

## APITOURISM AS AN OPPORTUNITY FOR RURAL DEVELOPMENT - A CASE STUDY OF PČELICA ROSICA

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***Abstract:** Apitourism, or beekeeping tourism, is one of the emerging forms of so-called special, specific, or selective types of tourism. It originated less than a decade ago in the Republic of Slovenia. Following the COVID-19 pandemic, there has been a growing interest in domestic tourism destinations, as well as an increased focus on human health and preventive care, which has further elevated the importance of apitourism. Although often associated with health tourism due to its health benefits, apitourism plays a crucial role in enhancing the overall visitor experience and service quality in rural tourism. Through the case study of Pčelica Rosica, this paper highlights the potential for the development of rural areas, contributing to the economic empowerment of rural communities and the integrated development of the overall rural tourism offer in the Rasina District.*

***Keywords:** apitourism, rural development, opportunity, Rosica.*

### INTRODUCTION

Recent changes in the modern tourism market have been directed toward the development of new tourism products based on authentic, unique, and distinctive tourism offerings, as well as high-quality services. Contemporary tourist demand is no longer satisfied with standardized travel packages designed for the mass tourism market but instead seeks something new and innovative. Modern tourists are often well-informed about potential destinations, thanks to the rapid flow of information and the widespread use of the internet, particularly forums and social media. A unique experience and an unforgettable journey are now highly sought-after and valued elements of travel, while today's tourists tend to be well-educated and, in most cases, experienced travelers.

In light of these changes, both in tourism demand and supply, apitourism, or beekeeping tourism, is increasingly recognized as a development opportunity for rural areas. Although beekeeping is not necessarily confined to rural settings and can also be practiced in the outskirts of larger cities within the concept of so-called urban beekeeping (maintaining and managing beehives on rooftops, in courtyards, parks, and other urban spaces), it is undeniable that in rural areas, beekeeping or api-tourism offerings enrich the visitor experience in rural and agritourism. Additionally, they provide significant opportunities for improving the socio-economic position and economic empowerment of rural communities.

### APITOURISM

Apitourism combines sustainable, niche, heritage and health tourism. It is a new tourism product and a new research topic (Tišler & Šuligoj, 2020). This type of tourism is more recent, and is translated as beekeeping tourism, and implies

various benefits in the prevention of health, from consuming beekeeping products to staying in the direct vicinity of bees (Stanić Jovanović et al., 2023).

Due to its distinctive characteristics, particularly its ecological and health-related benefits, apitourism is attracting increasing interest from the public, as well as from beekeepers who are increasingly opting to expand their primary activity—beekeeping. The demand for this specific form of tourism is on the rise (Blažev, 2019).

Apitourism is an innovative form of agritourism (although it has, in some form, always been present) that introduces visitors to the life and work of bees, beekeeping products, and various aspects of apiculture that interest them. Additionally, it offers specialized services such as inhaling air from beehives, honey massages, honey baths, cosmetics based on bee products, and more. In essence, apitourism focuses on raising awareness about the importance of bees in the ecosystem, promoting apiculture, and educating visitors about bee life, colony functioning, and the production of bee products. Currently, apitourism is gaining popularity due to the growing public interest in apitherapy and wellness practices that incorporate beekeeping products.

Figure 1. Tree-stump house serving as an apitherapy chamber in Temerin



Source: <https://www.utnv.org/api-komora-temerin/24.03.2025>.

Given that beekeepers are almost daily in new temptations, primarily related in addition to climate change, but also infectious and parasitic diseases of bees, it is evident that beekeeping is a rather precarious occupation unless beekeeping is developed and the range of products and services within the beekeeping household is expanded. Precisely for that reason by inclusion apitherapy and apitourism in the offer every beekeeper would have, without too much initial investment (except in knowledge upgrade) a new additional source of income (Škaro, 2021).

As a specific form of agritourism, apitourism involves visits to agricultural estates—specifically, beekeeping farms—that have the capacity to accommodate tourists. It represents a "quick return to nature", offering insights into agricultural production and the traditional rural way of life. Additionally, it can be organized through networks of specialized agricultural producers within a given area, such as honey routes, cheese routes, or wine trails. A beekeeper engaged in apitourism must be educated in various fields. Beekeeping itself requires fundamental knowledge of biology, zoology, chemistry, and economics, while apitourism further demands expertise in marketing, hospitality, psychology, foreign languages, and specific first aid procedures, particularly in handling bee stings and the potential occurrence of anaphylactic shock. As in all other forms of tourism, apitourism must adhere to established standards, which include basic education, the appearance and organization of the site, guest communication, promotional materials, educational films, and the development of additional activities such as workshops, tastings, excursions, and massages (Hegić et al., 2019).

Following modern trends in the international tourism market, in recent years apitourism or beekeeping tourism, as a subtype of health tourism, is getting a chance for accelerated development. This type of tourism is more recent, and it is translated as beekeeping tourism and implies various benefits in health prevention from the consumption of beekeeping products to staying in the immediate environment of bees. Apitherapy as a branch of beekeeping is becoming an increasingly sought-after solution for preserving health, and along with it, apitourism has also developed. It is a type of specific, i.e. selective or special form of tourism (niche tourism), that is, it can be classified as a subtype of health tourism. The word apitourism comes from the Latin word 'apis' - bee (honey) and the English word 'tour' - the pleasure of traveling with stops in different places. It marks a destination where tourists will have the opportunity to learn everything related to bees, honey and beehives (Stanić Jovanović et al., 2023).

Apitherapy and apitourism are increasingly recognized by younger beekeepers as an attractive and innovative form of tourist offer. The interest in bee products as well as inhalations of air from the hive, thanks to their good results that they have shown on human health, especially in post-covid recovery, have attracted a lot of attention from both apitherapy service providers (not necessarily beekeepers) and users (Hegić, 2022).

## **OPPORTUNITIES FOR TOURISM DEVELOPMENT IN THE MUNICIPALITY OF KRUŠEVAC**

The Municipality of Kruševac is located in the central part of the Republic of Serbia, encompassing the southernmost edge of the Pannonian Basin and the sub-Pannonian region of Serbia. It covers an area of 854 km<sup>2</sup> and consists of 101 settlements, organized into 52 local communities and 20 municipal offices. The municipality is situated in the valleys of the West Morava, Rasina, Pepeljuša, and Ribarska rivers, between Mount Jastrebac, the foothills of Kopaonik and Željin, and the slopes of the Mojsinje branches of the Gledić Mountains. Approximately

35% of the municipality's total area is covered by forests, with the largest forest complex found on Jastrebac, the most densely forested mountain in the Balkans. The territory of the City of Kruševac is also known for its significant sources of mineral and geothermal waters, including Bela Voda, Ribarska Banja, Lomnica, Žabare, and Čitluk. The city itself lies within the Kruševac Basin, which encompasses the composite valley of the West Morava River and extends between Levač and Temnić in the north, Župa, Kopaonik, and Jastrebac in the south, and the Kraljevo Basin and the Ibar Valley in the west. Kruševac serves as the administrative center of the Rasina District. With its rich tradition and centuries-old history, it was once the medieval capital of Serbia. Today, Kruševac is a modern city and an important economic, administrative, cultural, healthcare, educational, media, and sports center for both the Rasina District and the Republic of Serbia (<https://turizamkrusevac.rs/upoznajte-krusevac/>, accessed March 25, 2025).

Kruševac is a town of rich tradition, with long history, former Medieval Serbian capital. The development perspectives of Kruševac and municipality as a whole were and still are unspeakably tied to rich cultural and historical tradition of people who lived and still live in this part of Serbia. Beside favorable geographic position, Kruševac is the town of exceptionally attractive tourism potentials, with great possibilities of developing diversified branches of tourism (Stanojlović, 2010).

Kruševac offers a rich historical and cultural background, which can serve as a foundation for educational tourism (Petrović, 2024). The sights of the City of Kruševac are numerous and they enable the realization of various aspects of tourism: cultural-historical, religious, sport, mountainous, spa, rural, and event tourism. Tourism offer has significantly been improved by the investment into the development of secondary tourism centers – Jastrebac and Ribarska Banja. For quite a short period Jastrebac has become a favorite tourism destination of the citizens of Kruševac and the tourists from other settlements of Serbia and the neighboring countries. For its health-care purposes, Ribarska Banja has long been popular among the older population, and recently among younger generations as well, thanks to recreational tourism and natural beauties (Lukić et al., 2022).

There are numerous reasons to visit Mount Jastrebac. When discussing its natural wealth, it is essential to mention that this is one of the most densely forested mountains in this part of Europe. Additionally, Jastrebac is one of the oldest mountains in Serbia, having risen from the sea as a large island during the Tertiary period. This ancient island now hosts a variety of significant plant species, including mountain maple, black alder (*Carpinus orientalis*), European bladdernut (*Staphylea pinnata*), and hornbeam (*Carpinus betulus*). The symbol of Jastrebac is the white birch (*Betula pendula*), which has been legally protected by the Republic of Serbia. In addition to its diverse plant life, the mountain is home to numerous species of mushrooms and medicinal herbs, further enhancing its ecological and touristic value (<https://srbijazamlade.rs/article/jastrebac-planina-za-sva-cula2/>, accessed March 25, 2025).

The balneological health resort and climatic site of Ribarska Banja is located in central Serbia, at the northeastern foothills of Mount Jastrebac. It lies in the valley of the Ribarska River at an altitude of 540 meters. Situated 220 km from Belgrade, 34 km from Kruševac, and 72 km from Niš, and positioned near the village of Ribare, from which it derives its name, this spa resort benefits from excellent transportation connections. With its favorable geographical location and well-developed infrastructure, Ribarska Banja meets all the prerequisites to become a key center for health and climatic tourism in this part of the country (Belij, 2016).

The area of Ribarska Banja has been inhabited since prehistoric times (Bankoff, Palavestra, 1986), as well as during the ancient period (Dušanić, 2004) and the early Middle Ages (Rašković, 2005). In addition to Roman settlers, the warm waters of this spa were also used by the Serbian medieval nobility. In the 12th century, Stefan Nemanja received Ribarska Banja, along with the entire valley of the Ribarska River up to its confluence with the South Morava, as a gift upon reaching adulthood. Ribarska Banja was named after the fishermen who caught exceptionally high-quality trout from its springs to supply the court of Prince Lazar. The healing properties of Ribarska Banja's springs have been known since prehistoric times, as evidenced by archaeological sites in the area. The Župa region around Ribarska Banja was granted to Stefan Nemanja upon his coming of age, while Princess Milica and her court ladies maintained their beauty by bathing in the springs of Ribarska Banja (<https://www.ribarskabanja.rs/index.php/o-banji/>, accessed March 25, 2025).

Figure 2. Ribarska Banja



Source: <https://www.ribarskabanja.rs/index.php/galerija/> 25.03.2025.

It is evident that the development of tourism in these areas has been primarily based on the use of natural healing factors. Some spas and climatic resorts, owing to the presence of "Specialized Hospitals," achieve significant tourist traffic throughout the year, even though they lack well-developed tourism infrastructure, as is the case with Ribarska Banja (Čutović, 2012).

In the territory of the Rasina District, rural settlements are particularly vulnerable, as indicated by the decline in the working-age population, the deterioration of agricultural activities, and the share of employed residents in non-productive sectors falling below the national average (Šabić et al., 2022).

### CASE STUDY: PČELICA ROSICA

On the slopes of Veliki Jastrebac lies Rosica, a village with a favorable geographical position and historically fertile land. According to local belief, the villagers never worried about extreme heat, as the morning dew always provided sufficient refreshment. In gratitude for this natural blessing, they decided to name the village Rosica. Another legend tells of a hardworking woman named Rosa, who, after her husband was killed by the Ottomans, became an outlaw. She established a homestead at the site of the present-day village, cultivating the land swiftly and diligently, "like a wasp" (*osica* in Serbian). It is believed that the village's name originated from the combination of *Rosa* and *kao osica*, forming *Rosica*. Today, Rosica is a livestock-raising and fruit-growing rural settlement of a dispersed type, located along the valley slopes of the Rosačka (Jakovljačka) River and the foothills of Veliki Jastrebac. It is situated 31 kilometers from Kruševac, with a total land area of 744 hectares (<https://krusevacgrad.rs/istrazujemo-poreklo-imena-sela-dragocena-rosa-u-rosici/25.03.2025.>).

The apiary *Pčelica Rosica* is located on the edge of the emerald-green Jastrebac Mountain, which towers over the Rasina Valley—according to legend, the homeland of the Dragon of Jastrebac. This mountain near Kruševac is crisscrossed by numerous streams and traversed by the famous European hiking route E7, passing over Sokolov Kamen and Bela Stena. In the village of Rosica, *Pčelica Rosica* was officially registered as an agricultural holding in 2016. Its brand name is aptly chosen, carrying the titles *Pčelica Rosica* and *Honey from the Dragon's Mountain*.

The most forested mountain in Europe, as Josif Pančić once called it, Jastrebac is said to have received its name from a local legend. According to the tale, a hawk built its nest on the bare, towering peak of the mountain in ancient times. As it carried twigs in its beak, seeds of conifers, birches, and beeches would fall, giving rise to what became known as the "hawk's trees." Other folk traditions describe Jastrebac as the cradle of dragon-born heroes: Despot Stefan Lazarević (founder of the Order of the Dragon), Marko Kraljević, and Miloš Obilić, all born in nearby Kruševac. It is also said to be the secret meeting place of Boško Jugović and Miloš Obilić with the beautiful sisters Jelika and Jaglika. To this day, Jastrebac's locals weave mystical tales of buried Ottoman gold and a secret weapon that Nikola Tesla is rumored to have left hidden in the mountain's depths.

The apiary *Pčelica Rosica* now consists of over 300 beehives, with an annual honey production of four tons. In addition to honey, this agricultural estate also produces other bee products such as propolis, bee bread (*perga*), and royal jelly. It is also specialized in beverages, offering not only standard products like wine, brandy (*rakija*), and liqueurs but also excelling in the production of *Medovača*—honey brandy—and *Medovina*—honey wine, known as the drink of the Old Slavs.

Figure 3. The attractive glass beehive of *Pčelica Rosica*, also known as the “bee hotel”



Source: FB page "Pčelica Rosica" / 25.03.2025.

*Pčelica Rosica* serves as a model of best practices in integrated tourism development. In 2019, the representatives of this agricultural estate, experienced beekeepers, collaborated with the *Special Hospital for Rehabilitation Ribarska Banja* to create a unique tourism product—a half-day excursion, completely free for tourists, designed to enrich and complement the offerings available to spa visitors. Guests staying in *Ribarska Banja* had the opportunity to visit the *Pčelica Rosica* farm, where they participated in educational activities about the life of bees, the historical use of honey from ancient civilizations to the present, and hands-on workshops on honey extraction, identifying genuine honey, and the use of honey in nutrition and cosmetics. Additionally, visitors learned about the role of bee products in health prevention and maintenance. The experience concluded with a tasting session featuring honey, propolis, bee bread (*perga*), royal jelly, and beverages such as *medovina* (honey wine), *medovača* (honey brandy), and honey liqueurs. A highlight of the visit, especially for younger guests, was the opportunity to take photos in front of the so-called "bee hotel"—an eye-catching glass beehive. This initiative laid a solid foundation for the future development of so-called

beekeeping tourism or *apiturism*. Although visitors did not pay for the excursion, the representatives of the *Pčelica Rosica* agricultural estate almost always generated revenue, as most participants were interested in purchasing api-products after completing the program. The COVID-19 pandemic, along with certain beekeeping and personal challenges faced by the estate's owners, temporarily halted the development of this api-tourism excursion in Rosica. However, with the recent rise in tourist demand for apiturism, there are plans to revive this product. Future enhancements include the construction of *api-chambers* for inhaling beehive air, specialized workshops for making wax souvenirs, and collaboration with rural tourism households in the surrounding area. By implementing these improvements, this initiative will contribute to the overall rural development of the region, strengthening the economic resilience of village households while enriching the tourism offerings—not only in rural tourism but also in other selective and niche tourism segments with development potential in the *Rasina District*.

## CONCLUSION

Changes in modern tourists' demands favor the development of new, specialized forms of tourism based on creating authentic experiences through unique tourism values enriched by local traditions and gastronomy. Although often well-educated and experienced travelers, contemporary tourists still seek opportunities for further learning. Health awareness, preventive care, and stress—an integral part of daily life—along with the negative effects of rapid technological advancements (such as noise, pollution, and fatigue), emphasize the growing need for rest and relaxation in preserved natural environments. In this context, beekeeping tourism, or *apiturism*, is becoming increasingly sought after in the tourism market.

The growing interest in tourism demand is linked to the numerous health benefits that the use of api-products provides for the human body (such as api-chambers, api-cosmetics, and other api-preparations). In addition, education on bee life and active participation in various workshops related to bees and honey—combined with the tasting of local gastronomic specialties based on honey—contribute to creating a unique tourist experience that remains in visitors' memories for a long time. On the other hand, *apiturism* presents an opportunity for rural development and the economic empowerment of rural households by enriching the guest experience and fostering connections with other stakeholders in rural tourism.

The authors of this paper did not use AI to write this article.

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