

## PROMISING DIRECTIONS FOR THE DEVELOPMENT OF SPORTS TOURISM IN THE ALMATY REGION USING THE EXAMPLE OF ROCK CLIMBING

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**Abstract:** The aim of the study was the process of studying the phenomenon of rock climbing development as one of the promising areas of sports tourism in the Almaty region of the Republic of Kazakhstan, which has a wide range of tourist resources systematically involved in various types of tourism. The research method was a large-scale, extended analysis of the tourist attractiveness of the region, and thus defined the most popular tourism destinations, as well as the persistent association of the Almaty region with mountain and foothill terrain, sports tourism and rock climbing. As a result of the research, the authors have formed a clear understanding of rock climbing as one of the promising areas for the development of sports tourism, which is currently becoming increasingly popular among both the local population and tourists of different ages. Sports tourism, rock climbing on natural and artificial (specially created) terrain, requires significant resource provision with respect to both the rock climbing sites, and professional personnel in the field of tourism who possess competencies in the field of sports tourism, ensuring the implementation of this tourist service. The results of the research presented in this article are based on the professional activities of the authors and allow them to have a qualitative impact on the process of training the sports tourism personnel, and contribute to the development of different-level routes for tourists wishing to engage in rock climbing, expand the involvement of tourists and contribute to the development of touristic attractiveness of the regions of the country.

**Key words:** tourists, sports tourism, professional personnel, educational trajectory climbing

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### INTRODUCTION

The Republic of Kazakhstan is the world's ninth largest country by land area (Issakov et al., 2022), with its lots of significant sites of both natural, and historical and cultural heritage, systematically involved in the tourist activities of the country's regions. Since tourism was declared as one of the priority directions of the development of the modern economy of Kazakhstan, where the development of regional tourism becomes an important element in building a competitive tourist business at the international level and quite rightly positions itself as one of the most promising branches of development of modern society (Mironova and Kalinkina, 2020). The Republic of Kazakhstan has a wide range of objects of interest to tourists from all over the world, these are objects of both national and international significance. The country has almost all bioms, from deserts to perennial snow, the relief is represented by a variety of forms, lowlands, plains, hills, low-mountain and high-mountain areas, etc., five UNESCO World Heritage Sites are located here: the Mausoleum of Khoja Ahmed Yasawi, Petroglyphs within the Archaeological Landscape of Tamgaly, Saryarka – Steppe and Lakes of Northern Kazakhstan, Silk Roads: the Routes Network of Chang'an-Tianshan Corridor, Western Tien-Shan (Aldybayev et al., 2021), other authentic and unique sites of national and regional significance which reflect the cultural diversity of multi-ethnic Kazakhstan. The country also has natural wealth preserved and

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carefully involved in tourist activities through the organization of specially protected natural territories, the amount of which is currently increasing. They are ten nature reserves, fourteen national parks, seven wildlife reserves, fifty natural, zoological and biological wildlife areas, conservation areas, natural monuments, botanical gardens, etc., located in all regions of Kazakhstan and characterized by a wide diversification.

Now the Republic of Kazakhstan is divided administratively into 17 regions and 3 cities of republican significance, according to the decree of the President of the country, the previously existing 14 regions by their division were supplemented with three more regions. Each region has its own characteristics, so, until recently, the Almaty region was the largest one. Its land area decreased due to the separation of the Aksu, Alakol, Eskeldy, Karatal, Kerbulak, Koku, Panfilov, Sarkan districts, as well as the cities of Taldykorgan and Tekeli. The Almaty region has a rather complex physical and geographical characteristic, represented by both plain-like and mountainous areas. The distance between Kapshagay water reservoir to Zailiyskiy Alatau is about 1000 kilometers, but this one-hour-driving route involves climatic zones from deserts to Arctic ice (Saparova, 2022) (Figure 1). This region has natural, cultural, historical, and ethnographical assets, as well as man-made tourist areas specially created for tourism development purposes, and which represent the tourist and resource potential of the Almaty region.



Figure 1. Almaty region, location and relief (Source: Google Maps)

The city of Almaty and the Almaty region are among the most tourists-visited territories of Kazakhstan, as they have significant potential for promoting almost all types of tourism: from ecological and agrotourism (Plokhikh et al., 2022) to business one (Nikolaev, 2022). Their development involves activities to improve the tourist infrastructure; constant work is underway to simplify the visa regime, etc. The Almaty region under the "Program for the development of the tourism industry of the Republic of Kazakhstan for 2019-2025", is a "mountain tourism cluster" and is among the top 10 priority objects for the development of the tourism industry. The region has outstanding facilities for the promotion of active types of tourism (Makogonov, 2015), sports tourism (Kenenbai et al., 2020) in such areas as ski tourism, mountaineering, rock climbing, equestrian tourism, cycling and much more. From mountaineering to skiing, trekking to climbing, mountain-biking to canyoning, wildlife observation to recreational activities at medicinal mineral water sources and spas, the spectrum of opportunities for mountain tourism is particularly broad (Debarbieux et al., 2014). Mountains with their spectacular scenery, majestic beauty, and unique amenity values, are one of the most popular destinations for tourists (Mukayev et al., 2022). With the emergence of alpine wellness (Weiermair et al., 2007), research in the field of mountain tourism has become increasingly branched, i.e. interest in organizing tourist trips in mountainous areas contributes to the creation of an increasing number of tourist offers. An exceptional feature of the mountainous terrain of the Almaty region is its close location to the metropolitan city of Almaty (Gubarenko et al., 2020), surrounded by plenty of various-height rocks, Forestry, Asian rocks, Butakovsky waterfall, Tuyuk-Su, Tamgaly-Tas, etc. Thus, there is an excellent resource potential for the development of rock climbing as one of the promising areas of the country's tourism industry. Rock climbing can be divided into athletic and nonprofessional one, where athletic one involves reaching of certain speed and categorical norms (Mitrofanova, 2016), the nonprofessional is leisure and tourism in its purest form, as it is one of the means of organizing tourist entertainment, combined with visiting the natural attractions of the region. It is rock climbing that is quite a popular type of sports tourism (Kolotukha et al., 2022), which the World Tourism Organization (UNWTO) includes in the concept of "sports tourism": "active sports tourism", "event sports tourism" and "nostalgic sports tourism", requiring professional training of instructors capable of preparing and implementing a high-quality tourist product, providing a high level of security even for novice tourists.

## MATERIALS AND METHODS

The development of a certain type of tourism in the region requires two main elements – a tourist resource potential and

highly qualified specialists with professional competencies in various areas of tourism. Resource potential is one of the key factors in the formation of a powerful tourist offer (Amirkhanov and Arakelov, 2013) and sightseeing routes (Gubarenko, 2021). It is the basis for the development of tourism in the country, in accordance with the scientific approach, it includes objects directly or indirectly involved in tourist activities, i.e. natural-climatic, historical and cultural sights and infrastructure (Imangulova and Gubarenko, 2018). The stages of assessing the tourist and resource potential of the area (Kuskov et al., 2005) consist of qualitative identification and study of resources located on the territory of the country in the regional context, their systematization, development of maps and schemes, as well as the formation of new and innovative tourist products. The analysis of the resource potential of the city of Almaty and the Almaty region was carried out in several stages: over 2017-2019 - the study of tourist resources of the city of Almaty (Zakiryanov et al., 2018), over 2018-2021 - the research of tourist resources of Almaty region (Zakiryanov et al., 2020) (Imangulova et al., 2019), the subsequent publication of the results of the study, their introduction into the professional activities of subjects of the tourism industry and organizations that train specialists in tourism. The field research method was actively used in this process (Vinober, 2019), in which the analysis of resources was carried out in natural conditions, at their location to obtain reliable and up-to-date information.

The next part of the research was the development and conduct of a survey among visitors and residents of Almaty and Almaty region to form a clear idea of promising areas in the development of tourism in the region. The survey as a method of collecting information from a wide range of respondents (Shapiro, 2017), the analysis of which allowed us to determine the further direction of the study. So, the authors regularly conduct the surveys, both in face-to-face (verbal) and online formats (Google form). The last survey conducted in May-June 2022 showed the high relevance of the research direction outlined in this article. The analysis of tourist and recreational resources and the survey made it possible to identify one of the quite popular areas in the development of active types of tourism in the region, namely rock climbing. It is in the city of Almaty and the Almaty region where there is mass of rocks – a natural relief for climbing, as well as climbing walls – specially created routes for indoor climbing. The next stage of the study was the analysis of available professional human resources (Pestova et al., 2021), which are the basis for the formation of an innovative tourist climbing product.

The analysis of educational programs "Tourism" of the Republic of Kazakhstan on the platform of the Unified Higher Education Management System "ESUVO PLATONUS KZ", as well as educational programs of the CIS as well as far and near abroad countries, became the method of assessing the current state of the availability of specialists with professional skills in the field of rock climbing. Based on the data obtained, a climbing instructor training program was developed, which is a component of the educational program "Tourism" for higher educational institutions. Routes along the rocks for novice tourists have been created and presented graphically using the modeling of routes. It is the modeling as a method of routes visualization (Tolk, 2015) allows them to use the received developments as a ready-made tourist offer, if they have the relevant equipment, as well as a specialist with the required competence in the field of active types of tourism and climbing.

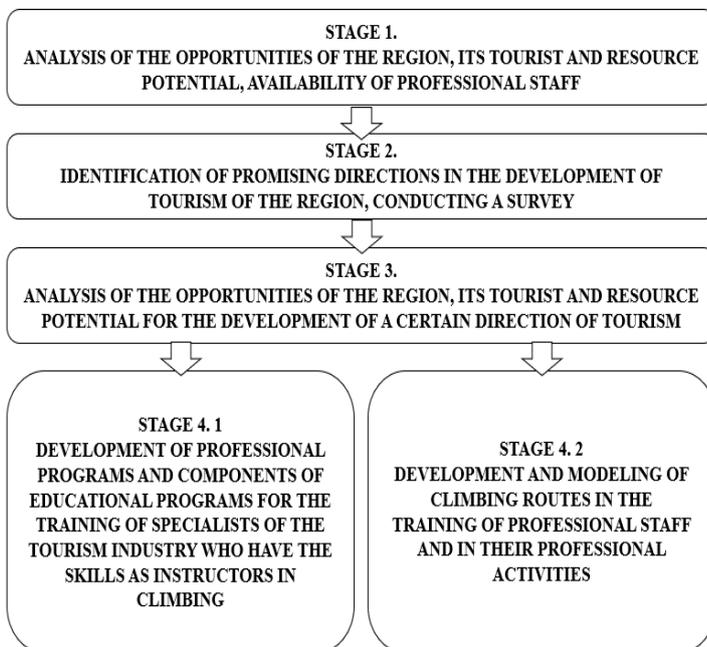


Figure 2. Research methodology (compiled by the authors)

Thus, this study is the implementation of a step-by-step methodology, including both general scientific methods (analysis, synthesis, scientific search) and practical methods (field research, modeling, experiment), and can be formed in several stages:

Stage 1. Conducting a large-scale analysis of the tourist and recreational potential and tourist opportunities of the region in order to identify the most resource-rich areas for tourism development. The analysis also included human resources, their quality and quantity.

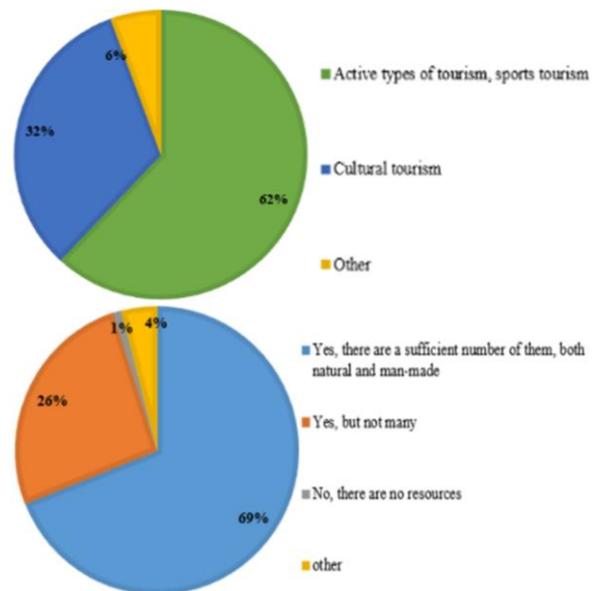


Figure 3. Analysis of responses to the survey named "Almaty through the eyes of a tourist" (Datasource: the authors conducted the survey using Google forms) (Note: 1. Analysis of respondents' answers to the question «What type of tourism, in your opinion, is the most promising to develop in the city of Almaty and the Almaty region»; 2. Analysis of respondents' answers to the question «Do you think there are resources for active sports, sports tourism and rock climbing in Almaty and Almaty region».)

Stage 2. Identification of promising directions in the development of tourism in the region, which is carried out by means of a survey and questionnaire of specialists in the tourism industry, residents and visitors of the region, as well as all those who are potentially involved in the process and interested in the results of the study. After identifying promising areas for the development of tourism in the region (it is rock climbing in our study), the next stage begins.

Stage 3. Analysis of the region's capabilities, its tourism and resource potential for a specific tourism direction (in our study, this is rock climbing), which makes it possible to define strong and weak positions, work on which will allow the development of a certain type of tourism.

Stage 4. It is practical, and is divided into two necessary sub-stages: 1. Development of professional programs and components of educational programs in the field of tourism, necessary for the high-quality training of specialists who have the skills to organize a specific direction of tourism (it is rock climbing in our study); 2. Development and modeling of routes that represent both a practical part to train specialists and ready-made tourist offers (in our study, this is the development and modeling of the routes for climbing in the region).

## RESULTS AND DISCUSSION

Rock climbing, as one of the promising areas of sports tourism, began its active formation in the middle of the twentieth century, since then this type of tourism has begun to spread and has become popular in many countries (Temereva, 2015), as an independent direction or part of the organization of tourist services. Today, rock climbing is becoming more and more popular in the tourism industry. To confirm this statement, a survey was conducted within the framework of this study, which involved more than three hundred people, among which were both residents of the city and the region, as well as tourists, citizens of Kazakhstan, specialists in the tourism industry, teachers and students of tourist specialties. So, the absolute majority of respondents when they were asked "What do you associate the city of Almaty and the Almaty region with?" replied that they associate the city with mountains, mountain relief, which indicates a high recognition of the region in terms of all types of mountain tourism. Except that, the respondents qualified the active types of tourism (sports tourism and rock climbing) as one of the most promising areas (65%), for which there is a sufficient number of both natural and man-made sites (69%), and mentioned the most recognizable tourist objects of Almaty and Almaty region: the Medeo skating rink, Shymbulak ski resort, Tuyuk Su glacier, mountain resort "Forest fairy tale", climbing walls, "Butakovsky gorge", Alma Arasan gorge, Ayu Say gorge, etc. (Figure 3). Thus, tourist climbing is one of the most popular types of tourism, and the region has all sorts of resources for organizing this type of recreation activity.

Currently, rock climbing is developing in two directions: sports (as a separate sport that has certain standards and categories) and leisure, touristic (as an element of the formation of a tourist product, or as its key service). The development of each direction requires resources as follows:

1. The place where the service will be implemented. They are natural rocks and climbing walls for rock climbing;
2. Infrastructure and complexes necessary for the implementation and provision of climbing services to tourists;
3. Professional personnel (instructors, tourism managers, accompanying personnel, etc.) who have completed relevant training and who were officially qualified.

The tourism and resource potential for the development of rock climbing in the city of Almaty and the Almaty region includes all the necessary elements: natural mountain terrain, rocks, climbing walls, recreation areas, transport, specialists in active types of tourism, climbing instructors and educational institutions that train them. So, in the city of Almaty, the most popular and high-quality indoor climbing facilities are one of the largest climbing walls of the Kazakh Academy of Sports and Tourism, Skala Boulder, Skala Climbing gym, as well as climbing walls located in the entertainment and sports centers, recreation areas, clubs and schools. The most high-quality sites in the open space are natural rocks near the city of Almaty: Tamgaly Tas, a mountain tract with the preserved petroglyphs of different eras, and the relief is a tract with rocks of varying complexity; Tuyuk-Su, a climbing area with a wide variety of both simple and complex routes; Butakovsky Waterfall, a mountain tract with vertical routes; rocks near the Medeo ice rink, etc. It is on these rocks where both tourist programs and practices for climbing specialists are conducted. One may master the climbing instructor skills both during specialized courses and within the framework of higher education in the field of tourism (Figure 4).

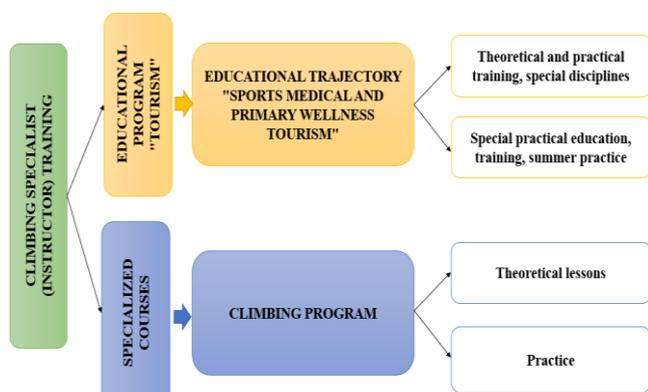


Figure 4. Methods of mastering professional competencies in the field of rock climbing, with the receipt of supporting documents (Source: compiled by the author)

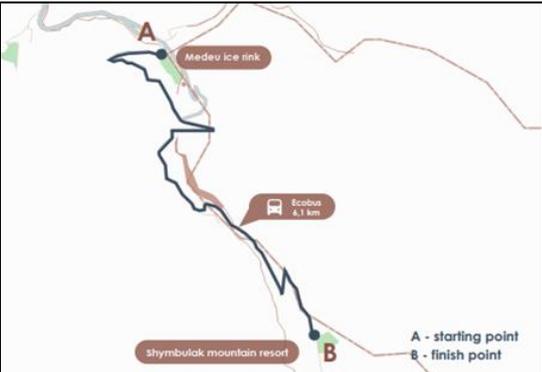


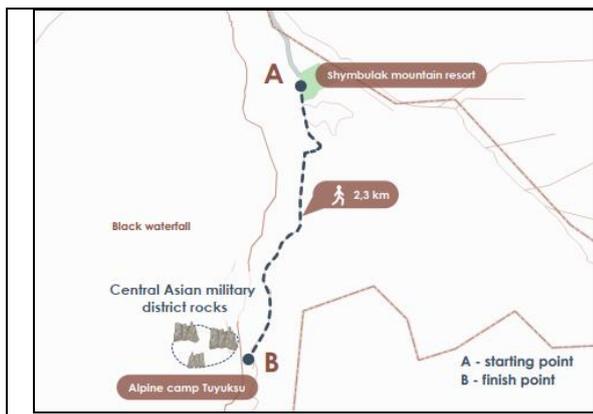
Figure 5. Structure of the "Initial training in rock climbing" program

Thus, the authors have developed a unique professional trajectory "Sports, primary wellness tourism", which gives students the opportunity to study under the educational program "Tourism", at the Kazakh Academy of Sports and Tourism to obtain additional qualifications "Tourism Instructor", through special disciplines "Active types of tourism", "Moral and psychological training of a tourist", "Children's and youth tourism", "Methods of training a tourism instructor", "Fundamentals of topography and orientation on the terrain", "Special types of tourism" and others, which are aimed at the specialization of students in obtaining additional qualifications – a tourism instructor, which allows graduates to work in the field of active types of tourism and rock climbing in the territory of Kazakhstan in the future. During the training under the trajectory of "Sports and primary wellness tourism", students pass the qualification tests for categorical and non-categorical hikes by types of tourism that pass through the territory of Kazakhstan. During the hikes, students consolidate their knowledge in practice while studying specialized disciplines of the trajectory, acquire practical skills and abilities. After the hikes, they are assigned sports categories, depending on the category of difficulty of hikes by type of tourism. Students with athletic titles can receive (according to the professional standards "Tourism" of the National Qualifications Framework) the qualification "Tourism Instructor" by types of tourism (Sardarov, 2020). The methodology of training a tourism instructor - the course provides complete information about the functions, status and rights of a tourism instructor, the rules for organizing and conducting hiking trips on the territory of Kazakhstan. Reveals the specifics of the work of a sports tourism instructor, teaches how to plan and organize hiking trips, gatherings and competitions in sports tourism. This educational trajectory is fully implemented in the educational program "Tourism" of the Kazakh Academy of Sports and Tourism at the Faculty of Tourism and is highly appreciated by the UNWTO TedQual international certification (Zakiryanov et al., 2019).

As a result of their research and professional activities the authors are developing a training program for rock climbing specialists with the assignment of appropriate qualifications, which is currently undergoing specialized certification. This program "Initial training in rock climbing", developed in accordance with regional and international requirements is aimed at training those engaged in the system of further education and at realizing the needs for physical improvement and a healthy lifestyle. The program is aimed at the formation of professional skills in the field of rock climbing, the development and improvement of physical qualities, motor abilities through sports climbing. The program includes recommendations on the structuring, support and organization of the training process of climbers at the initial level of training. The program material is combined into an integral system of sports training and assumes the solution of the following main tasks: - promoting physical development and strengthening the health of those involved; - preparing young climbers for competitions at the city, regional and Republican levels; - characterizing the basics of sports climbing development in the Republic of Kazakhstan; - developing the motional abilities necessary for a climber: flexibility, legerity, strength, motion coordination abilities, balance; compliance with control standards; - education of strong-willed, courageous, disciplined climbers with a high level of activity and responsibility; identification of potential, abilities and athletic talent. The Program consists of several main blocks: Theoretical training in rock climbing; General physical training; Special physical training; Technical training; Tactical training; Compliance with standards; Participation in competitions; Rehabilitation activities, during which the formation of a high-class climbing specialist takes place (Figure 5).

Table 1. Tourist climbing routes, their location and description

Site location	Route description
 <p>1.1</p>	<p>Route, part 1. (Figure 1.1)                      The location of point "A" is bus stop No.12, across from the "Kazakhstan" hotel, the place of departure.                      Geographical coordinates are 43°14'41"N 76°57'23"E .                      Point "B" Medeu Alpine Sports Complex",                      geographical coordinates are 43°09'31"N 77°03'30"E.                      "Medeu Alpine Sports Complex" - is an outdoor speed skating and bandy rink. It is located in a mountain valley (Medeu Valley, or the valley of Malaya Almatinka River) on the south-eastern outskirts of Almaty, Kazakhstan.</p>
 <p>1.2</p>	<p>Route part 2. (Figure 1.2)                      Point "A" location: "Medeu Alpine Sports Complex",                      geographical coordinates are 43°09'31"N 77°03'30"E. Point "B"                      Ski resort "Shymbulak", geographical coordinates are 43°07'42"N 77°04'49"E                      "Ski resort "Shymbulak" is a ski resort near Almaty. It is the largest ski resort in Central Asia. It is located in the upper part of the Medeu Valley in the Zailiisky Alatau mountain range, at an elevation of 2,200 metres (7,200 ft) above sea level. The resort area is about 25 kilometres (16 mi) south of Almaty city by Medeo road.</p>



Route part 3. (Figure 1.3)

The location of point "A" is the ski resort "Shymbulak", coordinates 43°07'42"N 77°04'49"E.

Point "B" - the Rocks of the Central Asian Military District, geographical coordinates are 43°06'35"N 77°04'10"E

Tuyuk-Su Gorge is located in the central part of the Zailiyskiy Alatau. This is the largest northern ridge of the Tien Shan. There are many rocks in the area suitable for rock climbing. Central Asian military district rocks are suitable for tourists with different levels of training.

An important part in the training of a climbing specialist is the practical one, which should be given a sufficient amount of time while training. The practice-oriented nature of all areas of sports tourism, including rock climbing, allows instructors not only to work with all groups of tourists qualitatively, but also to develop routes for them. A good example of such activity is four routes for rock climbing developed by the authors during their study, where climbing instructors are trained and which is also treated as a tourist service. Arranged in accordance with all requirements and standards, these four routes today are fully implemented in the educational and tourist activities of the Almaty tourist region.

The main stages of the climbing routes arrangement, both for those trained and tourists, are the following:

1. Determination of the existing tourist and resource potential for rock climbing in the region, using maps, GIS technologies. The analysis of maps, cartographic schemes of the territory, involving various technologies, is carried out to identify the presence and diversity of objects of the tourist and the resource potential of the territory necessary for the formation of climbing routes. Identifying objects for which it is potentially possible to create routes becomes the first stage in the development of promising tourist offers for rock climbing;

2. Visiting potential sites for rock climbing, object analysis. A full-fledged study of potential objects for the formation of tourist offers for climbing occurs during field research, when the research group goes to the object, analyzes its condition, and forms variable routes and trails;

3. Arrangement of routes along the rocks, analysis of their complexity, initial development of routes, determination of necessary technical means. After the initial on-site visit and the collection of field information, a detailed data analysis and the compilation of routes, trails and stocktaking takes place, as well as the preparations are made for the practical testing;

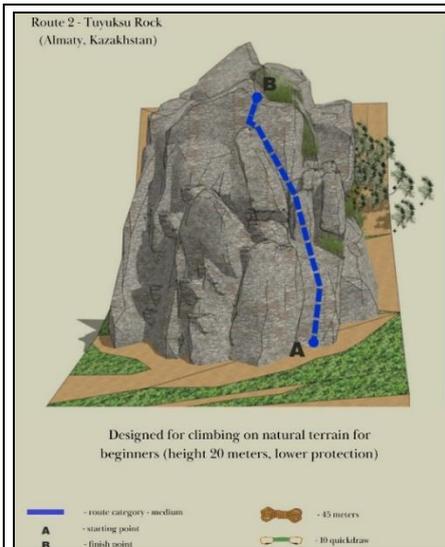
4. Working out and describing routes for rock climbing, routes mapping. This stage is carried out on the ground in field conditions, when the prepared routes are tested in the field environment, their detailed description and mapping take place, which allows providing the service to tourists in a safe and unified form (Table 2).

Introduction of the developed routes into the professional activities of subjects of the tourism industry and tourism education. The developed routes and trails, formed into a practical guide in graphic form with text interpretation (Table 2), allow the subjects of the tourism industry to implement this service, if there are specialists, instructors with appropriate qualifications.

Thus, these routes are the result of the experienced work of the authors and are actively being introduced into the practical activities of the subjects of the tourism industry and tourist education of the Almaty tourist region. The purpose of these routes arrangement is their subsequent implementation within the framework of climbing development as the direction of sports tourism.

Table 2. Tourist climbing routes, their location and description

Route map	Route description
	<p>Route 1 – Tuyuk-Su Rock (Figure 1.4)</p> <p>This route is good for climbing on natural terrain for beginners and tourists. The route height is 18-20 meters.</p> <p>The top-rope climbing is carried out through points B.</p> <p>The route is divided into two trails as follows:</p> <ul style="list-style-type: none"> <li>- blue, the route category is medium, suitable for beginners and tourists without special climbing skills. Route description: the route start is a little difficult because there are mostly crimps (i.e. small edges for the legs), then the movement can be carried out through a small crack, with careful movements during stemming (i.e. climbing corners with a right foot pushing into one wall and a left foot pushing into another) we go to the middle of the route. In the middle of the trail there is a small shelf where you can relax a little and climb further using magnesium powder. Further, the trail becomes easier, since there are convenient edges so we can continue moving up. All along the way, do not forget about the footwork, it is necessary to put your feet carefully not to fall down.</li> <li>- red, the route category is hard, suitable for tourists who have a fundamental understanding of climbing. Route description: the route begins slightly to the right of trail – 1 as described above, the beginning is hard with crimps, then climbing is carried out on the plate using cracks and small hollows for fingers and toes, from the middle of the route we move to the right corner of the cliff, using the corner we stem to the shelf and just like on the trail - 1 using ledges finish the trail– 2. Equipment: rope 45 meters.</li> </ul>



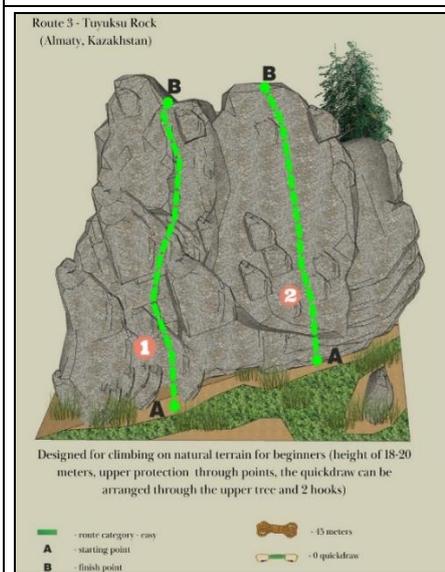
Route 2 – Tuyuk-Su Rock (Figure 1.5)

This route is good for climbing on natural terrain for beginners and tourists. The route height is 20 meters. Protection for lead climbing.

The route has one trail as follows:

- blue, the route category is medium, suitable for beginners and tourists without special climbing skills; Equipment: rope 45 meters; 10 quickdraws.

Route description: Climbing on a trail of medium difficulty, mostly movement occurs through cracks, leaning back a little from the rock, with the work of arms and feet, arms work with lateral grips, feet rest on cracks or soles on comfortable areas of the rock, knowing the correct movement and the correct clicking of the quickdraws, you can easily get to the end of the trail. It is necessary to avoid too high a position of the legs when moving along the crack since the main load will be on the arms, but climbing is carried out by short alternate movements of the arms and legs. The route start is not very hard: with light movements we get to the first crack, having clicked 2 quickdraws, we continue to move along the crack. Movement along the crack is carried out by careful changes of grasps and a clear placing of the feet. Having clicked 4 more quickdraws, we go up on the shelf and rest a little. After that, we also move along the crack, clicking the remaining 4 quickdraws and go out to the end of the trail. This route is good for practicing with protection for lead climbing since the quickdraws are on the left side and on the right for clicking with both arms.



Route 3 – Tuyuk-Su Rock (Figure 1.6)

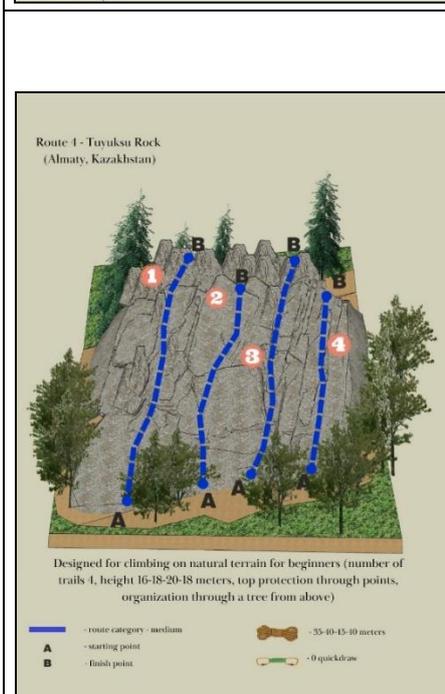
This route is good for climbing on natural terrain for beginners and tourists. The route height is 18-20 meters.

The top-rope climbing is carried out through top points, the quickdraw can be clicked through the upper tree and 2 anchors.

The route is divided into two trails, both suitable for beginners and tourists with minimal training.

Equipment: rope 45 meters.

Route description: Climbing on these routes is not very hard, as there are convenient holds and there are good places for putting feet. When climbing, the walking technique is used, alternating the movement of the arms and legs, since the rock has a positive angle of inclination, the so-called "Recumbent" (*i.e. rock or a section of rock having a positive angle of inclination less than 90°*). Various types of grasps are used jugs, cracks, undercling. On the trail, it is possible to organize speed climbing, putting your feet correctly and taking hold of the edges correctly, you can quickly climb the route. There are several shelves with cracks on the left trail, which makes it much easier to climb, as can be seen from the line, the route has a zigzag pattern, when climbing such trails, the technique of cross changes of grasps and foot positions is used.



Route 4 – Tuyuk-Su Rock (Figure 1.7)

This route is good for climbing on natural terrain for beginners and tourists. The route height is 16-18-20 meters. The top-rope climbing is carried out through the top points.

The route is divided into four routes as follows: Trail – 1 – It has good holds for changing arms and setting feet, climbing is carried out using movements on the toes standing on good ledges, in some areas have loose stones, it is necessary to check the holds and ledges well. There are chimneys and cracks all over the rock where you can put your arms and feet. Trail - 2 – A very good start has convenient holds for arms and feet, there are convenient shelves throughout the entire route, when climbing these shelves, you need to squeeze out all the way on one arm, while the legs should clearly and steadily stand on cracks or ledges, then with a smooth and neat movement we throw one leg on the shelf, it is especially important to maintain balance and coordination. Trail - 3 – The movements are performed sequentially one leg above the other. Then they stand with one foot on one hold, grabbing a convenient hold with both arms and placing the toe of the other foot sideways on the hold. Then push off with your back foot, put the toe of your front foot on the next hold going up. If necessary, you can hold on to the ledge, but the correct execution of the technique allows you to put your arms down. After that, you can repeat the movement and quickly climb up without realizing the distance traveled. Trail 4 – A convenient start with ledges climbing with the help of a walking technique with alternating different grips, under the finish section you need to lean back with a sidepull on the hold on the crack, you can transfer your body weight to the heel of the foot if the hold where the foot is placed is located almost at the same level with the hold used by the arm or at a short distance from it. (leaning back with a sidepull is an element of movement in rock climbing for climbing the outer corners of a wall or rock). Route description: climbing on these 4 trails is the easiest, unlike all the trails on the rocks of the Central Asian Military District. Due to the ease of these trails, it is possible to organize speed climbing. With the right position of feet and properly grasping the hold, you can quickly get to the end of these trails. All these trails are close to each other, the only difference is the holds on the rocks, in some places they are easier in some more difficult, but in general they are all passable and will not make any difficulty.

## CONCLUSIONS

The study, the results of which are presented in this article, made it possible for the authors to make the following conclusions:

1. Rock climbing today represents a quite promising and high-demand direction both among tourists and all categories of citizens as high-quality leisure in the future. The Republic of Kazakhstan, namely the Almaty tourist region, has all the necessary natural resources for the development of rock climbing. There are both natural landforms in the region, on which routes are being arranged, and climbing walls that allow indoor climbing.

2. Currently, there is a need to train tourist personnel with a wide range of additional competencies in the most popular and promising areas of tourism. To this end, the authors have developed and put into practice: the trajectory for the educational program "Tourism" - "Sports, primary wellness tourism" and the training program for climbing instructors, which are now actively used in the training of tourism specialists;

3. Rock climbing is of a clear practice-oriented nature and requires constant enhancement of professional knowledge of specialists. Thus, during their working activities, they must constantly improve their skills and arrange the routes for rock climbing. The article presents a methodology for creating routes on natural terrain, and an example of its application is the "Route Map." This map has been gradually introduced into the practical training and improvement of climbing instructors' skills and is being implemented as a ready-made tourist offer.

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The development of tourism in the Republic of Kazakhstan plays a strategically important role in the formation of the national economy of the country. Having a wide variety of tourist resources, Kazakhstan can develop each and every field of tourism. Regionally, the country is distinguished by various combinations of tourist attractions, the Almaty tourist region is a mountain tourist cluster and the development of all areas of this tourism is undoubtedly a priority. Rock climbing as one of the directions of sports tourism allows not only to get acquainted with the unique nature of the region, but also contributes to the physical recovery of all groups of tourists. The authors of this article have carried out active and fruitful work on the development of programs for training and practical improvement of climbing instructors, as well as tourism industry specialists who have climbing skills. The results of the research work presented in the article are being actively introduced into the practical and professional activities of the subjects of the tourism industry and tourism education.

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