

## Workshop Report

### **`Involvement of general public in biodiversity monitoring: experience in the Nordic-Baltic region`**

October 24, 2009, 25 Peldu Street (Old City of Riga), Riga, Ministry of Environment of Latvia, 1st floor, Room 101

The goal of the workshop

- to exchange best experience on the biodiversity monitoring for general public in the Nordic-Baltic region;
- to discuss particular organisational and methodological questions regarding biodiversity monitoring for general public.

The workshop was opened by **Ms. Liene Salmina**, Latvian Fund for Nature and **Ms. Daina Mežecka** from the Nordic Council of Ministers Office in Latvia. Ms. Daina Mežecka welcomed workshop participants and informed about the opportunities to apply for the NCM grants and information materials on Nordic-Baltic Mobility Programme for Public Administration and on Goals and Priorities of Nordic Council of Ministers, 2009-2012, were distributed.

**Ms. Sigita Baronaite**, from the Foundation for the Development of Nature Protection Projects in Lithuania gave presentation `Monitoring of the White-tailed Eagles (*Haliaeetus albicilla*) in Lithuania as a practical mean of protection of species` informing about the project `Conservation of White-tailed eagles in Lithuania` launched in 2003 which included establishment of monitoring network for volunteers. Other project tasks were to identify and to increase the number of breeding White-tailed eagle pairs, to raise public awareness and to promote nature protection management, to prepare proposals for the Ministry of Environment of the Republic of Lithuania on the White-tailed eagle protection in Lithuania. The volunteers monitor breeding sites and status of natural and artificial nests of White-tailed eagle. Students and pupils were involved in rising of demonstrative artificial nests and different awareness rising campaigns for general public were carried out. There is a good cooperation with other NGOs in Lithuania, municipalities and different institutions which helped to turn attention of general public to the project and to attract potential volunteers. The main project supporter is UAB `Litagra` (Litagra Group). Project leaflets and CD were distributed among workshop participants.

**Mr. Ainārs Auniņš** from Latvian Ornithological Society informed about the development and progress so far of the Volunteer-based common bird monitoring in Latvia. Common bird

count history in Latvia dates back to 1962 and from project based monitoring it has become a part of State monitoring program in Latvia since 2006. Participants of monitoring receive reimbursement of travel expenses, but data analysis and bird counting is carried out voluntarily. The new sampling design and methodology was prepared 2003-2005. Despite the challenges of the monitoring program such as lack of bird counting traditions among amateur ornithologists, lack of interested amateurs, and lack of counting experience, and lack of funding, the number of full counts done by amateurs reached about 30 routes in 2006. Communication with amateur ornithologists is important to maintain interest for monitoring. Therefore, regular communication by means of annual publication in the LOB magazine 'Putni dabā', personal reports, regular presentations in the annual meetings of LOB, small presents for those carrying out "full counts" such as T-shirts, badges etc. and results published in the website of LOB are of great importance. There are two persons responsible for this monitoring at the LOB, one is working with volunteers and other is responsible for data analysis.

**Mr. Leif Andersson, Ms. Margareta Edqvist** from Swedish Botanical Society gave presentation on the Flora Watch Program in Sweden which has been carried out by Swedish Botanical Society since 1987. The Flora Watch program is targeted to monitor threatened plant species in Sweden and is coordinated by one person from SBS. There are 24 county responsible and 300-400 persons are doing plant counts and evaluating site quality. The Flora Watch program is partly financed by the Swedish Threatened Plant Species Unit and SEPA. Flora watchers and county responsible are doing their work voluntary. The most important factors to inspire flora watchers are as follows: that their work is paid attention to, regular meetings, maps of good quality, reports of their work, and positive result of the surveys. The results of Flora Watch program are used in preparation of Red Data Book, in species action plans, reporting on EC directive species status in Sweden, environmental monitoring etc. The dissemination of results include regular publication in 'Svensk Botanisk Tidskrift', articles/reports by regional NGOs, articles in the website of Swedish Botanical Society, preparation and printing of information leaflets etc. Monitoring data are entered directly and can be summarised from Species Gateway (artportalen.se) - an internet mega data base where data on bird, invertebrate, mammal, and plant species monitoring are kept. Fields of improvement include standardisation of monitoring, prioritisation of certain species, dissemination of knowledge, involvement of new flora watchers etc. There is a lack of young volunteers and much effort is needed to involve them into the Flora Watch program in Sweden. The presenting author demonstrated examples of the data fields available at the database for workshop participants.

Ms. Margareta Edqvist gave representatives from each country examples of leaflets on plant species and copies of 'Svensk Botanisk Tidskrift'.

**Mr. Veljo Runnel** from University of Tartu, Natural History Museum, Estonia gave presentation on biodiversity databases in Estonia. The website Estonian eBiodiversity is an output for project "Estonian biodiversity data base and information network supporting Natura 2000". Estonian Ministry of Education and Science, Ministry of the Environment, University of Tartu, Estonian University of Life Sciences, Tallinn University of Technology, Estonian Naturalists' Society and Estonian Museum of Natural History support the development of the information system Estonian eBiodiversity by grants, co-financing,

participation or consultations. Website and underlying database has several functions:

- species references in literature,
- species in scientific collections (to the level of specimen),
- species observations,
- DNA barcodes for specimen samples,
- collective register of Estonian species.

Occurrence of species can also be recorded through observations. For this purpose the website has special workbench. It is possible to link photos and drawings to species records.

The input to the database has been done until now by specialists, but through joining the workgroups it can be done also by general public - teachers, students, amateur researchers etc. Specialists will monitor the correctness of data.

At the moment (Oct. 2009) there are **24811** species recorded in database. The number is constantly increasing, as new data from references and collections are added.

A very different database of nature photos can be found at address <http://www.looduspilt.ee>. This is managed by amateur photographers who are interested in nature and nature photography. It has forums, rating and commenting system.

The species names follow one species checklist for Estonia. Localities of rare species are not shown on the map. The presenting author demonstrated the data input and data fields available at the database for workshop participants.

**Mr. Reigo Roasto** from Estonian Environment Information Centre gave presentation on Estonian Nature Observations Database developed in cooperation with the Estonian Environment Information Centre and the Estonian Naturalists Society - <http://loodusvaatlused.eelis.ee>. The data base was established four years ago and now the number of users has reached about 500. There are 170 000 inputs so far and majority of them are bird observations. The database allows to visualise boundaries of protected nature territories etc. The establishment of database was expensive. The Estonian Nature Observations Database can be used for educational purposes and in scientific work as well. The presenting author demonstrated the data input and data fields available at the database for workshop participants.

**Ms. Inta Soma** from North Vidzeme Biosphere Reserve Administration in Latvia gave presentation on involvement of general public in biodiversity monitoring in North Vidzeme Biosphere Reserve. The monitoring was based on the parameters chosen by local people and include bat, white stork, beaver, water quality, air quality, beetle, *Heracleum sosnowskyi*, tree alleys and some other monitoring subjects. Experience exchange with colleagues from Latvia and Canada was important to implement the monitoring successfully. Methodology handbooks and informative materials were prepared and distributed among potential volunteers. The number of volunteers increased from less than 100 in 2005 to more than 400 in 2008 and majority of them were pupils and employed persons. The monitoring data are

used by ornithologists, state institutions, and in schools. There are no special nature educational schools in Latvia, the monitoring success mainly is based on simplicity of data gathering, the fact that the monitoring subjects have been chosen by volunteers themselves, and good communication through schools and public libraries.

**Mr. Andris Klepers** from Latvian Fund for Nature gave presentation on project 'Dabas dati' in which internet based nature observation reporting system [www.dabasdati.lv](http://www.dabasdati.lv) were established. Observation of any species of birds, mammals, plants, reptiles, amphibians and invertebrates can be reported into this database. The database was launched in December 2008 with the support of Swedbank and so far there are about 600 users. The number of observations has reached 13010 in total and the number of identified species is close to 2000. There is a possibility to put the photo in the website as well. Experts help with species identification. Benefits of this activity for nature conservation and sciences were mentioned. One of the challenges for future include improvement of software possibilities and involvement of more people. The data base is located on three PC: on one PC the map is kept, on second – design, on third – data itself. The challenge is fund rising to continue the work and maintain the data base.

### **Discussion on general principles for initiation and implementation of biodiversity monitoring for general public.**

Facilitated by Ms. Liene Salmaņa, Latvian Fund for Nature.

The most important issues to initiate and implement a good biodiversity monitoring mentioned by workshop participants during the discussion are listed in a logical sequence. Four main groups of „must” for biodiversity monitoring are distinguished: general outline, human resources, use of monitoring data and financing. More detailed explanations of each issue will be prepared during the Project and included in the Project report.

#### **General outline**

- Targets of biodiversity monitoring
- General monitoring scheme
- Sampling design
- Coordination scheme
- Promotion of the work

#### **Human resources**

- Involvement of volunteers
- Involvement of experts who will look at data
- Cooperation among NGOs from different countries

### **Use of monitoring data**

- Link to State Environment Data Bases/other data basis and data compatibility
- Linkages with educational programmes

### **Financial resources**

- Sustainability of projects
- Financial support via projects, state programmes etc.

Ms. Liene Salmiņa asked each of the participants for their opinion and evaluation of the workshop. Opinions on similarities in biodiversity monitoring for general public in all countries such as fund raising challenge, communication with volunteers, use of monitoring data, importance of experience exchange and potential cooperation among different countries etc. were mentioned. The participants concluded that the workshop was useful and gave inspiration and new ideas for future work.

Ms. Liene Salmiņa thanked the participants for participation at the workshop and small presents were given to the presenting authors.

The workshop was closed at 16:35.