



BeePathNet - Reloaded

TRANSFER STORY

Transfer Progress Final Report – the City of Osijek



Transfer Network BeePathNet - Reloaded

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1. THE CITY OF OSIJEK PRESENTS ITSELF

1.1. Briefly about our city



Osijek, located in the Pannonian basin, is the fourth largest city in Croatia and the largest in the Eastern part of the country. It is the administrative, economic, educational and cultural center of Osijek-Baranja County, as well as of the historic region Slavonia.

The history of the city is well presented by its historic remains and architectural monuments dating back to the prehistoric times and the Roman times (archaeological sites), to the Middle Ages and the Baroque (the Fortress remains) as well as

to the Historic and Art Nouveau streets in the present-day city center.

Currently around 18.000 students attend the 17 faculties/departments of the Josip Juraj Strossmayer University of Osijek. Osijek used to be one of the strongest industrial centers of Croatia in the 19th and 20th century. However, in the last decade of the 20th century Osijek was seriously shaken during the Homeland war (1991-1995), which caused a serious setback in the development of the city. The population of the city is 108.048 (Census 2011), but, just like all around Croatia, the number of Osijek population is slightly decreasing, primarily due to young people moving to West-European countries. Osijek has traditionally been a university city, higher education facilities dating back 300 years ago. Nowadays it is much less of an industrial city, currently transitioning towards the smart city. IT industry has experienced a very strong growth, and with the new IT Park and future IT incubator/accelerator building it is expected to boost even more.

Osijek is primarily a green city located on the banks of river Drava, with numerous green areas around and within the city (17 parks and 2 urban forests). In the vicinity there is Kopački Rit Nature Park, placed in the corner formed by the river Danube and its tributary Drava. As one of the best-preserved floodplains in Europe, including the Special Zoological Reserve as the most valuable part of the park, Kopački rit is a very significant example of biodiversity in the region.



1.2. Briefly about our aspirations in the project

Initially, our aspirations were to address the issues and challenges of keeping bees in urban areas and also popularize it, along with creation of green rooftops, hanging gardens and bee-hives in urban areas. We'd especially like to stimulate schools and kindergartens, as well as faculties to join the »Beevolution«. We would also like help small beekeepers and bee-related producers to develop their businesses. We also want to raise the citizens' awareness on the importance of bees and biodiversity.

Our city has never before been a part of the URBACT network and joining this project means that we are ready to learn about the good practices of other partner cities and that we are more than willing to incorporate these good practices onto our own city.

Our main goal in this project is to involve people who were more than happy to be part of our URBACT Local Group and make them visible. Beekeeping is one of the oldest recorded human activities in this area and beekeepers are not recognized enough.

This project will raise the awareness of the citizens on importance of bees for as indicators of clean and healthy environment, and pollinators as a key for human race survival in general. Next, it will promote the local beekeepers and local eco-friendly honey-production, hopefully also popularize it for youth and all the citizens of Osijek and surroundings. It may also lead to development of new (self-)employment and new SMEs in the region.

One of the biggest goals set by the city of Osijek, and that is the preservation of the urban biodiversity and the protection of the wild pollinators that are naturally present in urban green areas and parks. Having a detailed plan for preservation will also help attract more wild pollinators and make the urban area of Osijek even more diverse. Hence, Osijek is one of the cities that will try to implement all the ideas gathered in the BeePathNet Reloaded project and make the city area, not only bee but also wild pollinators friendly!



2. THE ESTABLISHMENT OF THE URBACT LOCAL GROUP AND ITS STORY

At first, we tried to think of people who are involved in the educational system (since we have Beekeeping Department at our Faculty of Agrobiotechnical Sciences- this was a no-brainer for us 😊), who are beekeepers themselves and people who are involved in the NGO's concerning biodiversity and beekeeping. Since we didn't have much time to organize a first formal meeting before September, we decided to bring 3 of the most interested people (1 professor from the Beekeeping Department, 1 Beekeeper and 1 NGO representative) with us to the Ljubljana Bootcamp in September 2021.

After returning from the bootcamp in Ljubljana, we had a lot of knowledge to share with our group that eventually grew in size. Other professors, representative from the Osijek Tourist Board, representatives of the beekeeper's associations on local and regional levels, Croatian Chamber of Economy representative and others have accepted our invitation to join our first ULG meeting on the 29th of September 2021. We decided to communicate via e-mails and phone calls, which has proven to be effective.



Fortunately, we didn't have any struggles in contacting the right people, but we were aware of the fact that there must be more interested people that we didn't manage to call. That's why we left a little task for our ULG members- to invite other people that might be interested to our next meeting. That technique proved to be successful, as 4-5 other people called us and expressed their wish to become members of the ULG. Some ULG members, such as the president of the Beekeepers Associations Cluster, were very involved with the ideas for the project, so we arranged a smaller meeting to talk about future activities. As an informal meeting, we visited the Beekeeping Department to arrange the start of our collaboration and to see the existing equipment and an exhibition of beekeeping tools that can become our first Bee Path spot.

In addition, we were invited to join the regular meeting of the City District Donji grad in order to present our project to the City District Council. That meeting was very productive as we found out that the City District is willing to consider renaming one of the city streets into Bogdan Penjić street- to honor Bogdan Penjić who was first to formalize any beekeepers' association in the Eastern Europe back in the 1879. After the word about the project was spread, one school also contacted us in order to present us with their book on the bees for children, and we plan to invite them for our next ULG meeting that will be held at the end of October 2021. Our ULG members are very involved and willing to cooperate, and that's why we're implementing the "quality over quantity" strategy to our ULG.



It is noticeable that many of the ULG members see ULG meetings as an opportunity to cooperate even more with each other on a regular basis. Even though there are a few beekeepers' associations in the region, and institutions such as Agrobiotechnical and Food Technology Faculties, they all more or less have one goal- and that is to raise awareness and to make citizens less afraid of bees. Even the commercial beekeepers agreed

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that the profit from honey and other bee products is not the main goal for them and that we need to start with teaching the children and citizens that bees are essential for the environment and that including honey and bee product in their diet is good for their general health. It is safe to say that the ULG members cooperate much more now than they did before the ULG meetings started.

The main idea of our ULG members is to raise awareness before we start with more concrete steps like putting beehives in urban areas. Teachers agree that they need to enhance the already existing school program regarding bees. Some schools, like elementary school Višnjevac and secondary school for Agriculture already started implementing their programs with children. All the ULG members agree with the ideas in the Road Map.



ULG meetings were until now mostly held at the Culture center Osijek. COVID situation has had an impact on our meetings because ULG members tend to ask for meetings in smaller groups.

Many of the ULG members know each other from other projects, associations and other activities, but they rarely ever collaborated in a manner that is offered by this project and Osijek ULG. Members often comment on how this project managed to bring them to work together, because in the previous times, beekeepers tended to spread around various beekeepers' associations that considered each other as competition.



Every ULG member was notified that they can come to our office and seek for help for planning activities or developing new ideas, anytime. ULG coordinator is keeping the ULG members informed via phone, e-mail and any ULG member can make an appointment to come and discuss any project matter. ULG members use this opportunity and frequently come individually or in smaller groups for consultations.

All the ULG members agree with the ideas in the Road Map and some are very eager to implement the ideas and activities. Some of the people interested in this project never physically showed up to the ULG meeting out of various reasons, but are equally informed and involved in the project so we consider them as ULG members who are contributing just as much.



As seen on the results of the survey, our ULG consists mainly of the educational workers. That is because this sector is very strong in Osijek and we have many kindergartens and schools with very motivated teachers. Since the concept of program for kindergartens is mainly opened, individual teachers could implement programs that we created as a team, and that were approved by

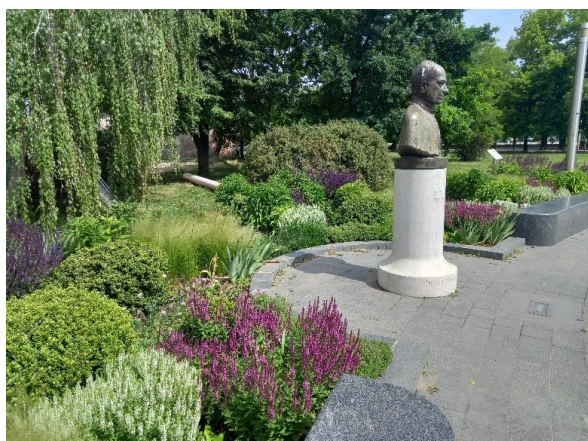
their head-masters. Since children were highly motivated to enroll in such activities, we invited other ULG members to collaborate with them, so beekeepers and book authors visited schools and kindergartens giving children valuable lessons about the bees.

Our ULG members who are also members of some beekeepers' associations wanted to organize set of local events to contribute to the discussion and knowledge about Bogdan Penjić – the founder of the first beekeeping association in Eastern Europe and a founder of the "Croatian bee" magazine in 1879. This local event was created by them and they used this project and the ULG to spread the word and to invite as many interested people to the panel. The role of the ULG coordinator is to present the goals of the BeePathNet project to the newcomers and to moderate the panel. This panel will continue to exist as a periodical local event and it will probably outlive this project, which is



something we are very proud of. Every such event creates a conclusion that is being sent to the city officials, who then try to work on the problems that were discussed on the panel. This time, discussion was about honoring Bogdan Penjić with renaming one of the streets in City District Donji Grad which was his birthplace.

Because urban beekeeping is almost impossible in the city of Osijek because of the strict national regulations, we decided to turn the story the other way around and start talking about the wild bees and wild pollinators in the cities that already exist in urban areas, and need our help to survive and thrive. Kindergartens, schools and green associations had many activities that raise awareness on bees and wild pollinators, and some of them were organized on or around the World Bee Day which was celebrated on the 20th of May 2022.



Other than World Bee Day, it seems that the city of Osijek is having a few more changes in the city landscape, as we managed to convince the city communal company to plant more melliferous plants around touristic sites. That will be great for the bees and other wild pollinators because even though the left river bank is technically an urban area (very close to the old city, across the river), it is surrounded by nature and a small forest.

City officials are getting more and more motivated for this project to make an impact in the city. Meetings are being held regularly and all of the participants have been made aware of the City Road Map. Since the ecology and

biodiversity are topics that are very "popular", it is very important that we are all on the same level concerning goals that we want to achieve.

Some of the participants have made clear that the urban beekeeping in a complete sense will never be completely achieved because of the many efforts that are now being made by the national green associations for leaving the national rules on urban beekeeping as they are, to protect the beekeepers from keeping the commercial beehives in the urban areas that would cause even more problems for the biodiversity and the wild pollinators. Nevertheless, it is important that we talk about this topic and create new ideas and new activities that can be done to preserve biodiversity and protects the environment. As the BeePathNet Reloaded project is something that is now widely known after the local and national media talked about it after the World Bee Day, we had an outburst of newcomers to our group. With the organization process of the events like



Honey breakfast and the graduation of Beekeepers from the Public University, we got some new ULG members who wanted to contribute, such as Osijek Fair officials, HAPIH (Croatian Agency for Agriculture and Food) representatives, Public University representatives and some new beekeepers.

ULG members have already figured out a way to cooperate between each other, without the help of a ULG coordinator. What is really important is that they meet regularly and communicate on a weekly basis. To organize a plenary ULG meeting was maybe a challenge during the beekeeping season, but it didn't stop the stake-holders in their communication and work.



What didn't change in these past few months, are the most prominent members of the working group. The most active members like Mr. Slavko Stojanović and prof. Zlatko Puškadija have really put some good work into this project, and without people like them, it would be impossible to make any of the changes.

Apart from the work, the knowledge transfer from ULG members themselves is amazing. Not only have the city officials and the municipal companies' representatives learned so much about bees, beekeeping and the wild pollinators, but also the wider public has already picked up on some of the knowledge that is being transferred in Osijek ULG group.

Like this little melliferous flower seed bags, knowledge is being planted through well-concepted public events, awareness raising media content, public lectures and school events. It is important that our ULG members always know that even the smallest step towards a good idea is also a step forward!

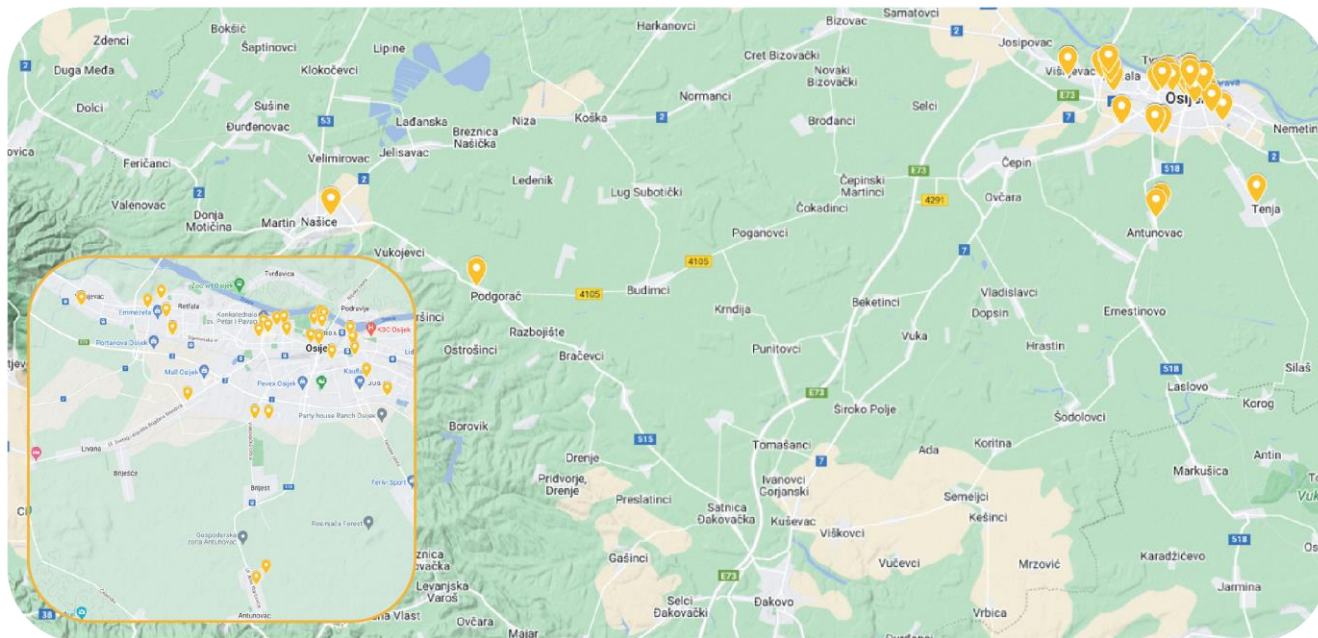


After 18 months of continuous work, we can proudly say that the ULG has the tendency to continue the meetings and the work even after the official end of the BeePathNet Reloaded project. Our most prominent members are already preparing public events for the next year, and we are all happy for everything that we managed to achieve up until now.

OSIJEK

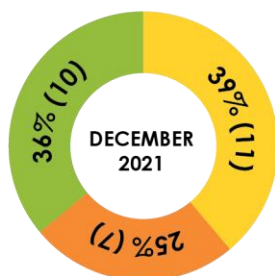


Meet our URBACT Local Group

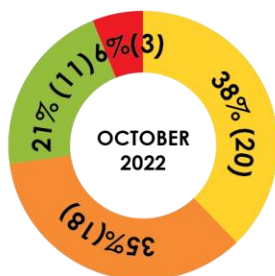


Diagrams 1 and 2: ULG members per their activity status (% and number of members) and per their primary interest

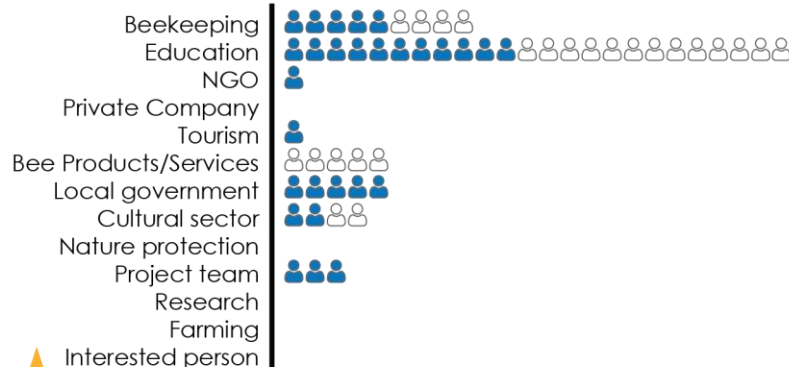
■ Active members
 ■ Observers
 ■ New members
 ■ No longer members



Total number of ULG members
28



Total number of ULG members
52



The aim of this infographic is to present key characteristics and growth in cooperation within the URBACT Local Group (ULG) from the City of Osijek (Croatia) from the Lead Expert point of view. It was designed to provide an in-depth insight into ULG development and cooperation dynamics.

The ULG in Osijek was formed in September 2021 as a "city" network, but quickly took on a more "regional" character by spreading to neighbouring cities like Našice.

It quickly grew from 0 to 28 ULG members, then to 44 and finally to the current number of 52 ULG members – a quick, constant and impressive growth for a quite short (18-month) project implementation period. Its members are an interesting mix of teachers, beekeepers, local government representatives, cultural institutions, as well as NGOs, tourist guides and bee-product/services producers. They are a vibrant mix of citizen, institutions and various societies, joining forces to address both – hard issues (e.g. beekeeping legislation, fear factor, etc.), as well as

Diagram 3: BeePathNet-Reloaded project impact on improved cooperation between ULG members in Osijek

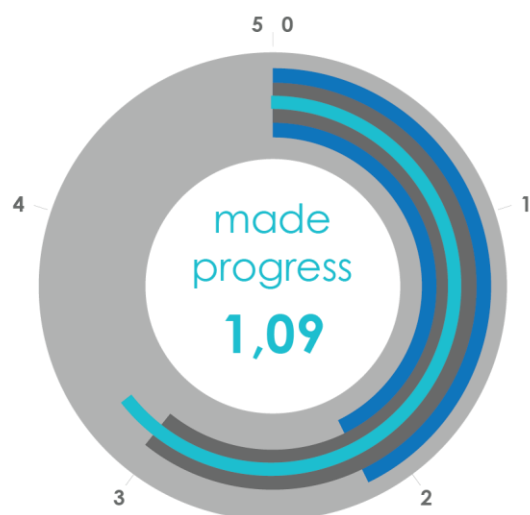
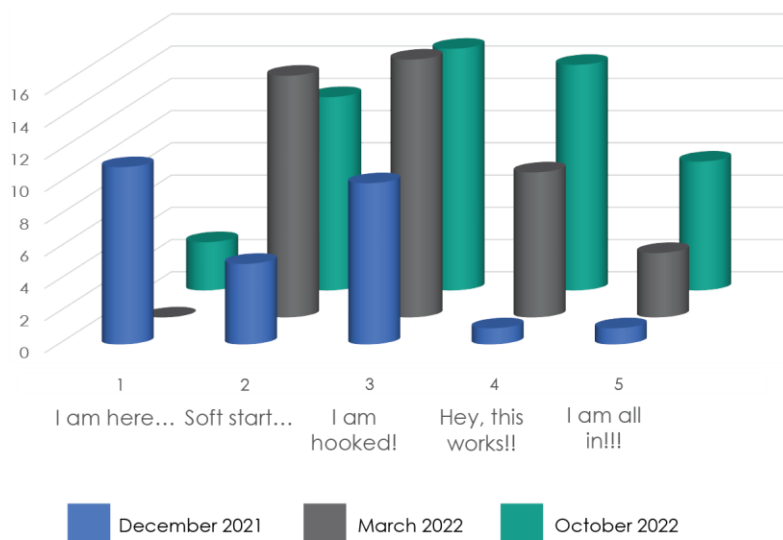
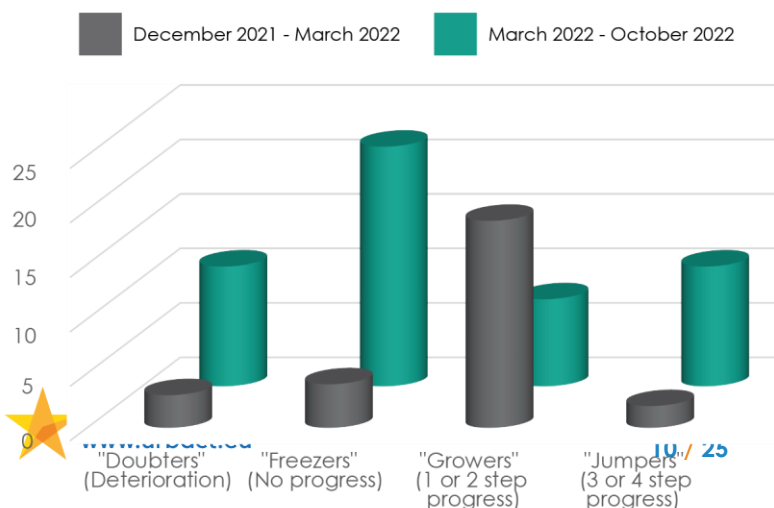


Diagram 4: ULG members from Osijek by cooperation progress types



various development opportunities. Through time, the ULG attracted more and more teachers and beekeepers, giving the ULG a clear educational and beekeeping character. As you can see, not everyone is sitting around the table – leaving room for further growth and diversification of the ULG in the years to come.

However, those present are very active – 20 active members can be identified within the ULG – a group that was steadily getting stronger through time. Constant influx of "new members" and only few "drop-outs" is another sign of high interest of key stakeholders.

A significant increase in the level of cooperation between ULG members can be detected on the Diagram 3; visually demonstrating the effects of a continuous and goal-oriented work with the ULG, as well as the achieved mind-change.

As indicated by the Diagram 3, the ULG didn't only grow in numbers, but also managed to improve the level of stakeholder's "buy-in" and the level of cooperation between ULG members by more than 1 level.

However, two characteristics and contradictory processes become evident, if you pay attention to the distribution of ULG members in March and December 2022 (grey and turquoise columns) – a clear formation of "the core team" with an obvious buy-in and high level of cooperation, as well as a clear formation of "the observer group" with a desire to remain in the ULG, but assume a less active role.

Both "polarization" and "fluctuation" within the ULG is normal and expected in such voluntary working environments where ULG members are driven by their own ambitions, as well as actual capacities for active cooperation. This is why 11 "new members" and 18 "observers" in the ULG should not be neglected, but rather understood as important future potential. As our ULG coordinators would say: "They are only waiting for the right moment to get involved!"

Diagram 4 breaks the ULG members into four “*cooperation progress types*” – their distribution further confirming above conclusions linked to “*polarization*” within the ULG in Osijek:

- “*Jumpers*” – most active ULG members, reaching a high level of cooperation progress per year.
- “*Growers*” – active ULG members with less turbulent, but constant 1-2 level progress per year.
- “*Freezers*” – ULG members who have already reached the desired level of cooperation within the ULG. If it is high (levels 3 to 5) they should be understood as active members, if it is low (levels 1 and 2) they should be understood as observers.
- “*Doubters*” – a group of ULG members whose level of cooperation within the ULG has deteriorated – they are less active.

Overall, the ULG in Osijek reached important cooperation progress within the BeePathNet-Reloaded project, with 1,09 level progress achieved by “*an average ULG member*” in Osijek - partially due to already high initial level of cooperation. This progress can be expressed by the words of their ULG Coordinator – Helena Kolenić: “*It is great to see that recently we had an outburst of newcomers to our group – such as Osijek Fair officials, HAPIH (Croatian Agency for Agriculture and Food) representatives, Public University representatives and some new beekeepers. But it is even better to know that our existing ULG members have figured out a way to cooperate between each other, without the help of me, in the role of the ULG Coordinator. They meet regularly and communicate on a weekly basis. Apart from the work, the knowledge transfer from ULG members themselves is amazing!*”

Based on all presented evidence, we can conclude that we have a lively, active and devoted ULG in Osijek, equipped with their own Long-term Bee Path Development Plan and lots of willpower to implement it in the years to come.





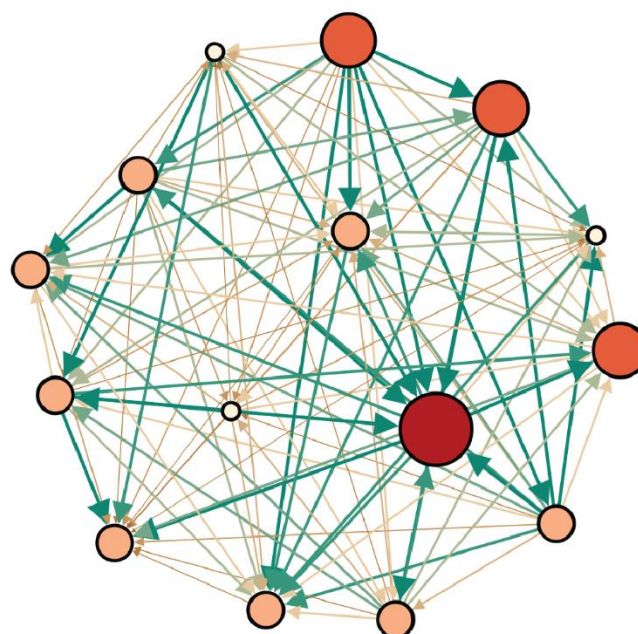
Diagram 5: Social network model of our most active ULG members

Circles represent our ULG members and show how well they are connected to other ULG members.

WEAKLY connected **STRONGLY connected**

Lines represent strength of connections between individual ULG members.

WEAK link **STRONG link**



To further increase the understanding of the ULGs, we carried out an on-line survey where ULG members were asked to indicate the level of cooperation on the individual level. In the case of Osijek 15 out of 52 ULG members responded to the survey, allowing us to draw the social network on Diagram 5 (using [Gephi](#)).

Similarly, to already presented conclusions, it shows a well-recognized, influential and well-connected core, with only few weakly connected members. However, due to low number of responses, we believe that the diagram only represents the “core team” of the ULG in Osijek, which is actually surrounded by 37 others, less connected and involved ULG members.

ULG coordinators are going to receive this graph in an active format – allowing them to investigate individual connections. The aim being to make the process of the “core team” identification and creation easier. It will also provoke them to work on further strengthening of the cooperation, slowly adding now missing but most needed types of stakeholders to the “core team”.

2.1. OUR PROGRESS

BEE PATH good practice transfer progress in the transfer City of Osijek in December 2021

GOOD PRACTICE MODULES		GOOD PRACTICE TOPIC DEVELOPMENT STEPS		OUR GOOD PRACTICE TRANSFER ASPIRATIONS	
OBLIGATORY	Active partnership establishment and management	1) Identification of key stakeholders / 2) Mobilization of key stakeholders (1 st autonomous meeting) / 3) Building enthusiastic atmosphere and providing support on regular meetings / 4) Identification of individual stakeholder goals, capacities and preparedness for cooperation / 5) Definition of a yearly ULG action plan, roles and responsibilities / 6) Guidance in yearly ULG action plan implementation / 7) Achieving synergy effects without involvement of the ULGC	1	✓	
		2	✓		
		3	✓		
		4	✓		
		5	✓		
		6	✓		
		7	?		
	Higher municipality administration involvement	1) Definition of key administration departments/sectors and their roles / 2) Gaining operational support / 3) On-going communication with city administration (briefing) / 4) Regulating urban beekeeping and integrating it into the strategic urban context / 5) Strengthening political support	1	✓	
			2	✓	
			3	✓	
			4	?	
			5	?	
	Awareness rising and promotion for citizens	1) Identification of target groups / 2) Communication and awareness rising strategy / 3) Development of communication tools (e.g. web site, social networks, local news, etc.) / 4) Regular publication of news and contents, giving interviews, etc. / 5) Organization and implementation of yearly awareness rising and promotional events, exhibitions, lectures, etc. / 6) Organization of beekeeping symposiums / 7) Organizing international beekeeping conferences	1	✓	
			2	✓	
			3	✓	
			4	✓	
5			✓		
6			?		
7			-		
Development of a "Bee Path" as a tourist and/or bee-product promotional platform	1) Identification of interested key stakeholders / 2) Identification of key natural and cultural heritage points / 3) Design of the Bee Path and marking of points / 4) Creation of the "story" behind the Bee Path / 5) Creation of the Bee Path guide (e.g. book, brochure, leaflet, etc.) / 6) Design of a Bee Path tourist package / 7) Education of tourist guides and interpreters in the city	1	✓		
		2	✓		
		3	✓		
		4	✓		
		5	✓		
		6	?		
		7	-		
VOLUNTARY	Education programmes for kindergartens and primary schools	1) In-depth understanding of existing educational system and needs of target groups / 2) Development of educational programmes concepts together with key stakeholders from ULG / 3) Involvement of relevant experts & institutions with development of educational programmes / 4) Pilot implementation of educational programmes through involvement of teachers / 5) Full implementation of educational programmes	1	✓	
			2	✓	
			3	✓	
			4	✓	
			5	-	
	Biodiversity maintenance	1) Awareness-raising campaign linked to promotion of planting of autochthonous melliferous plants in green areas / 2) Distribution of seeds and seedlings to citizens and planting of autochthonous melliferous plants with key target groups / 3) Awareness raising campaign linked to importance of wild pollinators / 4) Set-up of wild pollinator hotels / 5) Organization of biodiversity conferences	1	✓	
			2	✓	
			3	✓	
			4	✓	
			5	-	
	Support mechanisms for new bee-products	1) Identification of potentially interested stakeholders / 2) Guidance in bee-product development with entrepreneurship education / 3) Support in development of business ideas and plans / 4) Establishment and organization of promotion events	1	✓	
			2	✓	
			3	✓	
			4	?	
	Conceptual design of a local product promotion and selling point	1) Identification of potential locations (properties in ownership of the city) / 2) Identification of potentially interested stakeholders / 3) Development of a conceptual & organizational design of a local product promotion and selling point / 4) Establishment of a local product promotion and selling point / 5) Operationalization of a local product promotion and selling point	1	✓	
			2	✓	
3			?		
4			-		
5			-		
How to deal with bee-swarming	1) Agreement on organization of the bee-swarming SOS service with key stakeholders / 2) Operationalization of the bee-swarming SOS service / 3) Awareness raising and promotion of the bee-swarming SOS service / 4) Development and pilot implementation of the bee-swarming asylum / 5) Operationalization of the bee-swarming asylum	1	✓		
		2	✓		
		3	✓		
		4	?		
		5	-		
UP-GRADE	Educational Polygon	1) Select the micro-location for the educational polygon / 2) Develop educational polygon concept / 3) Design and purchase educational equipment and materials / 4) Promotion of the educational polygon amongst target groups / 5) Develop additional or up-grade of existing educational programmes	1	-	
			2	-	
			3	-	
			4	-	
			5	-	
	Evolution of the "Bee-friendly cities" network	To be determined in line with the LP's Up-grade Plan		✓	
COLOR-CODING LEGEND:		Already achieved	To be achieved in BPN-R project	To be achieved after BPN-R project	✓ = We plan to achieve this activity ? = We might achieve this activity - = We won't attempt to achieve this activity

BEE PATH good practice transfer progress in the transfer City of Osijek in December 2022

GOOD PRACTICE MODULES		GOOD PRACTICE TOPIC DEVELOPMENT STEPS		OUR GOOD PRACTICE TRANSFER ASPIRATIONS	
OBLIGATORY	Active partnership establishment and management	1) Identification of key stakeholders / 2) Mobilization of key stakeholders (1 st autonomous meeting) / 3) Building enthusiastic atmosphere and providing support on regular meetings / 4) Identification of individual stakeholder goals, capacities and preparedness for cooperation / 5) Definition of a yearly ULG action plan, roles and responsibilities / 6) Guidance in yearly ULG action plan implementation / 7) Achieving synergy effects without involvement of the ULGC	1	✓	
			2	✓	
			3	✓	
			4	✓	
			5	✓	
			6	✓	
			7	✓	
	Higher municipality administration involvement	1) Definition of key administration departments/sectors and their roles / 2) Gaining operational support / 3) On-going communication with city administration (briefing) / 4) Regulating urban beekeeping and integrating it into the strategic urban context / 5) Strengthening political support	1	✓	
			2	✓	
			3	✓	
			4	?	
			5	?	
	Awareness rising and promotion for citizens	1) Identification of target groups / 2) Communication and awareness rising strategy / 3) Development of communication tools (e.g. web site, social networks, local news, etc.) / 4) Regular publication of news and contents, giving interviews, etc. / 5) Organization and implementation of yearly awareness rising and promotional events, exhibitions, lectures, etc. / 6) Organization of beekeeping symposiums / 7) Organizing international beekeeping conferences	1	✓	
			2	✓	
			3	✓	
			4	✓	
5			✓		
6			?		
7			-		
Development of a “Bee Path” as a tourist and/or bee-product promotional platform	1) Identification of interested key stakeholders / 2) Identification of key natural and cultural heritage points / 3) Design of the Bee Path and marking of points / 4) Creation of the “story” behind the Bee Path / 5) Creation of the Bee Path guide (e.g. book, brochure, leaflet, etc.) / 6) Design of a Bee Path tourist package / 7) Education of tourist guides and interpreters in the city	1	✓		
		2	✓		
		3	✓		
		4	✓		
		5	✓		
		6	?		
		7	-		
VOLUNTARY	Education programmes for kindergartens and primary schools	1) In-depth understanding of existing educational system and needs of target groups / 2) Development of educational programmes concepts together with key stakeholders from ULG / 3) Involvement of relevant experts & institutions with development of educational programmes / 4) Pilot implementation of educational programmes through involvement of teachers / 5) Full implementation of educational programmes	1	✓	
			2	✓	
			3	✓	
			4	✓	
			5	-	
	Biodiversity maintenance	1) Awareness-raising campaign linked to promotion of planting of autochthonous melliferous plants in green areas / 2) Distribution of seeds and seedlings to citizens and planting of autochthonous melliferous plants with key target groups / 3) Awareness raising campaign linked to importance of wild pollinators / 4) Set-up of wild pollinator hotels / 5) Organization of biodiversity conferences	1	✓	
			2	✓	
			3	✓	
			4	✓	
			5	-	
	Support mechanisms for new bee-products	1) Identification of potentially interested stakeholders / 2) Guidance in bee-product development with entrepreneurship education / 3) Support in development of business ideas and plans / 4) Establishment and organization of promotion events	1	✓	
			2	✓	
			3	✓	
			4	✓	
	Conceptual design of a local product promotion and selling point	1) Identification of potential locations (properties in ownership of the city) / 2) Identification of potentially interested stakeholders / 3) Development of a conceptual & organizational design of a local product promotion and selling point / 4) Establishment of a local product promotion and selling point / 5) Operationalization of a local product promotion and selling point	1	✓	
2			✓		
3			?		
4			-		
5			-		
How to deal with bee-swarming	1) Agreement on organization of the bee-swarming SOS service with key stakeholders / 2) Operationalization of the bee-swarming SOS service / 3) Awareness raising and promotion of the bee-swarming SOS service / 4) Development and pilot implementation of the bee-swarming asylum / 5) Operationalization of the bee-swarming asylum	1	✓		
		2	✓		
		3	✓		
		4	?		
		5	-		
UP-GRADE	Educational Polygon	1) Select the micro-location for the educational polygon / 2) Develop educational polygon concept / 3) Design and purchase educational equipment and materials / 4) Promotion of the educational polygon amongst target groups / 5) Develop additional or up-grade of existing educational programs	1	-	
			2	-	
			3	-	
			4	-	
			5	-	
	Evolution of the “Bee-friendly cities” network	To be determined in line with the LP’s Up-grade Plan			✓

COLOR-CODING LEGEND:

Already achieved

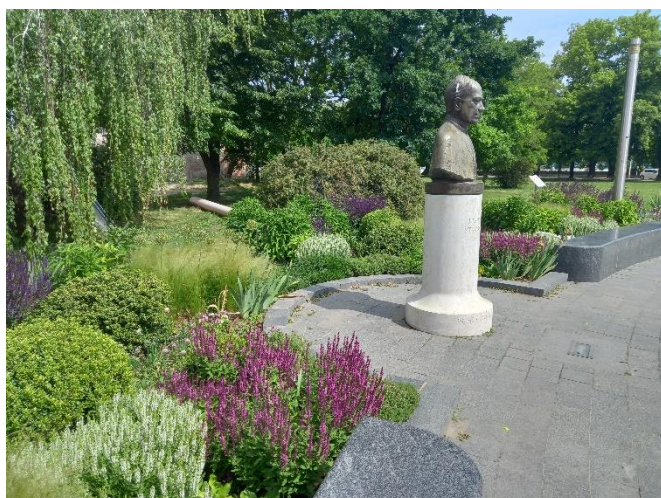
To be achieved in BPN-R project

To be achieved after BPN-R project

✓ = We plan to achieve this activity
 ? = We might achieve this activity
 - = We won’t attempt to achieve this activity
 X = No longer planned after the mid-term reflection
 ✓✓✓ = Achieved despite not being originally planned



2.2. What we achieved



Within this project, from June 2021 till December 2022, Osijek has gotten some tangible results like more melliferous flower beds in city parks, more collaboration of municipal offices with stakeholders like faculties and beekeepers' associations, but the most important, it got the first ever Bee Path that was created by the synergy of all involved stakeholders.

Since Osijek is not predominantly a touristic city, it was important for us to push the educational side of the story, as well as reminding the citizens that Osijek in fact is, the cradle of beekeeping in Croatia.

For that reason, our BeePath tells a story how

Osijek is once again a cradle of beekeeping in Croatia, but this time, the story is about the urban beekeeping.

In that matter, it was important for us to promote this story and educate citizens and school children of how important it is to save and promote our cities' beekeeping. Schools, kindergartens and faculties played a major role in this goal. Apart from teachers, all other ULG members agreed that this is a way to start raising awareness since our main obstacle is the fear factor. Citizens and concerned parents have big problems regarding putting beehives in the city parks, rooftops and schools because they are afraid that they will be stung by bees. Knowing it is still challenging to put beehives in the urban areas, beekeepers don't want to put beehives anywhere near citizens or children because they are afraid of lawsuits (words of one of our prominent ULG members). So, we decided to start our story with "soft" activities such as awareness raising and activities with children that will educate them about the importance of bees. In the other hand, our region has a great tradition and history of beekeeping and our bee products are very valuable.





Throughout this project, children, students and the citizens were educated on the idea of urban beekeeping and why it is very important to take care of wild pollinators. The bags with mixed melliferous flower seeds were given out to everyone at the local event “Honey Breakfast” held in October 2022. Around 200 bags with seeds were given out for free, with instructions on how to plant them and how it contributes to the bees and wild pollinators in urban areas.

“Honey breakfast” event was very well-visited and the media representatives were interested in the story behind it. Teachers and educators have already made a promise to visit the Osijek Bee Path

as soon as they get the chance. Other than that, World Bee Day was celebrated in the public park for the first time, and it is going to hold onto this new tradition!

The Osijek Bee Path creation and the establishment of the ULG was very helpful not only for this project, but also for future development of the city. We gathered the right institutions to work together and make new plans for the future. After this project, we have a city with more melliferous flowers in city parks, more educational programs in kindergartens in schools, more local events concerning bees and biodiversity, one almost-renamed street after the “father of organized beekeeping in Croatia” Bogdan Penjić, many lucrative collaborations, a Bee Path that can be visited by students, citizens and tourists and many more.



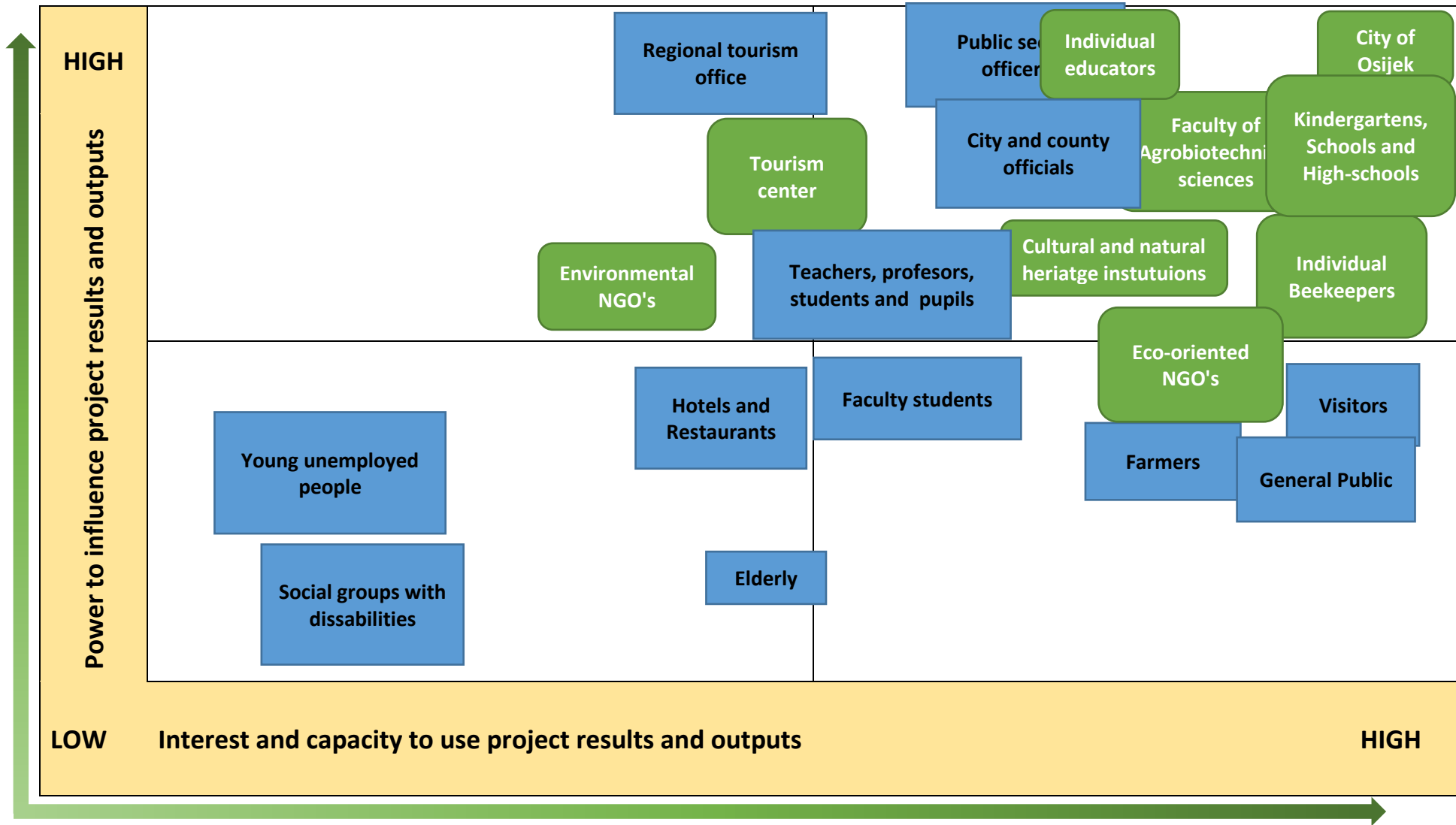
To the city of Osijek, it is very important to keep the tradition of beekeeping around Osijek alive, as well as adding new value to it, such as the idea of urban beekeeping that we try to introduce as a novelty. There is still so much room for change, but we can't wait to embrace the good changes!

Not only have we accomplished much more than we thought we would, but we also had fun and made some really good friends in the process!

Figure 1: Who is sitting around the table? - Stakeholders Power/Interest Matrix before the 1st ULG meeting



Figure 2: Who is sitting around the table? - Stakeholders Power/Interest Matrix in December 2022





Grad Osijek

Osijek – what we have learned through our transfer process

Shining stars

City Council agreed to **rename a street after Bogdan Penjić**, the founder of the first Croatian Beekeeping Association in Croatia and the first urban beekeeper in Osijek in the City District Donji grad

Organizing the **city visit in Osijek**

Having a **"Honey Day" in schools again**

We have the **first jar of URBAN honey in Osijek**

Knowledge transfer and networking in Banskó

ULG members collaborate even without the help of ULG coordinator

Organizing fun, attractive and well-visited activities during the **World Bee Day in Osijek**

The street renamed after Bogdan Penjić

Media covered great stories about our project and the **Honey breakfast event**

Students from the vocation school for catering in Osijek, together with their teacher and beekeepers **created a unique, butterspread with honey**, that can be used for pancakes, bread, cakes etc.

Eureka moments

We have **a children's book about the bees published** in Osijek! Its author and other teachers from her school will become our ULG members

Realization that **our ULG members are willing to implement many activities** that have been put aside for years

Discovering high potential for creating new bee products and services in Osijek

Ensuring great media coverage during the World Bee Day

Schools and kindergartens that are members of our ULG are **creating their own activities and programs** within the school curriculums

Invisible victories

We have the first Bee Path point – an educational apiary managed by the Beekeeping Department of Osijek University

We need an **in-depth awareness raising** and teachers are the first to act upon it

Successfully organizing **our first local public event**

Convincing city company responsible for greenery to plant **more melliferous plants around important city spots**

Obtaining political support and attracting a diverse group of ULG members to the 1st ULG meeting

Motivation and willingness of children to participate in the bee-related activities

Creating a domino effect among kindergartens – suddenly, many other educational institutions want to take part

A new generation of beekeepers educated about the urban beekeeping, impacts of climate change and wild pollinators

Preparation period (Jun. – Oct. 2021)

Transferring good practice from Ljubljana and development of URBACT local group in our city (November 2022 – May 2022)

Development of the bee path in our city and dissemination (June – December 2022)

Our regrets

Sometimes we meet in person with our ULG members and have such a productive meeting that **we simply forget to capture all the great moments**

Not attracting enough entrepreneurs and key tourism actors like hotels, restaurants, bars to the ULG

Focusing too much on one sector (education) and neglecting others

Due to some operational problems, **Osijek team wasn't able to participate in city visits to Bergamo and Sosnowiec**. We participated via online conferences as much as we could... Subsequently, our **ULG members were also not able to visit both cities** and share their experiences...

Obstacles in our way

The city finance department finds it **hard to pre-finance the costs of the project**

Lack of support from the public sector officials regarding late mowing of green areas... We will have to find a way to get the on-board

Some interested people **never find time to attend ULG meetings**

Struggling with Covid 19 restrictions limiting our progress



More about BeePathNet-Reloaded project on: <https://urbact.eu/networks/bee-path-net-reloaded>



Grad Osijek

Osijek – what we have done through our transfer process

Shining stars

Eureka moments

Invisible victories



Preparation period
(Jun. – Oct. 2021)

Transferring good practice from Ljubljana and
development of URBACT local group in our city
(November 2022 – May 2022)

Development of the bee path in
our city and dissemination
(June – December 2022)

Impressions from
our City visits



URBACT
Driving change for
better cities



More about BeePathNet-Reloaded project on: <https://urbact.eu/networks/beeopathnet-reloaded>

3. EDUCATIONAL ACTIVITIES AND LOCAL EVENTS – PHOTO COLLAGE





4. OSIJEK BEE PATH

After implementing new educational programs, organizing public events, making our city more biodiverse by planting melliferous plants in the city parks and raising awareness about the importance of bees and wild pollinators, the last step was to gather all the public places that have a meaning in creating Osijek's Bee Story and put them on the map in form of the Osijek Bee Path. It contains seven spots that can be visited in one day, either by walking, bicycle ride or public transportation. Our Bee Path has an educational character, but can be visited not only by students and citizens, but also tourists who want to know more about Osijek's beekeeping history, honey production and biodiversity.



5. OUR FINAL IMPRESSIONS

How challenging was it to implement all the project goals?

Of course, there were many challenges and at first, the actions list seemed too long and too demanding – but, step by step, with the help of the right people, we managed to tick all the boxes and accomplish even more than previously planned.

What statements can describe Osijek's URBACT Local Group?

- ✓ The beauty of Osijek's ULG is in its dynamics.
- ✓ ULG members have different interests but share a same goal.
- ✓ There is always a need for compromise. However, ULG members are ready to make them.
- ✓ Less interested ULG members come to learn and more interested ones come to lead the change.
- ✓ We all agree the change comes in small steps !



Helena Kolenić
ULG Coordinator from the City of Osijek

Do you feel that your journey towards bee-friendly and biodiverse city is at the end?

Absolutely not. This is just the beginning. Even though we already accomplished much, there's so much yet to be done.

What was the process of knowledge-transfer like?

ULG members and the project team are not even aware of how many little steps have already been done and how much we've learned in the process. The knowledge we are gaining by interacting with each other and other partners is remarkable, and we still have a long way to go. The city of Ljubljana and partner cities have taught us so much and we hope that they also learned a bit from us.

What would you do differently?

There is always room for improvement, but we would definitely involve more people and engage them to do even more. This is a learning process and we are proud of every step of it !

What is the most important added value of the BEE PATH good practice for Osijek?

Awareness-raising and education. The fear of bees is still to a large extent present among the citizens of Osijek and we hope that this project emphasized the importance of cohabitation with the bees.

