# A PRELIMINARY OVERVIEW OF MONITORING FOR RAPTORS IN BELGIUM

## Predhodni pregled monitoringa populacij ptic roparic v Belgiji

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Belgium is divided in three highly autonomous regions: Flanders in the north, Wallonia in the south and Brussels in the centre. Each region has its own regional government and, therefore, its own nature administration. Because of this situation, large-scale bird monitoring projects and atlas work have been implemented at the regional level resulting in different methodology, scale and timing. However, scientists responsible for the coordination of these projects meet on a regular basis and it is statistically possible to merge the data and produce national status assessments, trends and indices.

Although small, Belgium hosts 20 breeding raptor species, many of which, however, in small numbers (Vermeersch *et al.* 2004 & 2007, Weiserbs & Jacob 2007, Jacob *et al.* 2010).

#### Main players

Large scale bird monitoring projects and atlas work in Wallonia and Brussels are coordinated by Aves-Natagora (BirdLife partner in Wallonia) in collaboration with the regional nature administration "Département d'Étude des Milieux Naturels et Agricoles" (DEMNA) in Wallonia and Brussels Institute for the Environment (BIM) in Brussels. Similar work is conducted in Flanders where Research Institute for Nature and Forest (INBO), a scientific institute of the Flemish government coordinates the projects in collaboration with Natuurpunt, a non-governmental organisation, and Flemish BirdLife partner that provides the essential volunteer-network. Data on these large-scale projects are easily accessible and are merged to produce national reports (e.g. for cyclic reports under the Birds Directive 2009/147/EC).

Apart from these organisations, independent working groups are active in all three regions,

focusing mainly on one or two species per group. Harriers, kites, owls and Peregrine Falcons *Falco peregrinus* are monitored on a voluntary basis within the framework of these groups. The resulting data are less accessible and more patchily distributed. Many of the independent working groups monitor breeding success of the study species and many young birds are ringed at the nest. These ringing data are collected at the national level by the Royal Belgian Institute for Natural Sciences (KBIN).

#### Main data users

The three regional nature administrations are the main users of the collected ornithological data. They are mainly used for the development of several indicators and for nature directives reports. Nature associations form another group of data users. They are able to quickly inform a large number of people since they coordinate the volunteers and thanks to the rapidly growing number of their members. Data can sometimes be used for risk-assessment: impact of planned windmills, large infrastructure building plans and other potential problems.

#### Coordination

Although we have no national coordinating scientific institute, Aves, INBO and BIM work closely together to compile the cyclic Birds Directive reports as well as trends and indices for the European Bird Census Council (EBCC) and BirdLife International.

#### Key species and issues

Apart from the large scale monitoring and atlas projects, which cover a wide array of species, most independent working groups focus on owls, harriers, kites and Peregrine Falcons. In Wallonia, Eagle Owl Bubo Bubo and Tengmalm's Owl Aegolius funereus breeding numbers are closely monitored. In both Wallonia and Flanders, Barn Owl Tyto alba and Little Owl Athene noctua receive much attention. Barn Owl is probably the best studied bird species in Flanders with long-term data on its breeding success and survival. Wallonia has a separate programme for Red Kites Milvus milvus, but coverage is restricted to the core area of its breeding range. Breeding numbers of Marsh Circus aeruginosus, Montagu's C. pygargus and Hen Harriers C. cyaneus are monitored on a yearly basis in Wallonia.

The relationship between the presence of these species and the implementation of agri-environmental schemes has received growing attention in both Flanders and Wallonia. In Flanders, the nature conservancy is interested in presence/absence data of

Marsh Harriers in relation to ground water levels in reedbeds. INBO has recently started a new research project focusing on movements, habitat choice and breeding success of Marsh Harriers in fragmented landscapes (Anselin *et al.* 2011). An important issue is the illegal trade of Eagle Owl and Peregrine Falcon resulting in increasing time investment in site protection. Finally, the location of new wind farms has received considerable attention recently (Everaert 2011), especially in relation to the breeding grounds of the endangered Red Kite.

#### Strengths and weaknesses

Being one of the most densely populated and highly accessible countries in Europe, the large scale monitoring schemes in Belgium are characterised by a very good coverage (sample size) and a high number of skilled volunteers. The development of databases and online data-collection has received a lot of attention so that data can rapidly be used in various reports and risk-assessments.

Obvious weaknesses are the non-existing integration of independent working groups at a national or even a regional level and the integration of the ringing data in the monitoring schemes. A growing problem is the fact that our young highly skilled and most active birdwatchers hardly show any interest in actively contributing to the monitoring schemes, resulting in an ageing pool of volunteers.

Despite of the different monitoring schemes, we have no good data for a few diurnal or nocturnal raptor species like Long-eared Owl *Asio otus*, Honey Buzzard *Pernis apivorus*, Goshawk *Accipiter nisus* and Hobby *E. subbuteo*. We would highly welcome input from workshop-participants to provide a useful standard protocol for monitoring raptors at a regional scale.

### Belgian priorities

To summarize, Belgium should coordinate the different independent working groups at a regional and national levels and invest in monitoring of "difficult" species based on standard protocols. Moreover, we should integrate national ringing data in large-scale monitoring schemes and provide standard protocols for ringers. Last but not least, appointing a national coordinator is of vital importance to achieve these priorities.

### References & supporting bibliography

Anselin, A., Castelijns, H. & De Bruyn, L. (2011): Movements, Habitat Choice And Breeding Success Of The Marsh Harrier (*Circus aeruginosus*) In Fragmented

- Landscapes. Poster presentation. 8<sup>th</sup> Conference of the European Ornithologists' Union, 27–30 August 2011, Riga, Latvia.
- DE BRUYN, L., ANSELIN, A., BAUWENS, D., COLAZZO, S., DEVOS, K., MAES, D., VERMEERSCH, G. & KUIJKEN, E. (2003): Red lists in Flanders: scale effects and trend estimation pp. 111–120 In: LONGH, DE H.H. (ed.): The harmonisation of red lists for threatened species in Europe The Netherlands Commission for International Nature Protection, Leiden.
- Everaert, J. (2011): Site selection for new wind farms in Flanders (Belgium): new dynamic decision-instrument for birds and bats. pp. 86 In: May, R. & Bevanger, K. (eds.): Proceedings of the Conference on Wind energy and Wildlife impacts, 2–6 May 2011, Trondheim, Norway. NINA Report 693. [http://www.nina.no/archive/nina/PppBasePdf/rapport/2011/693.pdf]
- JACOB, J.-P., DEHEM, C., BURNEL, A., DAMBIERMONT, J.L., FASOL, M., KINET, T., VAN DER ELST, D. & PAQUET, J.Y. (eds.) (2010): [Breeding Bird Atlas of Wallonia 2001–2007.] Série Faune Flore Habitats no. 5. – Aves et la Région Wallonne, Gembloux. (In French, English summary)
- PAQUET, J.-Y., JACOB, J.-P., KINET, T. & VANSTEENWEGEN, C. (2010): [Common bird population trends in Wallonia, 1990–2009.] Aves 47: 1–19. (In French, English summary)
- Vermeersch, G. & Anselin, A. (2009): [Breeding bird in Flanders in 2006–2007: recent status and trends of rare, colonial and exotic bird species and species of the Flemish Red List and/or European Birds Directive.]

  Mededelingen van het Instituut voor Natuur- en Bosonderzoek, 2009 (3). Instituut voor Natuur- en Bosonderzoek, Brussels. (In Dutch, English summary)
- Vermeersch, G., Anselin, A., Devos, K., Herremans, M., Stevens, J., Gabriëls, J. & Van Der Krieken, B. (2004): [Atlas of Flemish Breeding Birds 2000–2002.] Mededelingen van het Instituut voor Natuurbehoud 23. Brussels. (In Dutch, English summary)
- Vermeersch, G., Anselin, A., Onkelinx, T. & Bauwens, D. (2007): Monitoring common breeding birds in Flanders: a new step towards an integrated system. Bird Census News: 20 (1): 30–35.
- Vermeersch, G., Anselin, A. & Devos, K. (2007): [Status and trends of diurnal raptor species in Flanders.] Natuur.oriolus: 73: 41–44. (In Dutch, English summary)
- Weiserbs, A. & Jacob, J.-P. (2007): [Breeding birds of Brussels 2000–2004: distribution, numbers, development.] Aves, Liège. (In French)

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