) to 59 m (in the floodplain of the Siverskyi Donets on the border of the Kharkiv and Donetsk regions) [25].

The Kharkiv region is characterised by accumulative landforms. Thus, the region is characterised by alluvial terraced plains. The ravine and gully system is highly developed in the region, confined to river valleys. The reason for this, in addition to the lithological composition of rocks, is tectonics. Over time, the watershed areas have been affected by erosion – planar flushing [26].

To sum up, it is worth noting that the geomorphological structure of the Kharkiv region is determined by its geological features. Thus, the predominant morphosculptures in the region are water erosion forms such as river valleys, ravines and gullies. Thus, the geological and geomorphological conditions have a complex impact on the formation of the region's natural landscape mosaic.

According to the above classification, in order to determine the type of territory for the Kharkiv region by the predominant objects of collecting, it is necessary to analyse it by each of the three conditions (see Fig. 1).

According to the ecological passport of the Kharkiv region, in 2024, the area of forest land covered with forest vegetation is 4,177 km². Meanwhile, the total area of the region is 31,418.5 km² [27]. Thus, the forest cover of the Kharkiv region is 13.3%. This indicates the predominance of steppe vegetation.

As for the region's outcrop, no direct or additional official data were found. Therefore, in order to obtain indicative data, visual interpretation of Sentinel-2 satellite images was performed in an individually adjusted composite, which allowed us to more clearly distinguish between rock outcrops not covered by vegetation. It is worth noting that among the identified rock outcrops, outcrops along the river and quarry shorelines are predominant. The largest exposed areas were recorded in the Kytsivska

Desert and near the Oskil Reservoir.

The area of the digitised zones was calculated using the Calculate Geometry function in ESRI ArcGIS Desktop and came to 70.2 km². As a result, it was determined that the outcrop of the Kharkiv region is 0.2%. This indicates a weak outcrop of the territory.

As noted above, the territory of the study area is characterised by sedimentary rocks, which is the definition for one of the classification conditions.

Thus, after analysing the geological and geomorphological conditions of the study area, it can be argued that the Kharkiv region falls under subtype B of the third type, i.e. it is a territory with a gentle outcrop, which is characterised by the predominance of herbal finds due to the dominant steppe vegetation. In this case, when organising collecting tourism, it is the medicinal herbs that should attract the tourist's attention.

According to the ecological passport, 873 species of perennial, 95 biennial, and 188 annual herbal plants grow in the Kharkiv region, including 571 medicinal and 112 edible species [27]. The authors have compiled a list of 205 medicinal and edible herbal plants that are common in the region and are not subject to protection and therefore may become potential objects of interest for tourists.

It is worth noting that in case of reducing the scale of the territory, for example, when considering collecting tourism in the context of an administrative district, territorial community or a certain settlement, the classification subtype may change, as the indicators of forest cover and exposure will be different.

For example, the forest cover of the Slobozhanska territorial community exceeds the total forest cover of the Kharkiv region. The exposure for this area remains low. Thus, the Slobozhanska territorial community falls under subtype A of the third type – a territory with gentle exposure, which is characterised by the prevalence of berry, nut and mushroom finds, due to the dominant forest vegetation. In this case, when organising collecting tourism, the tourist's attention should be drawn to wild berries, nuts and edible mushrooms.

According to the ecological passport of the Kharkiv region, the flora of the region includes 27 species of trees, 48 species of shrubs, 26 species of bushes and semishrubs [27]. The authors have compiled lists of 23 wild plants that bear berries, 6 that produce nuts, and 200 edible mushrooms. These plants and mushrooms are common in the Kharkiv region and are not subject to protection and therefore may become potential objects of interest for tourists.

Another example concerns the Iziium territorial community. Due to the concentration of large-scale

rock outcrops in this area (Mount Kremenets, Velyki Kamianski Outcrops, Protopivska Gully), the value of the outcrop index increases, in addition to the predominant forest vegetation. Thus, the Iziium territorial community falls under subtype A of the second type – an area with moderate exposure, which is characterised by an equal ratio of paleontological and berry, nut and mushroom finds due to the sedimentary parent rock and forest vegetation. In this case, when organising collecting tourism, the tourist's attention can be attracted by wild berries, nuts and edible mushrooms, as well as interesting paleontological remains.

In general, it can be argued that the natural resource base of the Kharkiv region, due to its geological and geomorphological circumstances, is favourable for the organisation of collecting tourism and is represented mainly by plant, fungal and paleontological potential objects of tourist interest. The predominance of certain finds will vary depending on the scale of the selected territory for organising a hike – its local geological and geomorphological situation.

Let's consider the prospects for the development of collecting tourism in the Kharkiv region. Given the above fact, at the time of writing, the territory of the Kharkiv region is improper for organising tourist gathering activities due to military operations that affect both the security and environmental aspects of tourism.

The use of military equipment and weapons contaminates all components of the environment, including the air, soil, surface and groundwater. The damage caused to the environment by military operations has a negative impact on the state of ecosystems.

To date, the number of recorded cases of potential damage to the natural environment of Ukraine is about 2,611, of which 410, the second largest number, were observed in the Kharkiv region, which directly borders the Russian Federation, the aggressor country, to the north. For example, in the 3 years between the end of May and the end of August, which is hot and dry in the region's temperate continental climate, numerous cases of large-scale fires were recorded in areas covered by meadows and forests, in particular within the Bohodukhiv, Iziium, Kupiansk, Lozova, Chuhuyiv and Kharkiv districts, caused by the use of artillery and bombers [28].

At present, visiting areas where active hostilities took place or which have been subjected to even the slightest military impact in the Kharkiv region is strongly discouraged, as it poses a direct threat to life. Firstly, because of the large extent of mined territory and the risk of coming across unexploded ordnance, and secondly, because of the contamination of the environment with heavy metals and harmful gases.

Ammunition explosions release a complex mix of gaseous byproducts (such as CO, CO², SO², etc.) and heavy metals (Pb, Cd, Cu, etc.) into the environment [29, 30]. These substances settle into the soil via atmospheric precipitation or direct deposition and are subsequently absorbed by flora and fungi. This chemical contamination, combined with extensive habitat destruction, has severely compromised the future of foraging tourism in the Kharkiv region, rendering much of the territory unsafe for public use. The overall security situation is unsatisfactory. And as a result of the fires, ecosystems may well change in the future, for example, pure pine communities will be replaced by mixed ones, as only one species cannot regenerate on the burned areas. Therefore, changes will affect all components of the ecosystem, including potential tourist attractions.

In the first post-war years, the organisation of collecting tourism will only be possible in those areas of the region where active hostilities were not conducted. For areas that have been heavily impacted by the war, in addition to natural biodiversity restoration and clean-up, measures should be taken to eliminate the effects of the war and preserve ecosystems in order to restore this tourist vector.

As for the general features of organising tourism for the purpose of collecting, it is worth starting with route planning. When planning a route for the needs of collecting tourism, the following aspects should be analysed and taken into account: 1. *Season choice*. Different seasons are characterised by different weather conditions, which in one way or another affect the comfort of the trip. Seasonal weather patterns significantly influence road accessibility, as heavy precipitation in spring and autumn can render unpaved trails and forest paths impassable. Consequently, a thorough analysis of local climatic conditions and seasonal route viability is essential. A tourist's success in finding specimens, as well as their overall comfort and experience, is dictated by these environmental factors. Furthermore, the phenology of plants and fungi – the primary focus of the collecting tourism – is strictly tied to seasonal growth cycles.

2. *Conservation status of the territory*. Selecting a destination requires a comprehensive understanding of the legal protections governing Ukrainian land. When a route enters the Nature Reserve Fund (NRF) of Ukraine, visitors must adhere to strict regulations that scale with the territory's conservation status.

According to the Law of Ukraine “On the Nature Reserve Fund of Ukraine,” the extraction of medicinal plants or fruits is permitted only if such activities do not compromise the conservation goals or the reproductive capacity of the ecosystem. The restrictions are categorized as follows: in Natural

and Biosphere Reserves foraging is strictly prohibited in these core zones to maintain peak biodiversity, with rare exceptions made only for specific anthropogenic buffer zones; in National Nature Parks (NNP) and Regional Landscape Parks regulations are site-specific. For instance, Synevyr NNP in the Zakarpattia region allows for the sustainable harvesting of mushrooms for personal use (excluding red-listed species). Conversely, Holosiyivskyi NNP in Kyiv enforces a total prohibition on all foraging activities to protect the urban forest ecosystem [31, 32].

In the context of National Nature Parks, the collection of natural resources is not a general liberty but a strictly regulated activity. A notable example is Homilsha Woods National Nature Park, where mushroom harvesting is permitted only under specific administrative oversight.

According to the official “Rules for Visiting”, which were mandated by the Ministry of Ecology and Natural Resources of Ukraine (Order No. 135, dated May 13, 2016), any gathering of mushrooms or berries is contingent upon obtaining formal permission from the park's management. Furthermore, collectors must operate in strict accordance with environmental protection protocols. The law explicitly forbids these activities within “high-protection zones” – areas specifically designated to safeguard rare, threatened, or endangered flora and fauna. In these sensitive habitats, maintaining the ecological balance takes absolute priority over any foraging interests [33].

A more rigorous set of restrictions applies to Nature Reserves, which represent the most protected category within Ukraine's Nature Reserve Fund. These areas operate under a “special protection regime” designed to maintain ecosystems in their pristine state.

Under this legal framework, all forms of economic activity or resource extraction that could negatively impact the natural complex are categorically prohibited. Consequently, foraging and collecting activities are entirely banned within the boundaries of nature reserves. This prohibition serves a dual purpose: first, to prevent direct physical harm to the ecosystem, and second, to minimize the overall anthropogenic footprint. By restricting human interference, the law ensures that these territories remain undisturbed as vital benchmarks of natural biodiversity [34].

3. *Tourist safety*. When designating a specific territory for a route, the paramount consideration must be the safety and physical security of the participants. A comprehensive evaluation of the landscape is necessary to identify and bypass potentially hazardous zones. These include: geomorphological hazards (geologically unstable areas, such as coastal erosion zones or active mountain slopes prone to

landslides and rockfalls, pose significant physical risks to tourists) and anthropogenic contamination (foraging activities must be strictly excluded from ecologically compromised locations which includes the vicinity of landfills, active or abandoned industrial zones, and areas surrounding manufacturing facilities where the soil and air may carry high concentrations of pollutants).

Given the inherent unpredictability of the natural environment, tourists must possess a high degree of situational awareness and specialized knowledge. Safety in the wilderness is not merely about location but also about behavioral competence. It is critical for individuals to be educated on the specific protocols for interacting with or avoiding wild animals to prevent aggressive encounters. Strategic planning should include a clear framework for actions to be taken during unforeseen emergencies, ranging from sudden weather shifts to medical incidents. Adhering to established codes of conduct for open terrain ensures not only the personal safety of the tourist-collector but also minimizes the impact on the environment, ensuring that the expedition remains both safe and sustainable.

4. *Pollution of the territory.* This aspect is closely linked to the general safety of the route, yet it requires a deeper analysis of both direct and indirect health risks. While immediate physical hazards are a concern, the long-term chemical risks associated with foraging are often more insidious.

When designing a route for gathering-based tourism, it is imperative to bypass areas characterized by significant anthropogenic pressure. These high-risk locations include: waste and industrial sites (landfills, chemical waste dumps, and active industrial zones), post-disturbance landscapes (areas affected by wildfires (burned areas) where chemical compositions in the soil may have shifted), and agricultural and infrastructure zones (intensively cultivated fields (due to pesticide and fertilizer runoff) and roadsides with high traffic volume (due to exhaust emissions and heavy metal deposition)). The necessity of avoiding these areas stems from the unique biological properties of flora and fungi. Plants and mushrooms function as highly efficient biological filters, possessing the capacity to absorb and concentrate various substances from their surrounding environment. This process of bioaccumulation means that they often harbor toxic compounds – such as heavy metals and synthetic pollutants – at levels far exceeding those found in the soil itself.

Consequently, a tourist who consumes or even handles specimens from contaminated zones inadvertently ingests hazardous substances. These toxins are particularly dangerous because they tend to be cumulative, building up in the human body over time and potentially leading to chronic health issues

long after the initial exposure.

In the process of collecting tourism, a person directly interacts with all the components of nature that are the objects of his or her attention. It is well known that tourists always have different levels of experience. In the case of this tourist activity, the collectors need to be familiar with the objects of interest. For example, tourists can study and take thematic reference books with them on a hike in advance to recognise species of plants, mushrooms, shellfish, etc.

With the development of technology, there are apps that can replace paper guides. One of them is the “Seek” mobile app, which is a mobile supplement to the “iNaturalist” app, a joint initiative of the California Academy of Sciences and the National Geographic Society [35]. The interface of both the “Seek” app and the “iNaturalist” app is quite user-friendly and will be understandable to tourists of all ages and backgrounds.

The main purpose of using this mobile application in the context of collecting tourism is to recognise biodiversity species. It is important to note that the recognition accuracy is quite high, as the computer vision model includes 15,798 species and 12,524 broader taxonomic groups such as kingdom, type, class, order, family and genus.

To use the application, users need a smartphone with a working camera. This software is installed on iOS and Android operating systems, which makes it possible for a wide range of people to use it. To identify a species, you need to point the smartphone camera, which is turned on within the app, at a living object and wait for the specific name to appear. After that, the user takes a photo of the object and receives an information note, which includes a photo taken by the user, a photo example, the name of the species in Latin, the date of the study, the area of distribution, the taxonomic series, the number of similar studies in the world published in “iNaturalist”, and the seasonality of the recorded studies. All studies are stored in the app and the user can view them at any time. Using the “Seek” app, anyone can publish a species study in the “iNaturalist” environment, thereby enriching the public information base.

An important advantage of this application is its combination with Google Maps. In addition to orientation on the ground, a tourist can use the web map to view species that have already been studied within their location and beyond.

The use of this application in the process of collecting tourism is appropriate, as it greatly facilitates the process of identifying objects of tourist interest, namely representatives of plants, mushrooms or mollusks, and also provides automatic geo-referencing, thanks to connection with the GPS module built into the smartphone. Of course, it is

also worth noting the problematic issues that may arise during use, namely the definition of a biodiversity unit at higher taxonomic levels, i.e. the difficulty of defining it to the species level. The reason for this may be the lack of research on the territory where the hike is planned.

If we talk about the sources of information that should be used in the development of tourist collecting routes, the following should be considered (Table 1).

Thus, in the authors' opinion, the above-mentioned recommendations will help to develop a quality route for the organisation of collecting tourism.

Table 1

Sources of Information for Developing Collecting Tourism Routes

Source	Purpose	Example
Thematic cartographic materials	For accurate route plotting	Topographic maps, landscape maps, vegetation cover maps
Manuals and reference books	To specify the object of collection	“Mushrooms of Ukraine. Atlas-Reference Book”, “Complete Atlas of Medicinal Plants”, “Wild Fruits and Berries”, “Minerals of Ukraine”
Object websites	To clarify the tourist's authority in a certain area	Websites of national nature parks
Earth remote sensing data	For monitoring the current situation in the area	Satellite images, meteorological indicators
Mobile applications	To specify the object of collection and monitor the extent to which the area has been studied by other tourists	“Seek by iNaturalist”

The modern consumer significantly differs from the consumer of 20-30 years ago, as the former is already very familiar with modern technologies and strives to involve them in all spheres of their life. Thus, the tourism sector is no exception.

Geographic Information Systems (GIS) provide the user with a wide range of possibilities because they allow for the uploading, arrangement, and combining of a large amount of different information. That is why the development of visualization for the needs of tourism, including collecting tourism, in a GIS environment opens up new opportunities.

As an example of such a tool, the Google My Maps platform can be noted. The technical capabilities allow the developer to plot the desired route and at the same time see the area in full, choosing a satellite image as the geographical base of the map. A standard map or a relief map can also be chosen as a base option.

When adding points, the developer has a wide selection of pins and colors for them, which makes it possible to distinguish points on the route and navigate their theme. The ability to add a short description and photos to the point, which increases the level of visibility, is an equally important function.

Such a map can contain several routes at once, which undoubtedly illustrates the advantage of using a geographic information system. The user can display or hide routes, by clicking on the corresponding buttons in the map's legend, and thus see the complete picture.

This platform provides the ability to print a map with the constructed route, which is very convenient in case a paper copy of the map is needed.

Another example of a platform for route visualization is ThingLink – an online environment for creating interactive virtual tours, which is a kind of representative of geographical information technology. If Google My Maps is an example of a more classic map-creation product, ThingLink looks more innovative and engaging for the user.

It is worth starting the description by noting that in this program, the user can choose not only a geographical base (a map or a satellite image) but also a photograph as the background (Fig. 2). This capability, in the authors' opinion, increases the level of visibility for the user regarding the area of the future hike.

In the ThingLink environment, as in the previously described platform, the author has a wide selection of pins and colors for them when adding po-

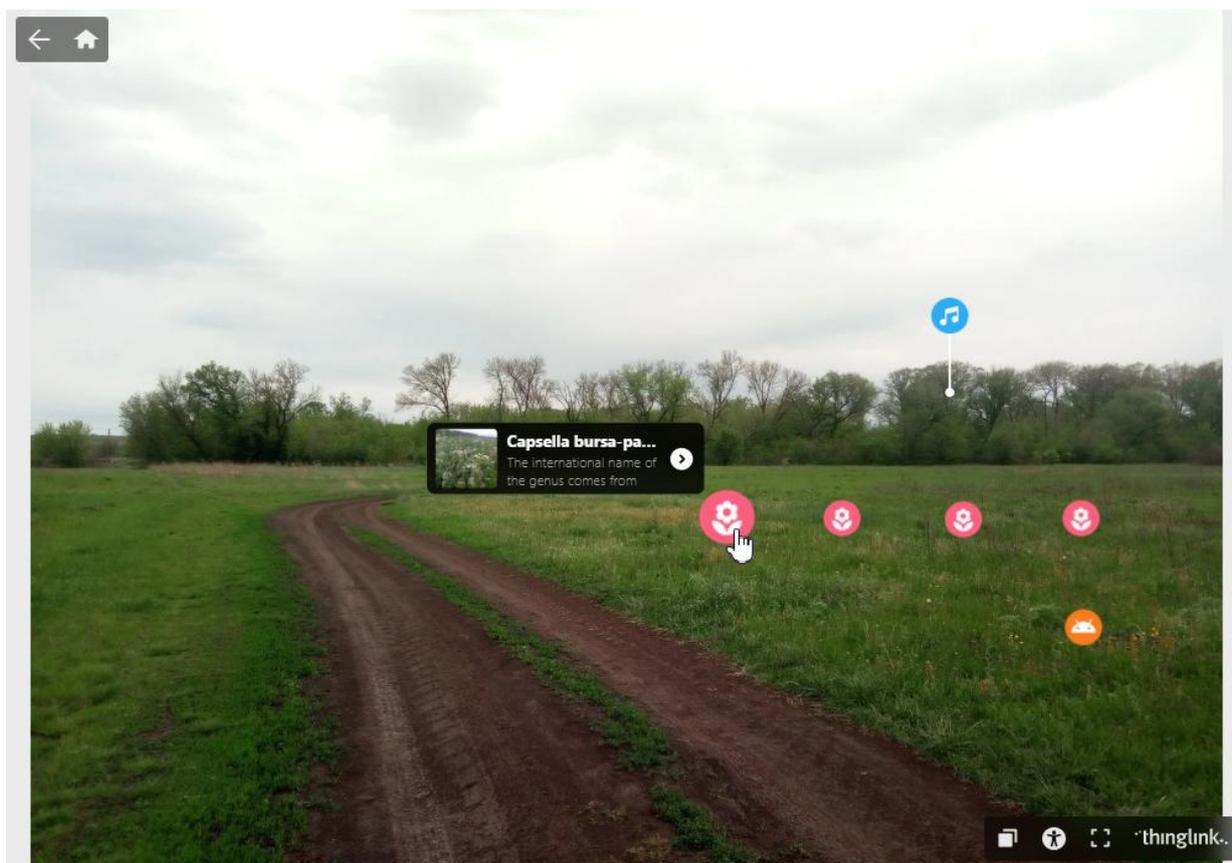


Fig. 2. Example of tourist route visualization using ThingLink

ints. Additionally, the developer has a wide range of tools for additional functions for the points. Thus, besides the standard addition of an image and a description, there is an opportunity to add an active button, to which a website can be linked. This function can be used to link to detailed information about the demonstrated object, for example, in the iNaturalist database.

This program, in contrast to Google My Maps, allows for the addition of video and audio materials, which can also create a positive influence for the completeness of the picture.

Given the unusual interface of the ThingLink platform, which is aimed at making the content more visually appealing and more interactive, it can be concluded that it is optimally used as a form of reporting, filled with photo materials.

The only factor that, in the authors' opinion, may have a negative effect on the user is that the route points in the ThingLink environment change one after another in the form of separate scenes, and not standard points on a map, as in Google My Maps. However, the route developer can visualize the points, using a familiar map or satellite image as a base, to neutralize this aspect and not "scare away" the potential user.

Thus, it can be concluded that dynamic and polyfunctional tourist routes, created on modern platforms using geographic information systems and

technologies, are promising for use in the needs of collecting tourism, as they provide a number of additional opportunities to the potential user, in contrast to static paper maps.

Conclusions. 1. Theoretical material regarding the conceptual and terminological base of collecting tourism has been analyzed. This revealed that both domestic and foreign tourism studies, due to their rather short development process, do not define "collecting tourism" as a separate phenomenon in tourism, and accordingly – do not provide a definition of the term or a place in classifications. Therefore, the authors proposed and substantiated their own vision of the place of collecting tourism in the scientific system in order to fill this gap.

2. Geological and geomorphological features and the natural resource base of the Kharkiv region were studied in the context of collecting tourism. Establishing that the most common objects of interest for a collecting tourist are medicinal herbs, however, the dominance of one object over others may change depending on the scale of the chosen territory.

3. Peculiarities of the organisation of collecting tourism were investigated. As a result, recommendations for constructing a collecting tourist route were developed, which take into account the specificity of the narrow focus and provide an opportunity to obtain a quality final product.

4. Prospects for the development of collecting

tourism in the Kharkiv region were examined. It was found that the region has a promising, natural resource base, but currently, conducting collecting tourist activities within the studied territory is impossible due to the negative impact of military actions.

5. The possibilities of Google My Maps and ThingLink programs as means for visualizing collecting tourist routes were analyzed. Similar and distinguishing features of the aforementioned platforms were determined, as well as the advantage of geographic information systems and technologies over paper cartographic materials in this aspect.

In summary, it can be added that the geological and geomorphological conditions of the territory play an important role in the formation of the resource base for collecting tourism. And this type of tourism itself is a promising form of recreation. Despite the fact that this direction lacks a theoretical foundation, it has potential and is in demand among “wild” tourists. However, a scientific approach will allow for a better study of this phenomenon in tourism, conducting new research, monitoring, and ultimately creating a data bank, which will allow for the combination of fundamental and applied aspects of study.

Bibliography

- Hussain, S. T., Muhammad, S., Khan, S., Hussain, W., & Pieroni, A. (2023). Ethnobotany for food security and ecological transition: wild food plant gathering and consumption among four cultural groups in Kurram District, NW Pakistan. *Journal of Ethnobiology and Ethnomedicine*, 19(1), 35. <https://doi.org/10.1186/s13002-023-00607-2>.
- de Jong, A., & Varley, P. (2018). Foraging tourism: critical moments in sustainable consumption. *Journal of Sustainable Tourism*, 26(4), 685-701. <https://doi.org/10.1080/09669582.2017.1384831>
- Svizzero, S. (2016). Foraging wild resources and sustainable economic development. *Journal of Economics and Public Finance*, 2(1), 132-153. <https://doi.org/10.22158/jepf.v2n1p132>.
- Тарановський, В., Ковальов, Б., & Портянка, А. (2014). Науково-методичні підходи до визначення дефініції “екотуризм”. *Механізм регулювання економіки*, 64(2), 30-37. <https://mer-journal.sumy.ua/index.php/journal/article/view/488>.
- Мельничук, М., Безсмертнюк, Т. (2016). Підходи до класифікації туристсько-рекреаційної діяльності в межах природно-заповідного фонду. *Науковий вісник Східноєвропейського національного університету імені Лесі Українки. Серія: Географічні науки*, 340(5), 106-111. <https://evnuir.vnu.edu.ua/handle/123456789/15267>.
- Кляп, М., & Шандор, Ф. (2011). Сучасні різновиди туризму : навчальний посібник. Видавництво Знання.
- Биркович, В. (2008). Сільський зелений туризм – пріоритет розвитку туристичної галузі України. *Стратегічні пріоритети. Науково-аналітичний щоквартальний збірник*, 1 (6), 138-143.
- Рак, В., Антоненко, Т., & Голікова, Т. (2017). Агротуризм як напрям розвитку індустрії гостинності в Україні. *Науковий погляд у майбутнє*, 4(06-04), 79-85. <https://doi.org/10.30888/2415-7538.2017-06-04-024>.
- Горішевський, П., Васильєв, В., & Зінько, Ю. (2003). Сільський зелений туризм: організація надання послуг гостинності. Видавництво Місто НВ.
- Mushroom Tourism. (б.д.). *Planeta.com – Global Journal of Practical Ecotourism. Mushroom Tourism*. <https://www.planeta.com/mushroom-tourism/>.
- Wild mushroom picking tourism. (б.д.). Silvestres Ezcaray. <https://silvestresezcaray.com/en/activities/wild-mushroom-picking-tourism/>.
- Fruit Picking. (б.д.). Japan National Tourism Organization. <https://www.japan.travel/en/ph/fruit-picking/>.
- Liu, J., Chen, F., Ge, Q., & Li, Y. (2016). Climate change and fruit-picking tourism: Impact and adaptation. *Advances in Meteorology*, 2016, 1-11. <https://doi.org/10.1155/2016/9783646>.
- Borysenko, K., & Dovzhenko, P. (2022). The use of geographic information systems in combination with mobile applications for the needs of collecting tourism. *International Conference of Young Scientists “Modern Problems of Earth Sciences” Proceedings* (p. 122-124). Publish House of Iv. Javakhishvili Tbilisi State University.
- Деребчинська, А. (2015). Розвиток активного туризму в Україні. У *Матеріали III Всеукраїнської науково-практичної конференції «Сучасні тенденції розвитку туризму»* (с. 27-30). ВП «МФ КНУКІМ».
- Кицяк, В. (2003) Організація туристичної діяльності в Україні. Навчальний посібник. Книги-XXI.
- Definition of exposure. (б.д.). Mindat.org – Mines, Minerals and More. <https://www.mindat.org/glossary/exposure>.
- Білецький, В. (Ред.). (2004). *Мала гірнича енциклопедія (Т. 1)*. Донбас.
- Характер відслоненості районів зйомки. (б.д.). Studopedia. https://studopedia.com.ua/1_290095_harakter-vidslonenosti-rayoniv-zvomki.html.
- Свинко, Й., & Сивий, М. (2003). *Геологія: Підручник*. Либідь.
- Вовк, В. (2012). *Геологічний словник: для студентів вищих навчальних закладів*. КОД.
- Космачов, В., & Космачова, М. (2021). Естетично-привабливі місцевості Харківщини як об’єкти геотуризму. *Вісник Харківського національного університету імені В. Н. Каразіна. Серія «Геологія. Географія. Екологія»*, (54), 70-82. <https://doi.org/10.26565/2410-7360-2021-54-05>.
- Авраменко, А., Бабіч, А., Гвоздь, Н. та ін. (1991). *Географічна база “Гайдари”*: Навчальний посібник. Видавництво Харківського державного університету.
- Інженерно-геологічні умови Харківської області. (б.д.). *Геодезичні роботи, інженерна геологія для фундаменту, топографічна зйомка від фірми ГЕОТОП ІНЖИНИРИНГ по Україні*. https://geotop.com.ua/injenerno-geologicheskie-usloviva-xarkovskoy-oblasti_en.php.
- Космачова, М. (2009). Геологічні пам’ятки природи Харківщини як об’єкти наукової діяльності. *Вісник Харківського національного університету імені В. Н. Каразіна. Серія «Геологія. Географія. Екологія»*, (30), 58-61.

26. Палієнко, В. (2001). Акумулятивні форми рельєфу. У І. Дзюба (Ред.), Енциклопедія Сучасної України: онлайн-версія. Інститут енциклопедичних досліджень НАН України. <https://esu.com.ua/article-43554>.
27. Екологічний паспорт Харківської області – 2024 рік. (б.д.). Харківська обласна військова адміністрація. https://kharkivoda.gov.ua/content/documents/1327/132692/Attaches/ekologichniy_pasport_2024_rik.pdf.
28. Випадки потенційної шкоди довкіллю, спричинені російською агресією [інтерактивна мапа]. (б.д.). Екодія. <https://en.ecoaction.org.ua/warmap.html>.
29. Кочанов, Е., & Товстий, Ю. (2013). Оцінка стану ґрунтів територій військових об'єктів що передаються в народне господарство. У Матеріали ІХ Всеукраїнських наукових Таліївських читань. Охорона довкілля (с. 85-88). Харківський національний університет імені В.Н. Каразіна.
30. Одосій, Л., Стаднічук, О., Свідерок, С., Надала, О., & Гичко, О. (2015). Вплив техногенного навантаження військової діяльності на стан ґрунтово-водного середовища. Військово-технічний збірник, (12), 91-96. <https://doi.org/10.33577/2312-4458.12.2015.91-96>
31. Офіційний сайт Національного природного парку «Синевир». (б.д.). <https://synevyr-park.in.ua/>.
32. Офіційний сайт Національного природного парку «Голосіївський». (б.д.). <https://nppg.gov.ua/>.
33. Офіційний сайт Національного природного парку «Гомільшанські ліси». (б.д.). <http://gomilsha.org.ua/>.
34. Закон України «Про природно-заповідний фонд України». (б.д.). Законодавство України. <https://zakon.rada.gov.ua/laws/show/2456-12#Text>.
35. iNaturalist (б.д.). <https://www.inaturalist.org/>.

Authors Contribution: All authors have contributed equally to this work

Conflict of Interest: The authors declare no conflict of interest

References

1. Hussain, S. T., Muhammad, S., Khan, S., Hussain, W., & Pieroni, A. (2023). Ethnobotany for food security and ecological transition: wild food plant gathering and consumption among four cultural groups in Kurram District, NW Pakistan. *Journal of Ethnobiology and Ethnomedicine*, 19(1), 35. <https://doi.org/10.1186/s13002-023-00607-2>.
2. de Jong, A., & Varley, P. (2018). Foraging tourism: critical moments in sustainable consumption. *Journal of Sustainable Tourism*, 26(4), 685–701. <https://doi.org/10.1080/09669582.2017.1384831>.
3. Svizzero, S. (2016). Foraging wild resources and sustainable economic development. *Journal of Economics and Public Finance*, 2(1), 132-153. <https://doi.org/10.22158/jepf.v2n1p132>.
4. Taranovskiy, V., Kovalov, B., & Portianka, A. (2014). Scientific and methodological approaches to defining of the term of “ecotourism”. *Mechanism of an Economic Regulation*, 64(2), 30-37. <https://mer-journal.sumy.ua/index.php/journal/article/view/488>. [in Ukrainian]
5. Melniychuk, M., Bezsmertniuk, T. (2016). Approaches to the classification of tourism and recreational activities within the Nature Reserve Fund. *Scientific Bulletin of the Lesya Ukrainka Eastern European National University. Series: Geographical Sciences*, 5(340), 106-111. <https://evnuir.vnu.edu.ua/handle/123456789/15267>. [in Ukrainian]
6. Kliap, M., & Shandor, P. (2011). *Modern varieties of tourism: a textbook*. Znanntia. [in Ukrainian]
7. Byrkovych, V. (2008). Rural green tourism – a priority for the development of the tourist industry of Ukraine. *Strategic priorities*, 1(6), 138-143. [in Ukrainian]
8. Rak, V., Antonenko, T., & Golikova, T. (2017). Agrotourism as new approach in hospitality industry in Ukraine. *Scientific Look into the Future*, 4(06-04), 79-85. <https://doi.org/10.30888/2415-7538.2017-06-04-024>. [in Ukrainian]
9. Horishevsky, P., Vasyliiev, V., & Zinko, Yu. (2003). Rural green tourism: organisation of hospitality services. *Misto NV*. [in Ukrainian]
10. Mushroom Tourism. (n.d.). *Planeta.com – Global Journal of Practical Ecotourism*. Mushroom Tourism. <https://www.planeta.com/mushroom-tourism/>.
11. Wild mushroom picking tourism. (n.d.). *Silvestres Ezcaray*. <https://silvestresezcaray.com/en/activities/wild-mushroom-picking-tourism/>.
12. Fruit Picking. (n.d.). *Japan National Tourism Organisation*. <https://www.japan.travel/en/ph/fruit-picking/>.
13. Liu, J., Chen, F., Ge, Q., & Li, Y. (2016). Climate change and fruit-picking tourism: Impact and adaptation. *Advances in Meteorology*, 2016, 1-11. <https://doi.org/10.1155/2016/9783646>.
14. Borysenko, K., & Dovzhenko, P. (2022). The use of geographic information systems in combination with mobile applications for the needs of collecting tourism. *International Conference of Young Scientists “Modern Problems of Earth Sciences” Proceedings* (p. 122-124). Publish House of Iv. Javakhishvili Tbilisi State University.
15. Derebchynska, A. (2015). Development of active tourism in Ukraine. In *Materials of the III All-Ukrainian scientific and practical conference “Modern trends in tourism development”* (с. 27-30). VP “MF KNUKIM”. [in Ukrainian]
16. Kyfiak, V. (2003) *Organisation of tourist activity in Ukraine*. Textbook. Knyhy-XXI. [in Ukrainian]
17. Definition of exposure. (n.d.). *Mindat.org – Mines, Minerals and More*. <https://www.mindat.org/glossary/exposure>.
18. Biletsky, V. (Ed.). (2004). *Small Mining Encyclopedia* (Vol. 1). Donbas. [in Ukrainian]
19. Nature of exposure of survey areas. (n.d.). *Studopedia*. https://studopedia.com.ua/1_290095_harakter-vidslonenosti-rayoniv-zyomki.html. [in Ukrainian]
20. Svyenko, Y., & Syvyi, M. (2003). *Geology*. Lybid. [in Ukrainian]
21. Vovk, V. (2012). *Geological Dictionary: for students of higher educational institutions*. KOD Publishing. [in Ukrainian]
22. Kosmachov, V., & Kosmachova, M. (2021). Aesthetic-remarkable localities of Kharkiv region as geotourism objects. *Visnyk of V. N. Karazin Kharkiv National University. Series Geology. Geography. Ecology*, (54), 70-82. <https://doi.org/10.26565/2410-7360-2021-54-05>. [in Ukrainian]

23. Avramenko, A., Babich, A., Gvozd, N. et al. (1991). *Geographical base "Gaidary": Textbook*. Publishing house of Kharkiv State University.
24. *Engineering-geological conditions of the Kharkiv region*. (n.d.). *Geodetic works, engineering geology for the foundation, topographic surveying from the company Geotop Engineering in Ukraine*. https://geotop.com.ua/injenerno-geologicheskie-usloviya-xarkovskoy-oblasti_en.php. [in Ukrainian]
25. Kosmachova, M. (2009). *Geological monuments of nature of the Kharkiv region as objects of scientific activity*. *Visnyk of V. N. Karazin Kharkiv National University. Series Geology. Geography. Ecology*, (30), 58-61. [in Ukrainian]
26. Palienko, V. (2001). *Accumulative landforms*. In I. Dziuba (Ed.), *Encyclopedia of Modern Ukraine: online version*. Institute of Encyclopedic Research of NAS of Ukraine. <https://esu.com.ua/article-43554>. [in Ukrainian]
27. *Ecological passport of the Kharkiv region – 2024*. (n.d.). *Kharkiv Regional Military Administration*. https://kharkivoda.gov.ua/content/documents/1327/132692/Attaches/ekologichnyy_pasport_2024_rik.pdf. [in Ukrainian]
28. *Potential environmental impacts caused by Russian aggression in Ukraine [Interactive map]*. (n.d.). *Ecoaction – Center for Environmental Initiatives*. <https://en.ecoaction.org.ua/warmap.html>. [in Ukrainian]
29. Kochanov, E., & Tovsty, Y. (2013). *Assessment of the state of soils in the territories of military facilities transferred to the national economy*. In *Materials of the 9th All-Ukrainian Scientific Taliiv Readings. Environmental Protection* (p. 85-88). *V.N. Karazin Kharkiv National University*. [in Ukrainian]
30. Odosiy, L. I., Stadnichuk O. M., Sviderok, S. M., Nadala, O. S., & Gychko, O. S. (2015). *Influence of man-made load military activity on the soil-water environment*. *Military Technical Collection*, (12), 91-96. <https://doi.org/10.33577/2312-4458.12.2015.91-96>. [in Ukrainian]
31. *Official website of the National Nature Park "Synevyr"*. (n.d.). <https://synevyr-park.in.ua/>. [in Ukrainian]
32. *Official website of the National Nature Park "Holosiivskiy"*. (n.d.). <https://nppg.gov.ua/>. [in Ukrainian]
33. *Official website of the National Nature Park "Gomilsha"*. (n.d.). <http://gomilsha.org.ua/>. [in Ukrainian]
34. *Law of Ukraine "On the Nature Reserve Fund of Ukraine"*. (n.d.). *Legislation of Ukraine*. <https://zakon.rada.gov.ua/laws/show/2456-12#Text>. [in Ukrainian]
35. *iNaturalist* (n.d.). <https://www.inaturalist.org/>.

Збиральницький туризм: на прикладі Харківської області, Україна

Поліна Довженко¹

аспірантка кафедри фізичної географії та картографії

¹ Харківського національного університету імені В. Н. Каразіна, Харків, Україна;

Катерина Борисенко¹

к. пед. н., доцент кафедри фізичної географії та картографії;

Владислав Попов¹

старший викладач кафедри фізичної географії та картографії;

Саймон М. Хатчінсон²

д. філософії (географія), доцент факультету природничих наук, інженерії та навколишнього середовища

² Університету Солфорду, Солфорд, Велика Британія

У даній роботі наведено теоретичне обґрунтування визначення збиральницького туризму, яке є авторським варіантом у робочому вигляді. Також представлено розроблену класифікацію природно-територіальних комплексів за переважаючими об'єктами збиральництва з урахуванням ступеню відслоненості та характеру рослинного покриву ділянки, актуальну для природних умов території України. Наведено приклади застосування цієї класифікації на різних рівнях територіальної організації: для усієї Харківської області та її територіальних громад (Ізюмської МТГ і Слобожанської СТГ). Запропоновано визначення місця збиральницького туризму у системі активних видів туризму. Розроблено комплекс практичних рекомендацій щодо планування збиральницьких туристичних маршрутів, які включають обов'язкове врахування умов сезонності, природоохоронного статусу обраної території, умов загальної безпеки для туриста та, особливо, ризику забрудненості рослин і грибів, як об'єктів інтересу туриста-збиральника, токсичними речовинами унаслідок антропогенного впливу. Проаналізовано перспективи розвитку збиральницької туристичної діяльності в досліджуваному регіоні. Виявлено, що станом на 2025 рік організація такої туристичної активності на значній частині території Харківської області є неможливою та небезпечною внаслідок вже завданого та потенційного негативного впливу воєнних дій, спричинених повномасштабним вторгненням Російської Федерації на територію України, а відновлення даного туристичного вектору можливе лише після стабілізації безпекової ситуації та проведення заходів із очищення та відновлення уражених територій. Для підвищення якості організації збиральницького туризму проаналізовано можливості географічних інформаційних систем (ГІС) та технологій. Рекомендовано звернути увагу на використання мобільного додатку Seek від iNaturalist для точного розпізнавання видів рослин і грибів, а також цифрових веб-платформ Google My Maps і ThingLink для створення динамічних, багатофункціональних та інтерактивних візуалізацій туристичних маршрутів.

Ключові слова: збиральницький туризм, ландшафт, географічна інформаційна система (ГІС), карта, туристичний маршрут, Харківська область.

Внесок авторів: всі автори зробили рівний внесок у цю роботу

Конфлікт інтересів: автори повідомляють про відсутність конфлікту інтересів

Надійшла 3 жовтня 2025 р.

Прийнята 20 листопада 2025 р.