

RESTING IN THE FOREST IN TIMES OF PANDEMONIUM FOR THE BETTERMENT OF LIFE, OR BUSHCRAFT IN THE POLISH NATIONAL FORESTS

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ABSTRACT

Motives: In the context of the global health crisis caused by the COVID-19 pandemic, there is a need to develop new, safe forms of recreation and nature education.

Aims: The Polish State Forests are introducing the concept of bushcraft, which has gained popularity among those willing to develop such skills. Sociological research and analysis of forest resources have helped to develop regulations for this form of recreation and a map of places where it can be practiced. The availability of information on the website of the General Directorate of State Forests is an important consideration, as it can facilitate the process of organizing recreation for participants and foresters.

Results: The pilot program “Stay overnight in the forest” has been a success, attracting interest without negatively affecting forests and ecosystems. In the face of current and future pandemic challenges, such an innovative form of recreation may attract nature enthusiasts.

Keywords: bushcraft, forest recreation, leisure safety, State Forests in Poland

INTRODUCTION

Today, in the face of the global health and hygiene crisis caused by the COVID-19 pandemic and similar threats, there is an urgent need to develop new forms of recreation and nature education. These forms should be safe and take advantage of the positive effects of nature on physical and mental health.

The pandemic clearly underscores the need to bring people and nature closer together and the benefits of being outdoors for mental and physical health. It is worth understanding that consciously experiencing nature can play a key role in developing our awareness, citizenship and dialogue with nature (Morin, 2001). The 2020 tourist season was particularly unusual due to the COVID-19 pandemic and widespread

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restrictions, which affected not only tourist offerings, but also people's new approach to ensuring their safety while on vacation. Regardless of the challenges posed by the pandemic, the National Forest Service took a proactive approach. After consulting with tourism coordinators at the regional directorates of the State Forests, recommendations were developed for forest districts, which included a range of work related to the start of the tourist season. The goal was to make it easier for employees to cope with the anticipated increase in the number of tourists. The recommendations covered infrastructure, how to provide information and how to cooperate with tourist organizations. A significant increase in interest in camping in the forest was noted, not just in designated special areas such as pilot sites for bushcraft and survival activities. This phenomenon, although not new, has never before reached the scale it has today, when social isolation has become an indispensable part of the way of recreation. Bushcrafting, as a form of tourism that fosters the idea of biophilia, fits perfectly into the trends associated with the New Green Deal and sustainable development.

AIM AND METHODOLOGY

In Poland, forests occupy a third of the country's land area, so it is not surprising that they are accessible from virtually anywhere within 30 minutes. Nevertheless, despite this accessibility, few people spend time there. According to the PBS survey, as many as 35% of Poles did not visit a forest even once last year, and another 46% did so only occasionally, between one and eleven times a year. Only 19% of Poles declare that the forest is a regular destination for their excursions, although in the survey the forests are held in high esteem by respondents. For many, the forest is an ideal place to seek peace and quiet (18%), engage in sports (25%) or observe nature (40%), although for the majority it is primarily associated with mushroom picking (54%) or collecting forest fruits (19%). These observations form the basis for the "Time in the Forest" and "Stay overnight in the forest" campaigns, which aim to encourage Poles

to visit forests. As many as 22,000 kilometers of hiking trails have been prepared in forests managed by the State Forests, leading through the most beautiful forest areas. Thousands of kilometers of trails have also been prepared for cycling and horseback riding enthusiasts. In addition, for fans of less traditional forms of recreation, such as survival, more than 600 camping sites with places for campfires have been made available. The "Time in the Forest" campaign also includes educational classes and picnics for children, where foresters share knowledge about forest inhabitants, tree species and principles of forest management, as well as the benefits humans derive from the forest. The purpose of the article will focus on presenting the results of research on bushcrafting as an effective way to relax in the forest in times of pandemonium, highlighting its potential to improve the quality of life. The article is intended to inspire readers to take advantage of the natural resources of the forests, which offer not only the opportunity for relaxation, but also develop survival skills and build a bond with nature. Work on the network of bushcrafting complexes was carried out in parallel through several tracks:

Designation of pilot areas

In 2018, the director general of the State Forest Service met with representatives of various groups using the forest: from bikers and scouts, to bushcrafters and survivalists, to detectorists or dog sled drivers. The meetings were workshop-based, open and voluntary. Following the meeting, a series of consultations and workshops for foresters and representatives of organizations promoting bushcraft and surwalking began. Participants included the author of the popular vlog *Ekwipunek Dźwigany Codziennie* and the Facebook group *Bushcraft Poland*, EDC, the Polish School of Survival association, the publishing house *Stary Wspaniały Świat*, the Polish Mountain Bikers Alliance – an alliance of bikers, the Polish Motorcycle Association, the Polish School of Survival association, the Polish Explorers Association or the Polish Association of Dog Sports, bushcraft

foresters and DGLP specialists in fire protection and forest access. As a result of these consultations, basic data was collected to create a framework for a pilot program to promote bushcraft and survival. At the next meeting, in 2019, areas were jointly preliminarily developed, using heuristic techniques, primarily SWOT. Locations were selected that met the criteria: adequately connected to habitats and plant communities that are resistant to environmental pressures, places where particularly valuable plant and animal species (mainly insects) have not been recorded. Forty-three special areas have been designated in 15 of the 17 regional directorates, covering a total of more than 65,000 hectares of forest. The smallest is 224 hectares, the largest is 5371 hectares. On the entire area of these areas, bushcrafters can practice the activities most important to them in accordance. The rules of use are governed by established rules. The forests included in the pilot program are part of forest promotional complexes, which, according to the Forest Law, are intended, among other things, to test innovative, experimental forest management solutions. The pilot ran from November 21, 2019 to November 23, 2020.

Surveys

As part of the pilot study, people using this form of recreation were given a form for the operation of a recreation and leisure facility, which had to be filled out for each such facility in the forest district. The form was available on the program's website. The purpose of this was to create a list that would help effectively identify infrastructure problems and solve them as quickly as possible. Over the course of the program, users were able to express their opinions about the program in an open online survey. As many as 2,238 people voluntarily took advantage of this opportunity. Employees of the forest districts included in the pilot were also asked for their opinions (the forest district manager and the pilot area coordinator). The largest group of users of the pilot areas are men aged 35–44 and in the 25–34 age range. Women account for only 15% of the users of the pilot areas. Based on the results, a user model was created.

RESULTS

More than a year ago, in September 2019, the State Forests designated special forest areas with a total area of more than 65,000 hectares, where bushcraft and survival enthusiasts could practice their interests without fear of violating the Forest Law. When creating a program to make forests accessible to those wishing to camp in the wild, no one expected how well this service would prove to be adapted to the circumstances surrounding the COVID-19 pandemic. During the 2020 summer season, Poles limited their travel mainly to the country. Many tourists chose to relax in nature instead of visiting big cities. Until recently, forest tourists had limited lodging options, such as campsites, campgrounds or camping sites, which often did not guarantee complete privacy. However, for the past ten months, the opportunity to legally sleep “in the wild” has been available at 64 specially designated sites across the country. After six months of the program, an evaluation was carried out on the basis of questionnaires completed by both users and the forest districts responsible for the pilot areas. During this period, 427 reports were collected, although foresters are confident that there were many more users of the sites. The reporting procedure itself was also identified as an aspect of the regulations that would need to be changed.

User Profile

For the PCA (principal component analysis), gender and education were combined, which determined the following groups: FW – higher educated women FS – women with high school FZ – women with vocational education MW – higher educated men MS – men with high school MZ – men with vocational education. The survey had the main purpose of understanding the opinions of both the employees of the forest districts where the pilot was carried out and the people who use this form of spending time in the forest. The survey covered 41 forest districts. A total of 86 state forestry employees participated in the survey, including 47 coordinators and 39 forest inspectors, as well as 2,801 participants in the pilot

program. It is worth noting that as many as 80% of those surveyed had previously heard of the pilot area program, and 61% of them had taken advantage of the offer. Among those enrolling in the program, there was a preponderance of men between the ages of 25 and 44, who cited the need for close contact with nature (82% of respondents) and the desire to escape from the hustle and bustle of urban life and everyday life (71%) as the main motivations for their trips to the forest. Only 1% of respondents cited adrenaline rush as the main reason for camping in the forest.

Regulations

The concept of “wilderness exploration” poses a challenge to the State Forest Service, as the main manager of forest areas in the country. According to the Forest Law of 1991, Article 30 prohibits camping outside of designated sites by the forest owner or the forest district manager. Unfortunately, there is no precise definition of “camping” (whether it includes everything from setting up a tent to hanging a hammock between trees or placing a carrimat on the ground). Special regulations have been developed and are in effect in the pilot areas. The key provisions of these regulations relate to the maximum number of people who can spend the night at one site (four people) and the limit on overnight stays (no more than two nights in a row). With the approval of the forest district, these numbers can be increased. Many of the points in the bylaws are in line with the international set of good bushcraft and survivalist practices (including the “leave no trace” principle, which includes, among other things, rules for leaving a minimal footprint and lighting campfires only in designated areas). The regulations were created based on the rules in Denmark (*Sleeping outside in nature* – The Danish Nature Agency). The document promotes the principle of “leave no trace” meaning that care should be taken to leave no trace, and reminds us of the basic rules for using the forests.

7 PRINCIPLES OF LEAVE NO TRACE

1. *Plan and prepare before you set out.*
2. *Stick to the trail and camp properly.*
3. *Dispose of waste in the right way.*

4. *Leave the nature you find intact.*

5. *Minimize the effects of using fire.*

6. *Respect the life of wild animals.*

7. *Respect other land and trail users. Remember that you are not in it alone.*

Until now, it was thought that the forestry supervisor, as the administrator of the area, had the ability to designate camping spots, which were often associated with small clearings. However, there is no obstacle to such sites being several or even dozens of acres in size. The law does not specify exactly how the forestry supervisor should designate these sites, so it is possible to designate not only specific, defined points, but also larger areas with precisely defined boundaries. The law also does not specify what the equipment of such a site should be, or whether forest management at the site requires special measures. If the area for objective reasons (pest hailstorms, a large amount of downy wood) is dangerous, the forest supervisor may, and even must, impose a periodic ban on entering the forest. The regulations prescribe that before entering one must check the current prohibitions on entering the forest. This information should be posted in a conspicuous place on an information board, on the forest district’s website and in the Forest Data Bank. Regulations introduced by the order to launch the pilot explicitly prohibit the use of any fire in special forest areas. It doesn’t matter whether it’s a campfire, a tourist gas stove or a stove burning various homemade fuels. The use of fire, regardless of the level of risk and measures to protect against the potential ignition of fire, is strictly prohibited. Lighting bonfires is allowed only in places designated for this purpose by the forestry supervisor. If there is a high risk of fire, the forest supervisor has the right, in accordance with the Forest Law, to ban access to the forest. There are no exceptions to this ban – it applies to everyone, regardless of whether they are bushcrafters, survivalists, hikers or joggers. According to the Forest Law, everyone has the right to use the forest, but is obliged to do so in a way that does not harm the environment. Some points in the regulations are in fact a set of international rules of good practice in bushcraft and survivalism. Users of pilot areas

are absolutely prohibited from using open flames in the forest. The increasing fire danger in the forests, exacerbated by successive years of drought, leaves no room for compromise for safety reasons.

Survey results

The results of a survey conducted by Bushcraft Poland show that mostly men (more than 92 percent) choose this form of leisure activity. About 30 percent of them are between the ages of 25 and 34, followed by those between the ages of 18 and 24 (about 22 percent), and the third group is made up of those between the ages of 35 and 44 (20 percent). Overwhelmingly, these are urban residents who work on a daily basis. This ratio is inversely proportional to age. It can be assumed that the hobby brings together 40,000 people in the country, and this number is growing. Taking into account the level of employment in the National Forests in 2017, it comes out that on average there is one bushcrafter per forester. This 1:1 ratio calls for a look at forest users. Data provided by the administrator of the “Bushcraft Poland” group shows that this is a predominantly male group. Men make up as much as 92 percent of this community. As a rule, they reside in large urban centers. From the capital city almost 3 thousand users log in. These are young people, who can be placed in the age range from 18 to 34 (about 50 percent in total). Those using the pilot areas usually do so in the company of friends or a group of several acquaintances, while 17% organized their trips with their families. The best rated were:

- natural attractiveness of the areas,
- transportation accessibility to the areas,
- size of the areas.

It is also worth noting that foresters expressed satisfaction with many aspects of the pilot program. As many as 70% were in favor of turning the pilot into a permanent program to make forest areas available for bushcraft and survival activities, with minimal changes to the regulations. One of the main challenges will be to improve the system for tourists to report their stay. Foresters’ concerns about situations where someone illegally lights a fire or litters the area have

not been confirmed. Thanks to the program, there has been a deepening of cooperation between foresters and the bushcraft and survivalist community, which underscores that both sides are pursuing the same goal – protecting nature and using it wisely. Foresters also express satisfaction with many aspects of the pilot. As many as 70 percent of them are in favor of turning the pilot program into a permanent program to make forest areas available for the practice of bushcraft and survivalism, with minimal changes to the regulations. The biggest challenge will be to improve the system for reporting the presence of tourists. Foresters’ concerns about situations where someone was lighting a campfire illegally or polluting the area did not materialize. The program has succeeded in strengthening cooperation with the bushcraft and survivalist community, confirming that both sides are working toward the same goal – protecting nature and using it wisely. The survey results show that the majority of survey participants, both users of the pilot areas and those providing access to the areas, expressed a positive opinion of the program and supported its further development. Users indicated that what they miss most is the opportunity to use lying wood for camping. They also indicated the need for more places to light fires or to consider allowing fire use throughout the area. The issue of fire use scored the lowest. Many respondents noted that the availability of parking in the vicinity of camping sites is insufficient, which increases travel time to these sites. There are also suggestions for designating camping areas far from urban centers and expanding their coverage. However, among the most common negative phenomena reported are:

- improper burning of fires in places not intended for this purpose,
- increased littering.

Fortunately, these incidents were sporadic, but nevertheless had a significant negative impact and require action to reduce them. It is worth noting that most representatives of the pilot forest districts expressed readiness to exchange experiences and integrate with representatives of the bushcraft and survivalist community. In many cases, such

cooperation has already taken place, and even joint initiatives between foresters and bushcraft enthusiasts have been established. The results of the survey show that as many as 82 percent of respondents are looking for close contact with nature, 71 percent are escaping from the hustle and bustle of the city, and 83 percent consider this form of spending time to be healthy. Only 1 percent of respondents are looking for a dose of adrenaline in the woods.

The overwhelming majority of campers (82 percent) had no contact with employees of the forest districts where the pilot areas were located, other than sending an email informing them of an overnight

stay in the forest. Nevertheless, when meetings with foresters did occur, they were viewed very positively by campers. According to data collected by coordinators of the pilot areas, the number of people staying in the areas depended largely on the season and weather conditions. Most people visited the forests in summer and tended to go alone. Also noteworthy is that survival and bushcraft are primarily practiced by men (85 percent), while women make up a much smaller percentage in this group (15 percent). Among users, two dominant age groups can be distinguished: those aged 25–34 (34 percent) and those aged 35–44 (35 percent). Interestingly, almost 60 percent of respond-

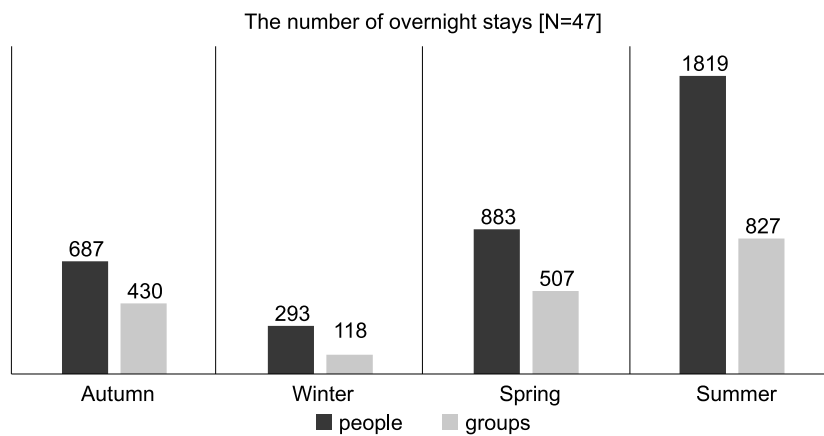


Chart 1. The number of overnight stays
Source: own elaboration, base on date (2023).

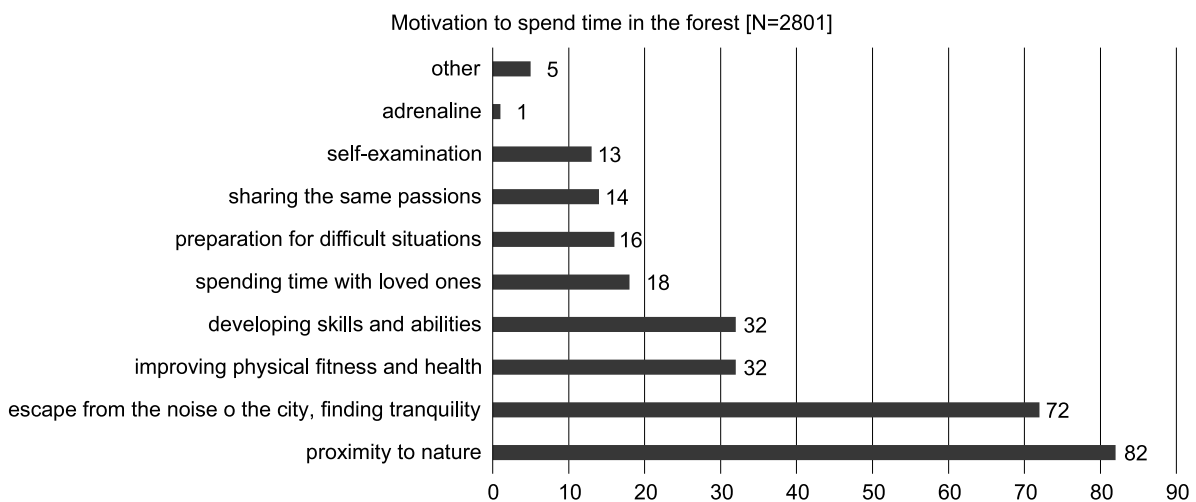


Chart 2. Motivation to spend time in the forest
Source: own elaboration, base on date (2023).

ents identify themselves as “bushcraft practitioners”, while about 30 percent use the term “survivalist”. It is worth noting, however, that 36 percent of respondents do not consider themselves representatives of these groups or are not familiar with these terms. The main motivations for spending time in the woods are the desire to be close to nature (82 percent) and the need for peace and quiet and an escape from city noise (72 percent). A high percentage of respondents also highlighted motivation related to improving physical health (32 percent). Communing with and observing nature (42 percent) were the most frequently mentioned activities while in the forest, which is in line

with the stated desire to be close to the natural environment. Interestingly, as many as 35 percent of respondents use their time in nature to engage in sports.

Respondents most often choose to spend the night alone (42 percent), slightly less often choosing to camp with a friend or acquaintance (38 percent). Less than a quarter of people practice bushcraft or survival activities with a partner (21 percent), and even fewer camp with family or children (less than one-sixth of respondents). Only a small number of people choose to spend the night in the woods as part of mass events or rallies (5 percent), or in larger groups (5 percent).

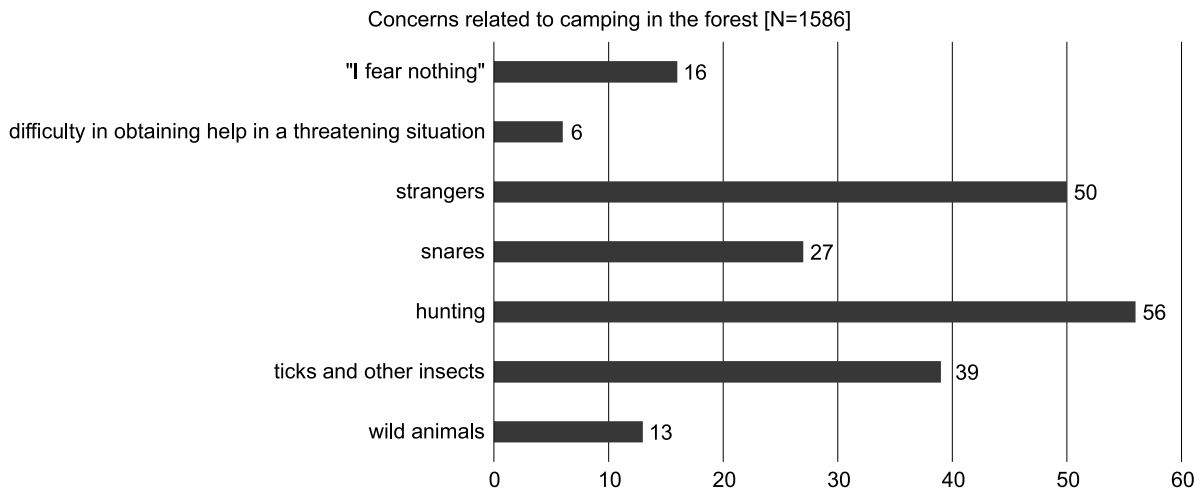


Chart 3. Concerns related to camping in the forest
 Source: own elaboration, base on date (2023).

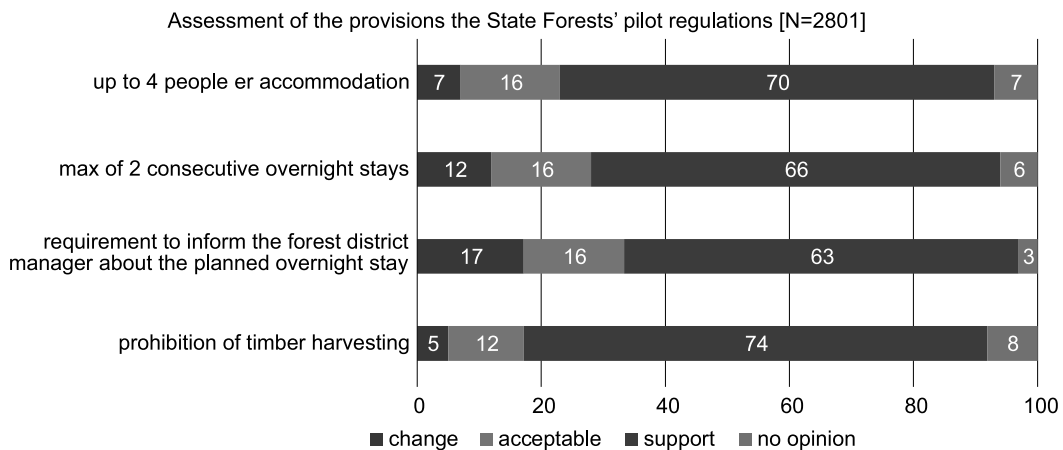


Chart 4. Assessment of the provisions of the State Forest pilot regulations
 Source: own elaboration, base on date (2023).

Spending time in the forest is more a form of retreat for loners than a family activity. Overnighting in the woods is attractive, but it also comes with some concerns. Comparing the opinions of those experienced in forest overnights and those who have no such experience, it can be seen that the concerns are similar, but their intensity varies. Both campers and non-nighters in the forest are most concerned about hunting (56 and 43 percent, respectively), strangers (50 and 48 percent), and ticks and insects (39 and 45 percent). Among those not staying overnight in the forest, wild animals (37 percent) and inclement weather (34 percent) also cause concern. It seems that the experience gained by those staying in the forest

alleviates concerns about contact with nature, but does not have a soothing effect on concerns about other people's behavior.

List of pilot areas in individual forest districts

A total of 41 areas have been designated in the pilot action in 15 of the 17 regional forestry directorates, thus covering more than 65,000 hectares of forest. The smallest of these areas covers 224 hectares, while the largest extends over 5371 hectares. All of this forest space is available to bushcrafters, who can conduct their most important activities there, according

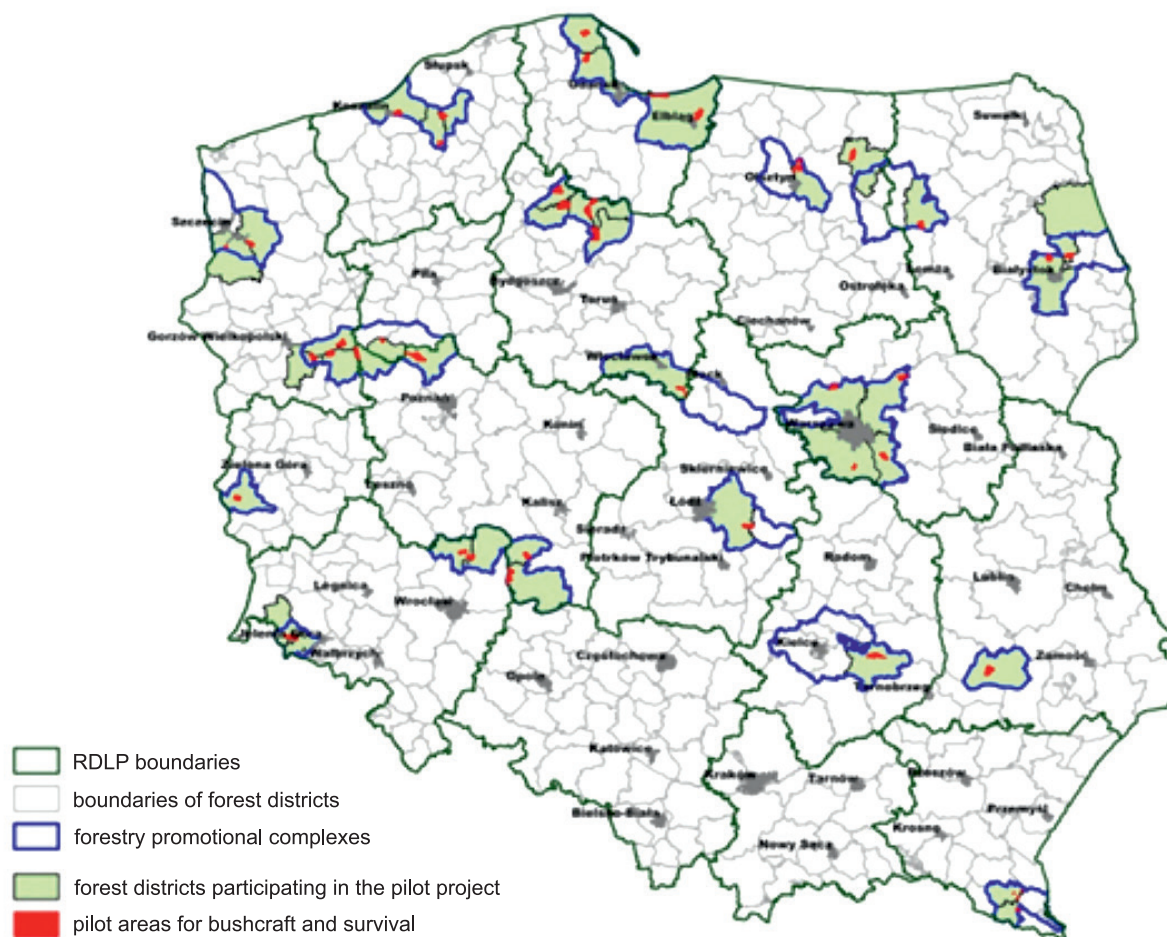


Fig. 1. Location of Bushcraft and Survival pilot areas
Source: own elaboration, base on date (2023).

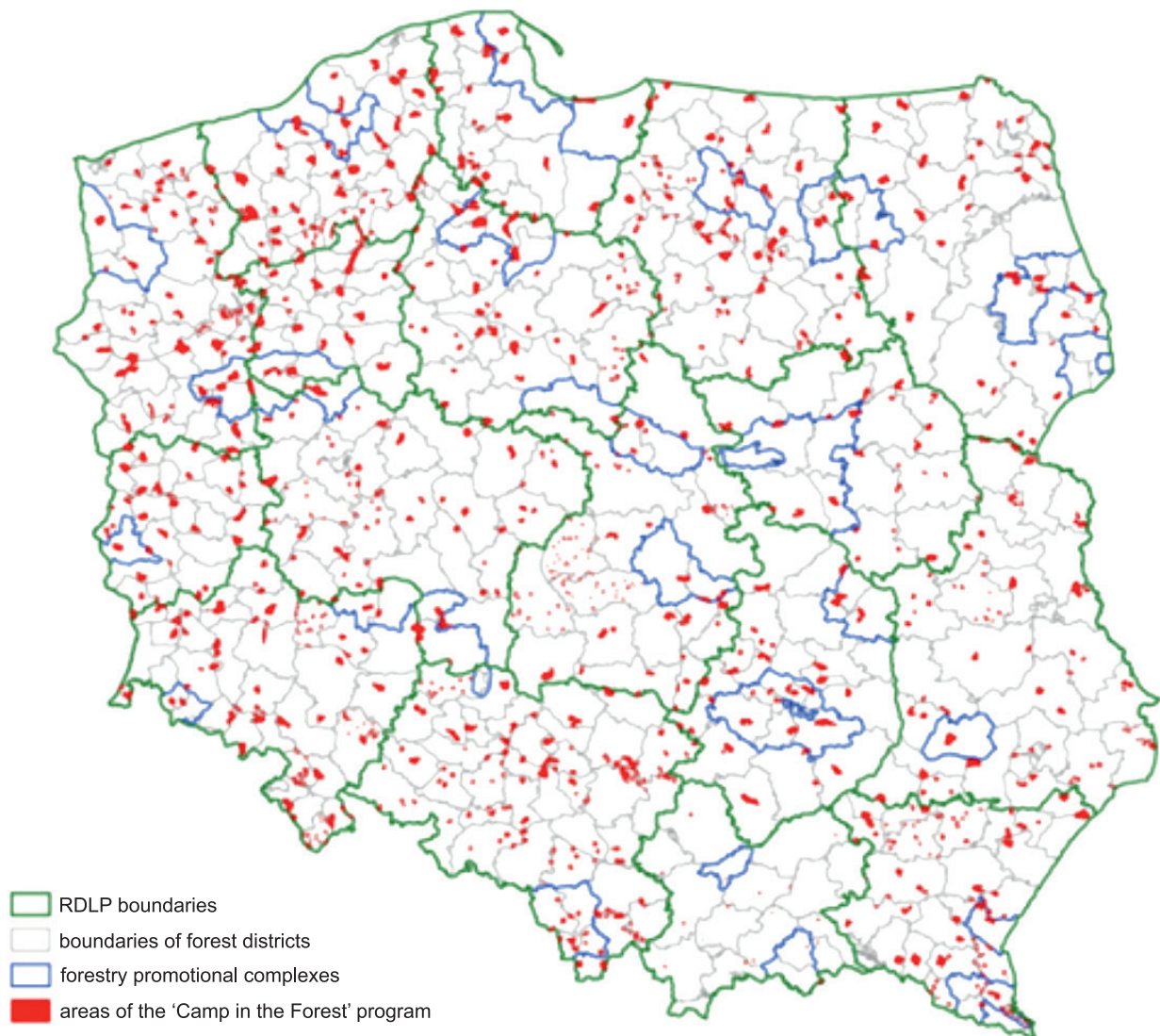


Fig. 2. Location of the program „Zanocuj w lesie”
Source: own elaboration, base on date (2023).

to established regulations. The forests included in the pilot program are part of the statutorily established so-called forest promotion complexes, of which there are 25 throughout the country. These complexes perform the function of testing innovative and experimental forest management solutions.

Once the pilot period is over, the range of forest accommodations will be expanded to provide better

accessibility. A key aspect of this process is the development of digital tools to help implement the project. An interactive database of information has been created to make it easy to find the exact location of forest accommodations. Detailed information and locations can be found on the website: <http://www.lasy.gov.pl/pl/turystyka/program-zanocuj-w-lesie>.

DISCUSSION

The World Health Organization stresses that green spaces are an indispensable element to ensure healthy, sustainable and livable conditions. Indeed, the scientific literature points to the various health benefits of access to natural areas. Access to and investment in enhancing engagement with the natural environment is one of the fastest growing ways to improve human health. A Chinese proverb emphasizes that what harmonizes with nature is good, while what goes against nature is bad (Sui, 1992). This statement seems to be accurate, and the forest is one of the most natural and primordial environments on the planet. Since prehistoric times, people have drawn sustenance from the forest and enjoyed its benefits, attaching great importance to trees (Klimuszko, 1992). Examples of traditional attitudes toward the forest include planting trees near newly built houses to protect them from evil, making cradles from linden and birch wood because of their symbolic power to promote the healthy development of children, and using brooms made from fir to chase away evil spirits. Analyzing the experience of various specialists in health care and prevention, it is easy to see that an important part of the process of treatment and disease prevention is the creation of an appropriate psychological atmosphere and the development of healthy life habits, including physical activity (Zaras, 2014). It is also worth considering a wide range of natural therapeutic methods, including laser therapy, which can be an effective tool in the fight against diseases of civilization (Atwood & Kimball, 2003). People often strive to recreate natural conditions in their surroundings and realize the benefits of being in the forest for physical and mental health. The forest allows people to achieve these benefits much more quickly. In practice, virtually all methods of coping with stress can be carried out in the forest space, which underpins the body's ability to build adequate immunity. At the same time, the proposed form of recreation guarantees adequate social isolation, which is extremely important in the fight against pandemics. It only requires adequate preparation, sometimes coordination,

supervision, as well as adaptation of the forest or appropriate adaptation of the space and equipment for this purpose. The therapeutic use of the forest is based primarily on the perception of the natural environment (Kostrzycka-Kostrowicka, 1999). The added value in visual perception and perception consists of two complex stimulus-response (sensing) systems. Their complement is perception, which can be defined as a collection of stimuli and information reaching the brain, which are processed into impressions (Asanovich, 1988). These impressions, perceptions and associations shape and influence the body's behavior (Kostrzycka-Kostrowicka, 1999). The issue of environmental perception is currently of considerable interest to specialists in various scientific fields, including psychologists, physiologists, ethologists, ecologists, geographers, sociologists, urban planners and other experts. In the context of perceptual psychology (Anthrop, 1988), vision is subject to certain rules, according to which what is seen is perceived as a whole, and an object can be recognized even when it is partially visible. In image decomposition, elements that are similar to each other are recognized first, and shapes are much easier to separate when they are adjacent to each other. In creating an image description, real shapes can be reduced to the simplest geometric figures. These observations can be extremely useful in organizing spaces in forests for recreation, especially for rehabilitation programs. That is why it is so important to understand the mechanisms of perception of the environment. There are two main types of perception of nature and landscape values. The first is perception from the perspective of the traveler, i.e. the area through which he or she is moving or passing – called “through” perception. The second is perception from the point of view of a person staying in a particular place – called “in” perception. In each of these cases, nature is perceived differently, its qualities are evaluated differently, and information is encoded in memory in different ways (Kostrzycka-Kostrowicka, 1999). Some genetically determined features of visual perception are the ability to see an image as a whole, even if it is formed by individual elements, and the

ability to perceive space through stereoscopic vision, which makes it possible to judge distances and determine the possibility of interaction with the environment. The introduction of the bushcraft pilot program meets these needs, allowing people to be “in” nature and fully benefit from contact with nature. Through this approach, people can become more immersed in the surrounding environment and take better advantage of the benefits of communing with nature. Many countries in the European Union are seeing similar experiences and the reasons that prompted the pilot program. Italy is an example, where the CEFEO Research Center conducted research to understand the socio-economic impact of the COVID-19 pandemic on Italy’s nature-related educational, therapeutic and recreational programs. In the context of economic austerity, social innovations are becoming an increasingly popular solution to various social challenges, both long-standing and new. They aim to support the creation of new ideas that can effectively respond to pressing needs and challenges, especially among vulnerable groups. They seem to promise solutions to the problems facing rural areas. However, there is still little evidence base on the impact of these innovations on the sustainability of rural communities. Similar experiences and observations can be noted in a study conducted by Scottish researchers. They conducted an analysis of social innovations in the context of forestry, examining their type, scope and impact on Scotland’s marginalized rural areas. The results show that social innovation has a positive impact on the social aspects of forestry. These effects are evident in various areas, such as environmental protection, social interaction, economic aspects, and institutional and governance issues. Nevertheless, their impact is mainly limited to the local territorial level. These results are valuable both from a local development perspective and in the context of forestry at the municipal level. The presented results of the evaluation of the Forest Physical Activity Program (AFPP) targeting physical activity in the forest environment showed a significant increase in the number of sports and the number of visits to pilot facilities. The program, the result

of a pilot study, introduced new opportunities and strengthened existing physical activities. Changes were also observed in the level of sports activities of people who previously participated in physical activities only once a week or even less frequently, although this is not directly related to the program. These results are consistent with previous studies that also suggest a positive effect of targeted activities on physical activity in the forest. These results are consistent with previous studies (e.g., Morris & O’Brien, 2011; O’Brien et al., 2016) that have shown that programs focused on physical activity in the forest have similar effects. Moderate physical activity in the forest can promote forest improvement. Overall, these results suggest that forest physical activity programs can increase sports activities and improve the forest environment, with beneficial effects on people’s health and quality of life. A study in Australia found a significant increase in the number of forest users (Veitch et al., 2012). However, other studies that have focused on improving forest trails and landscapes have shown no change (Cohen et al., 2016) or even recorded a decline in physical activity (Cohen et al., 2016). It is worth noting that this decline can be explained by a decrease in organized forms of physical activity (Cohen et al., 2009). The main motivations for engaging in physical activity focus on the health benefits and enjoyment of being in natural surroundings. These motivations are closely related to the perceived benefits that people derive from physical activity, with these benefits appearing to be greater when activity takes place in the forest. These findings are consistent with previous research that highlights the wide range of benefits of access to forests and other natural habitats (Cavanaugh et al., 2014), as well as the mental well-being benefits of physical activity. Organizing and leading activities also provides an opportunity to establish social relationships with others who have already come to appreciate the benefits of forests and green spaces (Cavanaugh et al., 2014). Social support also plays an important role in maintaining or changing physical activity behaviors, as evidenced by studies in other countries (Cavanaugh et al., 2014). Evidence gathered

from the pilot program enabled the Environmental (FE) and Public Health (SE) Board to decide to gradually mainstream the program. It began with three sites in 2017/18 and expanded to include another six sites in 2018/19, with four urban suburban sites joining the program as of April 2019. Currently, the AFPP covers eighteen forest sites across England. However, it is worth noting that the available evidence is limited and does not provide full figures on the program's impact on participants' sports activities. Another important aspect of access to forest areas is to understand ecological awareness, which should not just be a fad, but a permanent lifestyle. Long-standing environmental education efforts, which have been going on since the 1990s, focus not only on mitigating impacts, but primarily on addressing the causes of environmental problems. Environmentally conscious people not only don't litter in the woods, but also take concrete actions to protect the environment, which stem from their knowledge and sensitivity. One-time participation in forest cleaning actions is an important step, but in the long run, it is systematic concern for the environment and changing daily habits, as well as passing on this knowledge to others, that play a key role in achieving this goal. Living in harmony with nature is a beautiful slogan that evokes positive emotions and is popular on social media. Actions related to cleaning up the Earth are gaining many supporters and defenders of nature, however, it is important to understand that it is systematic, constant care for our environment and daily habits that are the key drivers of real change. Action steps, while important, are only part of the equation in the pursuit of a sustainable lifestyle. Environmental education and a sense of responsibility play a key role in protecting the environment from degradation. In the United States, after World War II, there was a tremendous increase in interest in enjoying the benefits of nature. In the 1970s and 1980s, the camping movement developed there, and backpacking (backpacking) and hiking (trekking) became fashionable. As the popularity of these activities grew, so did the so-called outdoor industry, which used new technologies to produce clothing

and equipment (e.g., Gore-tex membranes, Vibram soles, water filtration devices, specialized backpacks and bags). However, as the number of people using nature increased, there were also negative effects, such as environmental pollution, destruction of vegetation and trees, noise, and others. Observation of these negative effects prompted changes, both legally and in public awareness. In the United States, regulations such as limits on visitors to national parks were introduced, but at the same time it was understood that these regulations did not fully solve the problem. In this context, R. Max Peterson, then director of the U.S. Forest Service, noted that wilderness management relies heavily on education and information, and only marginally on regulation. In response to these challenges, the "No Trace" concept emerged, which focused on outdoor ethics education and responsible use of nature. The concept evolved over the years and led to an initiative known as Leave No Trace (LNT) ethics, which is promoted and coordinated by the nonprofit organization Leave No Trace Center for Outdoor Ethics. LNT principles have been incorporated into bylaws and followed by responsible forest and wildlife users. Studies have shown that regular access to the natural environment has a positive impact on children's health, development and academic performance. It's also worth noting that interest in outdoor learning is growing worldwide, but international comparisons make relatively little use of this data. This underscores the importance of environmental education and awareness in developing a responsible approach to nature.

SUMMARY

The forest has remarkable healing and relaxing properties, which are often intuitively felt by therapists, health professionals and all of us, regardless of our profession. However, we are not always able to rationalize these benefits, which can lead us to underestimate the role of the forest as a tool for improving our health and well-being. The forest is an extraordinary place that offers a wide range of sensory experiences. In the forest, we can experience a variety

of scents, from the smell of resin in coniferous forests to the freshness of young leaves in spring. Visually, the forest presents itself beautifully, with varied shades of green, the browns of tree trunks, the soft lines of mosses and the variety of shapes and colors of lichens. The sounds of the forest are also extremely varied, from complete silence to the concert of birds and the rustling of leaves. These diverse stimuli have a positive effect on both our body and mind. Forest therapies that take advantage of these sensory experiences can range from physical activity in the forest, during which we benefit from the presence of essential oils and other volatile substances, to more advanced methods such as sylvotherapy and naturotherapy. It is worth understanding that the forest offers a variety of ways that can be used to combat or prevent civilization ailments. Bushcrafting as a form of recreation stems from observation. An increase in the number of campsites and campfires set up in the wild has been observed in many regional directorates of the National Forests. There have also been cases of campers entering unauthorized, secluded and quiet places. Camper tourism has existed in Poland for several years, but the coronavirus pandemic has accelerated its growth. It seems to be a trend that will become increasingly important in the future. Those traveling in a camper want to be in contact with nature practically right outside the door of their vehicle. Many people take trips to the forest by car to ensure the safety of their trip. As a result, some forest districts have converted unused timber storage areas into temporary parking lots. Unfortunately, there is still a problem with blocking forest entrances and polluting sites that are supposed to provide a kind of escape from civilization's diseases and pandemic threats. Hippocrates, considered the father of medicine, already stressed the importance of the forest for human health many centuries ago in his work "On Air, Waters and Places". Today's idea of forest healing is gaining popularity, and it's hard not to see that it draws inspiration from the thoughts of this great Greek. The forest, and especially the trees growing in it, play an extremely important role as natural air filters, creating a favorable microclimate. First of all,

they absorb and neutralize toxins and heavy metals, and produce oxygen, which is essential for our life. It is worth noting that a single deciduous tree can provide as much as 1,200 liters of oxygen per hour, while a human consumes only 30 liters in that time. A walk in the woods doesn't just offer an extra dose of oxygen; it's also a great way to calm your nerves and reduce stress. Looking at the color green has a soothing effect on the nervous system and relaxes the eyesight. Studies have shown that patients in hospitals who have a view of trees are less likely to ask for painkillers than those whose view overlooks other buildings (Tserovska et al., 1990). Trees and shrubs have many elements and properties with therapeutic effects, such as bio-currents (electromagnetic charges), colors (flowers, leaves, bark, fruits), fragrances, phytoncides, essential oils, and sounds generated by plants, such as the sound of trees or the rustling of leaves (Zaráś, 2014). All of these factors together create a positive impact on human health and well-being, making forests and nature an extremely valuable place for our mental and physical health. The forest environment positively affects all the senses: hearing, sight, smell, touch and even taste. The forest allows us to escape from the noise of civilization that dominates city streets, factories and other areas of industrial activity. However, there is no depressing silence in the forest; you can hear the sound of trees, birds singing and the rustling of streams, which is a natural relief for your ears. In addition, the subdued lighting and sometimes even twilight in the dense forest help relieve the strain on tired eyes by dilating the pupils and slowing lens accommodation. The smells of the forest have a balmy effect on the sense of smell, bringing it back to life. Phytoncides play a key role in the sensation of freshness in the forest air, which contributes to the overall relaxation of the body. Flexible forest soil also benefits the joints, giving them a rest from the strain of walking on hard, urban surfaces. In Japan, there is the concept of "*shinrin-yoku*", or "forest bathing", (Hansen et al., 2017) which refers to a therapy that involves hiking among the trees and contemplating forest wildlife. Professor Qing Li of Tokyo's Nippon Medical School,

president of the Society of Forest Medicine, is one of the leading researchers in the field of environmental immunology. Such therapy is prescribed to patients suffering from occupational burnout, neurosis, general debilitation, and those recovering from illnesses. Research suggests that forest therapy can help defend the body against cancer by stimulating the production of NK (natural killer) cells – immune system cells responsible for destroying cancer cells. Patients who participated in four-hour walks in the forest had a higher number of NK cells in their blood compared to those who spent time in the city or did not go for walks. Concern for human health and a deep understanding of the forest were the cornerstones of the pilot to make the forests accessible to bushcrafters and survivalists, as well as to develop rules to ensure the safety of people and the environment. From the very beginning, the priority was to bring the two groups together – foresters and bushcraft and survival enthusiasts. It turned out that both groups share common values and goals - they want to share knowledge about nature and protect the forest in the best possible condition. Examples such as the Survival Valentine's Day at the Gryfino Forest District perfectly confirm this and predict a good future. Although it is difficult to find perfect equivalents for the English term "bushcraft" in Polish, it is a wilderness survival skill, and Mors Kochanski (Kochanski, 2016), a Canadian of Polish descent, is considered the father of this field. Kochanski emphasized that the more we know, the less we have to carry. It's worth noting that he contributed to the popularity of bushcraft by providing training not only for civilians, but also for the military in North America. Another European bushcraft pioneer is Briton Raymond Paul Mears (2003), who has been providing training on forest survival with basic tools since the 1980s. In addition to his survival skills, Mears is also an accomplished businessman with a number of television shows, books and films on survival. To the average person, survival and bushcraft may seem similar, but there are important differences. Both focus on being in and surviving in the woods, but survival involves surviving in nature without necessarily connecting with it, while

bushcraft teaches how to live and cooperate with the surrounding nature. According to the authors of the book *Forest Survival*, the difference between the two terms is that bushcraft focuses on traditional skills and knowledge. It is also worth noting that those interested in forest survival (bushcrafters and survivalists) usually prefer to spend the night in wild, undeveloped places. This can lead to conflicts with foresters, especially over the use of fire in the forest or cutting branches to build shelter. However, given the changing trends in tourism and recreation, it is important for foresters to follow these changes and try to find a compromise between the needs of forest users and environmental protection. A pilot project to make forest areas available for bushcraft and survival-type activities has yielded positive results. Most forest district employees have not noticed any negative effects of this program on special areas in the forest, nor have they noticed any impact on their work. Forest users also evaluate this program positively and would like to see it become a permanent offering of the National Forests. It is worth understanding that as the needs and trends of forest users change, foresters must adapt to these changes in order to reconcile the needs of society and conservation. Projects such as "Forest Survival" allow people to experience something new and unique that stands out from everyday life in civilization. It is worth continuing to research and develop such initiatives to better understand how the forest can serve as a tool to improve people's lives.

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