



Social action to protect pollinators

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Legnica 2015



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Bees calling for help – campaign for protection habitats of bees and other pollinators, financed by the EEA Financial Mechanism and Norwegian Financial Mechanism 2009-2014.



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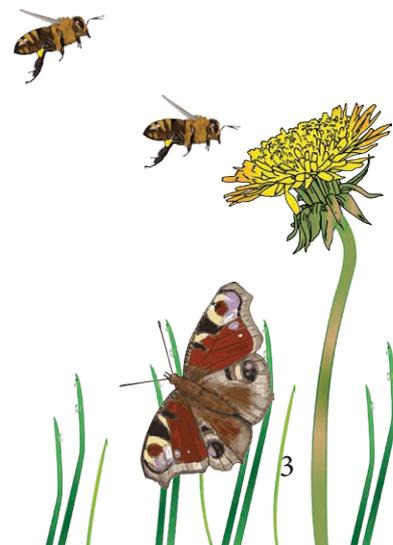




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Lesson objectives

- Discussion of the role of society in nature protection,
- Indication of selected activities involving society in nature protection,
- Knowing some selected activities in the protection of pollinators.

Introduction

Answers to the question about the role of communities in nature protection are very important. Is the involvement of people (non-experts) important for the maintenance of natural values (habitats, species, landscapes)? We are witnessing the greatest in the history of the globe species extinction caused mainly by human activity. Therefore, it is difficult to imagine their effective protection, which will be limited to the informal and formal ways. Without community involvement in the protection, without often grassroots initiatives, it will be difficult to maintain a full range of biodiversity. It must be remembered that no one is involved in the project for which has no attitude. Only achieve the appropriate level of environmental awareness can become an impulse for change of attitudes. Single person with his own example can influence others, groups and then even the crowds (the domino effect). Therefore, so important are all forms of ecological education which can lead to a stronger social responsibility for the current and future state of nature.

Public engagement in activities aimed at protecting pollinators

Protection of beneficial pollinating insects be effective if people are aware of their risks and want to take part of responsibility for their fate. It is necessary for this to have basic knowledge of biology, ecology, habitat requirements and threats hiding on pollinators in the environment. A better understanding of pollinators resulting a deeper understanding of current problems and this can motivate to take concrete protective actions. Greater social awareness may manifest both in open opposition, for example against the use of toxic pesticides as well as direct involvement in improving the food conditions (establishment flowery gardens) or living conditions (building and installing homes for pollinators). Therefore, information campaigns like „Great day of the bees” (organized in botanical gardens and national parks in Poland) or the nationwide projects “Bend the sky for bees”, “Kuyavia helps bees”, „Adopt a bee”, „Bees are asking for help... „ certainly affect the raising of public awareness. A positive role in environmental education at the local level play Non-Governmental Organizations (foundations and associations), by training local leaders they form the foundation for regional action groups.

Examples of social actions to protect pollinators

Thematic villages – it is a comprehensive project designed to revive the rural economy through the integration of the local community around the issues related to a specific product, service or culture of the region. The village whose development is subordinated to a particular idea, is a kind of tourist product around which are created alternative ways to residents incomes. The first thematic villages in Poland were created in West Pomerania Province. Thematic villages are very popular in Europe. At their creation the main effort



Fot. 1 Beekeeper at work (J. Józefczuk)

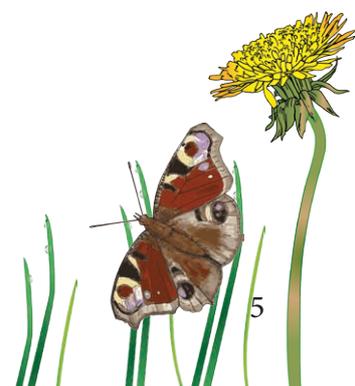




Photo 2 Show for children in workshop studio in one of thematic villages(H. Kamaszuk)



Photo 3 Group of visitors in educational apiary (H. Zarba)

is directed towards the preparation of workshops and educational program and games. Therefore, the offer of particular thematic villages often limited to a program implemented from a few to several hours. We can call it one-day offer.

All over the world there are a lot of very interesting thematic villages. The most interesting include: Krummnußbaum in Germany in which everything revolves around the nuts. While Nattenheim (also in Germany) is a village of witches. From this place comes a lot of legends about witches. One of the most famous tells, as during the Thirty Years War women from Nattenheim were catching bullets and threw them back into the enemy camp. In the US in New Hampshire there is a Santa Claus Village. It is a thematic park in which attractions are focused around Santa Claus. In California (USA) was founded Bottle Village, Simi Valley – Village of Bottles. It is a set of structures where the walls and many decorative elements were made of bottles. In Korea (in the cities of Poohang, Keongju i Yeongju) built villages to allow city dwellers to experience traditional Korean culture and life of the rural community. Guests can spend in villages several days, try at the time dishes of traditional Korean kitchen.

The importance of thematic villages in education with regard to the protection of pollinators is invaluable. Through lesson plans including both educational actions and physical activities, games and fun, participants will learn the life of bees (photo 2). There are organized educational games dedicated to the life of these insects. This is an excellent way to familiarize children with the basic facts about the structure of the hive and bee-keeping, bee ways of communicating and defending the hive, honeycomb properties and finally to show them what they eat and why bees are so important for human beings. It is a very effective way to educate the society because learning takes place through play, in which can take part the whole family and the form is attractive to participants of various age groups.

Theme villages in Poland where the leitmotif are bees and honey are:

- Maciejów (administrative district of Gmina Kluczbork, Opole Voivodeship) - honey flowing village, where is located the apiary of John Dzierzon, its activity is focused around beekeeping.
- Wielki Mędromierz (administrative district of Gmina Gostycyn, Kuyavian-Pomeranian Voivodeship) – „Wioska Miodowa” (“Honey Village”). The aim of the course is to acquaint visitors with the functioning of backyard apiaries and life of bees.
- Ruda (Podlaskie Voivodeship) - „Land of milk and honey”. During the visit we can learn the secrets and curiosities of life of bees, meet with beekeepers and honeybee family, swirl honey (show apiary tools, swirling honey, types), taste different honeys or take a souvenir of wax.

Educational apiaries - they are apiaries established to education (photo 3). They are aimed at educating the society, especially its youngest part and not on reaping profits from the production of honey and its derivatives. Of course, in most educational apiaries is the ability to purchase products of bees but it is not the main business (activity) of the apiaries.

Educational apiary is a place where everyone who wants to can learn beekeeping, actively spend time in nature, establish intergenerational dialogue and contribute to the protection of bees. Very often honey acquired in these apiaries is a regional product which is allocated for charity. In educational apiaries are organized workshops presenting life of bees, their importance in nature and for a man (photo 4). Repeatedly to make lectures are invited experienced beekeepers (photo 5). People visiting the apiary can watch the insects up close, spy on their lives and work of the beekeeper (photo 6), get information about the role of pollinators in our lives. The participants of the workshop often can build hotels for wild bees (photo 6), taste honey and prepare healthy, sweet snacks with the use of honey.



Examples of educational apiaries in Poland:

- “Muzyczne Pszczółki” in Krosnice (“Musical Bees”) offering workshops on beekeeping entitled “The Secret Life of Bees” for groups of all ages. The apiary is offering a lecture on beekeeping and various aspects of the life of bees (f.eg.: how to distinguish a bee from wasp, hornet from bumblebee, what life is like in a beehive, how bees communicate with each other, with what and how to create bee cells, etc.); presentation of bees (live insects presented in a glass hive in order to better discuss their construction and method of movement); presentation of beekeeping equipment; sculpt in beeswax (making candles from beeswax and bee comb foundation) and tasting of honey and other bee products, (<http://www.muzycznepszczolki.pl/Pasieka-edukacyjna>);
- „Bractwo Bartne”, (“Beekeepers Brotherhood”) which goal is the revival of traditional beekeeping on Augustow Land. Members of the brotherhood talk about it, present tools and technology enter the tree through “leziwo” and perform wild beehives using only traditional tools. They guide organized groups on these places in the wilderness where you can see wild settled beehives and in favorable conditions try a little honey straight from the forest hives, (<http://bartnictwo.com>);
- The educational farm „ Forest Apiary” („Pasieka Leśna”) under the slogan „traditional beekeeping” which lies on the route of the traditional „Crafts of Malopolska”. Farm works since 2000 and has more than 20 hives. Educational programs implemented at the farm is „Treasures from the hive” and „The mysterious world of bees” (<http://cdr112.e-kei.pl/Zagroda/index.php/component/places/?controller=places&task=details&id=59>).



Photo 4 Experienced beekeeper with hive (H. Zarba)



Photo 5 Meeting with beekeeper in educational apiary (H. Kamaszuk)

Educational Gardens are recreational and educational housing estate places for urban residents. It is a space full of green, in particular flowering and useful garden plants and infrastructure for rest, recreation and sports. These gardens are not dedicated to the protection of pollinators but allow for their protection by planting there nectariferous plants. Very often in such places are placed houses and hotels for wild pollinators, thus increasing their diversity. Urban areas are despite appearances the perfect location for bees. In fact, the surface of the city is built only 30%. The remaining 70% are parks, gardens, squares which are ideal for bees. Beekeeping in cities contributes to the development of parks, gardens and other green recreational areas. Inviting bees to urban gardens or allotments, we can be sure that they repay us by lush vegetation and better crops.

Didactic paths are walking trails marked in such a way that on their route there were many interesting natural objects - these are then nature paths, sometimes monuments of architecture or technology. The purpose of their creation is going to educate by observing objects in their natural environment which is not possible in the classroom (photo 8). The most common task of beekeeping educational paths is to present to visitors the history, culture and tradition of beekeeping from the old days and modern economy apiary. On the paths we can learn all about creating honey, construction of hives, biology and physiology of bees (photo 9-10). Very often beekeeping didactic paths also present hives with live pollinators. In some paths you can take drones in your hand.

Examples of Beekeeping Didactic Paths in Poland:

- didactic path in Domaszkw near Lubiąż (Lower Silesia) in the apiary „Zuzia”;
- didactic path in Godzięcín (Lower Silesia) in the „Gienek Apiary”;



Photo 6 Presentation of the hive from the inside with the participation of students from Secondary Schools in Wołów (H. Kamaszuk)





Photo 7 Preparing the house for wild pollinators by the participants of field workshop (Ł. Porębski)



Photo 8 Planting melliferous plants (J. Józefczuk)

- Museum of Beekeeping and educational honey path „Beskidy” in Kamienna (Lesser Poland).

Educational activities for groups:

- “The Academy of Friends of Bees” - to this unique academy belongs now more than 2.5 thousand schools and kindergartens from all over the Poland. Participants of „The Academy of Friends of Bees” have the opportunity to participate in interesting campaigns and contests with prizes but above all receive attractive educational materials which introduce children and young people the world of bees. Knowledge is given in light and accessible way. In addition to trips to the apiary under the „Academy of Friends of Bees” are also held actions of planting melliferous plants. (<http://www.pomagamypszczolom.pl/akademie>).
- Action „With Kuyavia we help bees” whose main purpose is to change social attitudes and promote positive activities related to nature protection, in particular the protection of bees whose importance for a man and natural environment is crucial (<http://www.pomagamypszczolom.pl/>).
- „The Great Day of the Bees” - 8th August in most of the Polish zoological and botanical gardens, as well as in national parks are carried out to a very wide audience educational activities on the protection of pollinators.
- Apiculture Society of Lublin organizes summer camps and winter camps of beekeeping for children and adolescents.
- In many Polish cities eg. in Walbrzych or Luban were created „Apiculture Education Centers”. Their main task is to rebuild the population of honeybees, development of the beekeeping sector, as well as to promote the profession of beekeeping among children and youth and education a new generations of beekeepers
- Greenpeace has published a free guide for consumers “Project: bee. Become a bee hero/bee heroine”. This guide will help readers select products in grocery and gardening stores that are friendly to bees and other pollinators (<http://www.greenpeace.org/poland/pl/wydarzenia/polska/Zosta-pszczelim-bohaterem/>).
- “Bees are asking for help” - a campaign to protect living environment of bees and other pollinators, organized by the Foundation “Green Action (“Zielona Akcja”)” (<http://www.zielonaakcja.pl/pl/programy-fundacji/pszczoły-prosza-o-pomoc-2/>).
- “Adopt a bee” is an action of Greenpeace from which the funds are allocated to „Big List of Pollinators”, so to research on honeybees and wild living bees in close cooperation with scientists from the University of Warsaw and professionals associated with the Wigry National Park (<https://www.adoptujpszczołę.pl/>).





Photo 9 Children from the school in Szalejów on didactic path (H. Zarba)



Photo 10 Planting flowers in Strupinia (J. Jozefczuk)



- “The power of creativity the bee family” is an original idea to sustain and rescue the bees led by teachers and students of School No. 29 in Wrocław. The project plans were limited to the following activities (<http://n-pajeczyna-w.blogspot.com/p/opis-prjektu.html>):
 1. Establishing cooperation with experts in the field of biology and ecology of pollinators and the plants providing pollen;
 2. Performing research micro-projects in own family and at school under created at school project groups called “Bee School Swarms”;
 3. Organizing natural workshops and educational trips;
 4. Organizing technical and practical workshops aimed at the construction of hotels and houses for pollinators;
 5. Organizing interschool photo-plastic competition and epigrams competition;
 6. Arranging and carrying out multimedia music workshops, establishing cooperation with cultural institutions in order to prepare a film promoting the protection of the habitats of plants providing pollen and pollinating insects;
 7. Organizing the Great Day of Bees.
- Many Foundations and Ecological Associations in Poland lead occasional actions for the protection of pollinators. An example would be the “Green Action” or “Foundation for Eco-Development”.

Conclusion

In recent years all over the world, including Europe and in our country has increased greatly interest in bees. One can even argue that bees and beekeeping has become a kind of fashion which understandably is related to the ongoing fashion for ecology. Many of us like products with the prefix „eco” because they are associated with healthy and, most importantly, compatible with nature and the environment lifestyle. For this reason we buy and consume „eco-food”, we wear clothes with eco-friendly materials and strive to reduce our often destructive impact on the environment by choosing, for example, ecological forms of transport. But this fashion, although so desirable in any society, is not always based on real knowledge of the environment and its problems. That’s why places like thematic villages, apiaries and educational gardens, didactic paths as well as educational activities for groups allow us to fill this gap and provide often fascinating and at the same time the required dose of knowledge. Discussed places and activities, although related to bees and pollinators, may be an excellent opportunity to begin a discussion on many other topics concerning today’s environmental problems. It should be also noted that most of the illustrated actions is addressed to young audience which allows to shape human attitudes and awareness at an early stage of its development. It is worthwhile to take examples from our western neighbors who set beehives in the vicinity of playgrounds. From time to time beekeeper visited the hives by the way telling interested about the life and the importance of bees. This early encounter and knowledge of these insects will pay off the desire to protect them, not fear and aversion.



Exercise

1. Thematic villages is:

- a) a comprehensive project to revive the rural economy
- b) the project on „greening” of farms
- c) the place of apprenticeship
- d) other name of ethnographic museum

2. Educational apiaries:

- a) are focused on public education
- b) are places where everyone who wants to can learn beekeeping
- c) are organized there among others workshops presenting life of bees
- d) all answers are correct

3. Didactic paths:

- a) the term used in the Polish education, signifying set of content and skills which are essential educational
- b) arise in order to control excessive tourist traffic
- c) allow for education by observing plant and animal organisms in their natural environment
- d) otherwise: vocational training course training for students

4. Educational Gardens are aimed at:

- a) enable cultivation of flowering plants living in urban areas
- b) recreation of city dwellers
- c) the relaxation of urban residents surrounded by greenery
- d) all answers are correct

5. The Great Day of Honeybees celebrate:

- a) 1 January
- b) August 8
- c) on December 24
- d) on April 1

Answers:
1.a
2.d
3.c
4.d
5.b

