

EBCC

European Bird Census Council



every bird counts

The European Bird Census Council (EBCC) is an association of like-minded expert ornithologists co-operating in various ways to improve bird monitoring and atlas work in Europe, and thereby inform and improve the management and conservation of bird populations. It aims to promote exchange of news, ideas and expertise through a journal and a programme of workshops and conferences. It works closely with ornithological and conservation organisations, and encourages links between ornithologists, land managers and policy makers. The EBCC oversees specialist working groups and monitoring projects; these have included the atlas of European breeding birds, and currently the pan-European common bird monitoring scheme and the second European atlas.

Chairman's report September 2016 to April 2019

1. Membership of the Board

Ruud Foppen (Chairman, The Netherlands)

David Noble (Secretary, UK) until spring 2018

Anny Anselin (Treasurer, Editor *Bird Census News*, Belgium)

Oskars Keiņš (Delegate Officer, Latvia)

Lluís Brotons (Data Officer, Spain)

Henning Heldbjerg (Denmark)

Mikhael Kalyakin (Russia)

Verena Keller (EBBA2 project leader, Switzerland)

Aleksi Lehikoinen (Finland)

Danae Portolou (Greece)

Mark Eaton (UK) from spring 2018

The Board has also called upon the expertise of the following observers/advisors:

Mark Eaton (observer for RSPB, UK) until spring 2018

Ian Burfield (observer for BirdLife International, UK), until 2014

Ivan Ramirez (observer for BirdLife International, UK), from 2014

Szabolcs Nagy (observer for Wetlands International, The Netherlands)

Gabriel Gargallo (coordinator EBP project, Spain)

Sergi Herrando (coordinator EBBA2, Spain)

Petr Voříšek (coordinator PECBMS/EBBA2)

Jana Škorpilová & Alena Klvaňová (Pan-European Common Bird Monitoring Scheme)

Marina Kipson (EBBA2)

Anna Gamero (Scientist PECBMS)

João Rabaca (on behalf of the local organizing committee Evora 2019)

2. Meetings of the Board

Since the last conference in Halle the Board has kept its regular schedule of two meetings a year.

The 53th meeting was in Copenhagen April 2017, organised by Henning Heldbjerg, the 54th in

Hanko field station in Finland November 2017, organised by Aleksi Lehikoinen, the 55th meeting

was in Evora April 2018, organised by Joao Rabaca and Carlos Godinho and the 56th meeting was in Athens October 2018, organised by Danae Portolou. Minutes are published on the website and we informed our delegates by the Newsletter.

3. Financial position

The financial position of the EBCC at the moment is secure for the time being. A full financial report will be presented by the Treasurer at the General Meeting of the Association and incorporated into the minutes of the meeting. The capital of the association at the end of 2018 was plus € 8618,56. Costs mostly stemmed from travel costs associated with Board meetings (for delegates from institutions with limited financial resources) and work in relation with the Pan-European Bird Census Monitoring project.

As there will be no future deliveries of data from the first atlas and we have lost this potential source of income. Thanks to the fair amount of capital at this moment this has no immediate consequences but the Board will have to seek for alternative sources of income for the near future.

4. Conference proceedings

Conference proceedings from the 20th EBCC conference in Halle, Germany were published in Vogelwarte in 2016. We thank the editors, Malte Busch, Kai Gedeon, Martin Flade, Volker Dierschke and the DDA for their swift and excellent work.

5. Bird Census News

The editorial team (Anny Anselin, Henning Heldbjerg, Mark Eaton) managed to get 23 papers published (plus 6 currently in lay-out phase). We are very thankful to Olga Voltzit (Russia) for her excellent lay-out work and the Catalan Ornithological Society for the free use of the bird drawings by artist Toni Llobet and Martí Franch. Since the last conference, two volumes of *Bird Census News* have been published and one is currently in the lay-out phase and will very soon be published:

BCN 2016 volume 29/1-2: 53 pgs

BCN 2017 volume 30/1-2: 70 pgs

BCN 2018 volume 31/1-2: currently in the lay-out phase (appr. 35 pgs).

Volume 29 was a special issue about Winter land bird Monitoring in Europe, with the main aim to promote these programmes which could become a useful element within EBCC's enlarging data network. Volume 31 is focussed on Garden Birds Surveys.

6. EBCC on the web (Alena Klvaňová)

We maintain three project websites for PECBMS, EBP and EBBA2 and we are in the process of dismantling the original website (www.ebcc.info). The plan is to only put general information here and to make the necessary links to the three project websites. The sites are maintained by CSO (EBBA2, PECBMS, EBCC) and ICO (EBBA2).

EBCC's website www.ebcc.info has been updated on a regular basis. The site is maintained by CSO (Czech Society for Ornithology, BirdLife Partner in Czech Republic) under a contract from the EBCC. Board members and observers contribute to the site. In spring 2018 the website was completely reconstructed and now it is running under WordPress publication system. I am especially grateful to Alena Klvaňová, Petr Voříšek and Jana Škorpilová who have largely been responsible for maintaining and updating content. The most active areas are the Pan-European Common Bird Monitoring Scheme (PECBMS) and the 2nd European Breeding Bird Atlas project (EBBA2), where news, information and outputs such as the latest Pan-European bird trends and indicators are regularly updated.

EBBA2 has its own website (www.ebba2.info) which is maintained by Marina Kipson, who also communicates the Atlas by facebook (<https://www.facebook.com/EBBA2.info/?fref=ts>). Both report on news, tips and tricks, announcements, foreign observer contributions for atlas work, interesting papers and atlas field work reports. It also brings the first maps or artwork which was prepared originally for the Atlas. All delegates are invited to contribute. EBBA2 Facebook serves also as a platform for the news on other EBCC projects, mainly PECBMS.

In September 2018 PECBMS also launched its own website (www.pecbms.info) which aims to be attractive, up to date and user friendly. On the new website users can find the map of Europe presenting all common bird monitoring schemes with detailed information on each project (updated annually). Starting with 2018 update the graphs of species indices are provided as smoothed line with shaded 95% confidence limits. More species can be viewed in one graph at once which allows a comparison of different species' trends easily.

Alongside this, on www.ebcc.info there have been regular updates of Board agendas and minutes, *Bird Census News*, the Delegates List, as well as information about new initiatives and scientific papers related to the EBCC or PECBMS.

The EBP website and viewer (www.eurobirdportal.org) is hosted and maintained by ICO (Catalan Ornithological Institute). In 2018 the website has been updated with 40 million new bird records and shows animated all-year round maps of 105 bird species for a period of seven years.

7. Planning for the 21th International EBCC conference in Evora

During the conference in 2016 in Halle we got the kind offer of João E. Rabaça of the LabOr- Laboratory of Ornithology, University of Évora in Portugal to host the 21st Bird Numbers conference. During the past 2 years João was invited to the Board meetings and we collaborated and assisted him and his team (lead by Carlos Godinho). Aleksí Lehikoinen was appointed as chair of the scientific committee that consisted of the following Board members (Lluís Brotons, Mark Eaton, Ruud Foppen, Henning Heldbjerg, Verena Keller and Oskars Keiss) and people from the local organising committee (Carlos Godinho, Rui Lourenço and João Rabaça).

8. Liaison with Delegates and Newsletter (Oskars Keiss, Alena Klvaňová)

Currently there are 87 EBCC National Delegates from 45 countries, 3 countries have only one delegate (Azerbaijan, Georgia, Lichtenstein). Albania does not have any EBCC delegate.

53 delegates have been active since 2016 – the last EBCC conference in Halle (Saale), Germany. The last contact corresponding about EBCC for 17 delegates are on 2009 or older date. We encourage every delegate who has not done that yet to get in touch with our delegate officer or any other Board member to ensure that we have the correct contact details and you receive the information that we distribute.

Autumn 2017 EBCC successfully introduced a quarterly newsletter for our network partners (delegates, coordinators of the three main projects). The newsletter is received very well. In short items news about the general activities of EBCC and the main projects are presented usually with links to relevant parts of the respective websites where more info is presented. I am grateful to Alena Klvaňová for her superb work in accomplishing this. Please, do not hesitate to supply us with feedback but also with ideas of content.

9. The Pan-European Common Bird Monitoring Scheme (Petr Voříšek, Jana Škorpilová, Alena Klvaňová, Anna Gamero, Maaïke de Jong, Eva Šílarová)

Activities implemented, main results and achievements over the period September 2016 – April 2019

The Pan-European Common Bird Monitoring Scheme (PECBMS) is a joint initiative of EBCC and BirdLife International that started in January 2002. PECBMS has established a large European network of collaborators – coordinators of national or regional monitoring schemes, EBCC delegates and/or BirdLife Partners. Up to date (28 March 2019) the network consists of 361 active contacts. PECBMS is officially led by a project supervisor, Richard Gregory (based in the RSPB, UK), and coordinated by a central coordination unit (based in the CSO, Czech Republic) that until September 2017 consisted of a project manager, Petr Voříšek, and technical assistants, Alena Klvaňová and Jana Škorpilová and research officer Anna Gamero. In 2017 Jana Škorpilová left for maternal leave and since September 2017 until September 2018 Maaïke de Jong worked as project coordinator. Since November 2018 Eva Šílarová is a new project coordinator, Alena Klvaňová is a new project manager and Petr Voříšek works as a senior expert. The project Steering and Technical Advisory Group (Ivan Ramirez, Ruud Foppen, Richard Gregory, David Noble, Zdeněk Vermouzek) meets annually and oversees the work.

PECBMS outputs – European and regional common bird indices and indicators

The European indices and indicators have been updated two times since the last Chairman's report in August 2016:

- 2017 update contained indices for 170 species and 168 species were included in the set of headline indicators (except two Cypriot endemic species) for period until 2015 based on data from 28 countries
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Technological development in data collation, quality control and production of species indices and indicators

The program TRIM, TRends and Indices for Monitoring data, a program used to determine species population trends, was rebuilt by Statistics Netherlands as a package for the freely available and widely used open source program R. RTRIM contains the same methods and models for nature monitoring data as the original versions of TRIM. It can work with the same input data and produces the same output data, but as a package in R it can easily be integrated in other R programming processes. Also, a RTRIM shell has been developed by Statistics Netherlands, which makes it easier to process large batches of species with specific model parameters at once. An on-line tool for collecting TRIM output files from national coordinators including automatic data quality control is available and ready to use in 2019 year's data collection. Adaptation for RTRIM outputs is only needed to be finished.

In addition to the regular request for national species indices, we are working on an update of site-level data, to be used for research purposes. A pilot tool for collection of site level data is under preparation.

Indicators – further development

We explored ways how to develop the Farmland Bird Indicator

at regional (sub-national) level. We realized that the main problem is a lack of both, standardized monitoring, and timed species lists data from the regions covering sufficient period.

We have been working also on a new forest bird indicator for EU policy purposes. Aims, spatial and temporal scale of a new forest bird indicator were discussed and agreed with policy people, particularly with people from Forest Europe. The niche based approach developed and promoted by Simon Butler and his team at the University of East Anglia is the approach which was agreed. Apart of these standard indicators, PECBMS has been considering a new generation of indicators, which would be based on site level data. Such indicators could be a powerful tool for measuring effectiveness of various conservation and policy measures at large scales.

Use of PECBMS outputs in policy

The updates of the EU indicators has been regularly sent to Eurostat, to be published on their website. The European and EU indicators were also used for the update of the SEBI indicators at the EEA website. We had several meetings with the European Commission (DG Envi, DG Agri, Eurostat). Technical and methodological details of production of the wild bird indicators were discussed.

Research

We have cooperated with external researchers on 8 projects using to various extent PECBMS data. We also initiated and completed a study on an effect of European policies on trends of common birds. In total, four papers were published in the reporting period (<https://pecbms.info/use-of-the-results/publications/>). Several other research projects were initiated and are in a phase of data requests. Furthermore, in 2017 we have contributed to the project to support follow-up actions to the mid-term review of the EU biodiversity strategy to 2020 in relation to agriculture. PECBMS team in Prague contributed with two case studies and overall support to the project led by IEEP and BTO. The final report has been approved by the European Commission.

Project outputs publications and dissemination

Indices and indicators published:

- On the EBCC website (<http://www.ebcc.info>)
- On the PECBMS website (<https://pecbms.info/>)
- In the leaflet 'State of common European breeding birds 2017' published in 2018 and the leaflet 'State of common European breeding birds 2018' - published in 2019
- In a series of scientific publications – see below
- In talks and presentations at meetings, workshops and conferences

Other activities

- Regular reports on the EBCC website (ca. twice per year)
- Regular reporting to EBCC Board (twice per year)
- Update of PECBMS and EBCC website
- Since December 2017 we have spread 6 issues of electronic EBCC newsletter, a new communication tool for EBCC network. Alena Klvaňová is the editor responsible for the contents, layout and distribution of the newsletter. Newsletter has been created by MailChimp and is produced quarterly to cca 300 recipients: EBCC delegates, PECBMS, EBBA2 and EBP networks (and subscribers).

Archive: <https://us16.campaign-archive.com/home/?u=38630e0b560f21593a0832b80&id=f0d152df0f>

Assistance to national monitoring schemes

PECBMS assisted coordinators in various tasks either via e-mail communication or via personal contact. We assisted national coordinators with calculation of indices, we helped in lobbying for funding, in monitoring design and data management.

Funding

Since its inception in 2002, the scheme has been continuously supported by the RSPB. It has also been supported financially by the European Commission since 2006. Unfortunately, the European Commission has not provided further support for PECBMS since July 2016. Because we were informed about the decision at the last minute, PECBMS core activities had to be temporarily suspended. Since January 2017, the European Commission re-allocated support for PECBMS, with the new grant "Towards new generation of Wild Birds Indicators" led by RSPB in cooperation with CSO running until December 2019.

10. EBBA2– Second European Breeding Bird Atlas (Verena Keller)

Main activities and achievements

Within the reporting period 2016 to March 2019 the focus lay on finishing the fieldwork period in 2017 (with some gap-filling in 2018), the compilation of the data and analysis. By spring 2018 the standardised data which form the basis for modelling were collected and checked by the European coordinators. In the course of 2018 models could be run for over 300 species. By the end of 2018 almost all data for 50x50 km squares had arrived at the European coordination team and most of the national coordinators finished their data checks. All information was compiled in an updated version of the webtool which was originally designed for national coordinators. At the beginning of 2019 the organisation of species account writing was started and by March 2019 the first texts had already arrived.

More details on activities can be found in the annual reports published on the website: <https://www.ebba2.info/category/reports/>

Atlas Steering Committee

The atlas steering committee (ASC) set up by the board in 2011 and chaired by Verena Keller, supervised and supported the work of the atlas coordination team. In 2018 David Noble was replaced by Dawn Balmer. The ASC held its meetings, usually preceding board meetings, in Copenhagen (spring 2017), Evora (spring 2018) and Athens (autumn 2018).

European Coordination

The coordination team continued to work in almost the same composition at the three institutions Swiss Ornithological Institute in Sempach (SOI), Czech Society for Ornithology in Prague (CSO) and Catalan Ornithological Institute in Barcelona (ICO). In Sempach, Verena Keller manages the project and leads the coordination team, while Pietro Milanesi is responsible for the development of the modelling procedure in collaboration with the Spatial Modelling Group. In Prague, Petr Vorisek and Marina Kipson are responsible for the coordination of the EBBA2 network consisting of national coordinators and other partners, information, website and the coordination of the species sponsorship. Also at CSO Alena Klvanova took over the coordination of the artists providing the illustrations for the final book. In Barcelona, Sergi Herrando coordinates data collection, storage and analysis, supported by Marti Franch, David Marti and Marc Anton and by Dani Villero and Magda Pla of the Catalan Forestry Centre.

Funding

The grant from the MAVA Foundation running from 2015 to 2017 was crucial for the whole project. It was focused on the fieldwork period and geographically on those countries that had early on indicated that they would need external support. Part of the funding went directly to countries in east and southeast Europe, the other was used to provide support by the European coordination team. Together with funding from another Swiss foundation, the Swiss Federal Office for the Environment and in-kind funding funding was secured until the end of 2018. At the end of 2016 a Species Sponsorship Scheme was set up on the EBBA2 website, where individuals, ornithological societies and other interested groups can provide funding through sponsoring particular species.

11. European Bird Portal (Gabriel Gargallo)

Overview

Most of the activities developed during 2016-2019 regarding the EBP project coincide exactly with those developed in the framework of the LIFE EBP project.

The LIFE EBP project, officially entitled "Combining and improving online bird portals data to display near-real-time spatiotemporal patterns of bird distribution across Europe (LIFE15 PRE/ES/000002)", had a duration of three years (January 2016 to December 2018) and an overall cost of 510.557 €, of which 60% (306.334 €) were financed by the European Union. In late 2018 it was agreed to extend the project until 15 April 2019 to include the launch of the LIVE EBP viewer (see below).

The main specific objectives of project are:

- 1) To create a new EBP data sharing standard, database repository and data-flow system capable of managing automatically and in near-real-time all data interchange processes between the local online portals and the central databank.
- 2) Adapt and improve the current EBP demo viewer and the spatial bird distribution models in order to reliably display detailed and up-to-date European-wide spatiotemporal patterns of bird distribution in near-real-time.
- 3) Increase the geographical coverage of the EBP project to include most of the European Union (>90% of its territory).
- 4) Improve the quality and relevance of the data collected.

The LIFE EBP project is coordinated by the Forest Sciences Centre of Catalonia (CTFC) and has five associated beneficiaries: the Catalan Ornithological Institute (ICO), the Swiss Ornithological Institute (SOI), the British Trust for Ornithology (BTO), Natagora and the Sovon Dutch Centre for Field Ornithology (SOVON). The project is managed in close cooperation with the EBP project coordination to ensure that fits perfectly in the framework of the EBP. The LIFE EBP is co-financed by the European Commission Directorate General for the Environment, the Directorate-General of Telecommunications and Information Society of the Government of Catalonia, and each of the project beneficiaries. The progress of the LIFE EBP project can be easily monitored action by action through this specific website: <http://life.eurobirdportal.org/overview#actions>.

Partnership

The partnership has increased a lot during the 2016-2019 period. Currently, we have 72 partners from 33 different countries. 27 out of the 28 EU countries (99.9% of the EU), all except Malta, are involved in the EBP, though two of them (Slovenia and Lithuania) do not provide data yet. Overall,

the project mobilizes c. 45 million new bird records every year (increasing c.14% annually) which are collected by c. 100,000 volunteer birdwatchers through 18 different online systems.

The Executive Committee and the chair of the EBP Steering Committee were elected in November 2017 at the 11th EBP meeting. Chair EBP Steering Committee: Gabriel Gargallo and members EBP Executive Committee: Stephen Bailie, Ruud Foppen, Carlos Godhino, Károly Nagy, Jean-Yves Paquet, Hans Schmid, Peter Uppstu.

Meetings

Six EBP meetings have taken place since 2016 (twice a year). The next one will be held at Évora on April 8th 2019. The meetings last one full day and usually 20-30 persons from 10-16 different countries participate. Taking profit of these general EBP meetings, the LIFE EBP coordination team also meets twice a year.

The second version of the EBP demo viewer

The launch of a second version of the EBP viewer in December 2017 was a key milestone of the project.

There were two main reasons behind the decision of developing this new version of the viewer: 1) the geographical increase of the area covered by the partnership, and 2) the need to adapt the old version of the EBP viewer to the much higher updating frequency expected to be put in place once the new data sharing standard, automated data flow and database repository are fully functional (cf. <https://goo.gl/TsgGaF> and <https://goo.gl/44i5J4>).

This version of the viewer incorporated 40 million more new bird records and showed animated all-year round maps of 105 bird species for a period of seven years, ensuring that the EBP maintains its position as the largest and most dynamic citizen science biodiversity data flow in Europe. The species maps were based on 205 million bird records submitted between 2010 and 2016 to the online bird recording portals run by the project partners, a 24% increase with respect to the previous version.

The main improvements and new functionalities of this version of the viewer were (see this video for further information: <https://youtu.be/zrkWkCNz4hM>):

1) Geographical coverage and map viewing options.

The viewer properly shows the new, expanded, geographical coverage of the EBP project, including the whole of Europe and parts of the Middle East (e.g. Turkey and Israel). Moreover, a new button allows switching between two different map views: “Core area” and “Full coverage”.

Another improvement refers to the option of selecting the visualization of a single map (previously a double map was always shown) that, unlike the double map, allows three zoom levels. Now, both the double and the single map views allow some panning (unavailable in the previous version).

2) Visual design and usability.

Users can change the species, map type and time period of each map (left/right or single) directly from the legend info windows or using a lateral drop-down menu. Moreover, attractive species drawings have been added to improve aesthetics and make the viewer more attractive.

The viewer also incorporates now a helpful timeline that makes really easy to grasp the temporal patterns that lay behind the species maps. Moreover, this new version is fully responsive and tablet and mobile friendly.

3) Sharing options.

The new viewer’s sharing options makes very easy to copy the url of any double map combination or single map in the most popular media networks. And more importantly, now any animated EBP

map can also be easily embedded to any blog or website using the code provided in the sharing options window.

4) Real-time solution.

The new version of the viewer is already adapted to work in near-real time, processing the data stored in the new central database (cf. <https://goo.gl/TsgGaF>) and creating the maps automatically. These functions, however, have not been completely deployed until the LIVE version of the EBP viewer was launched on April 9th 2019.

The new EBP data sharing standard

A new EBP data standard (life.eurobirdportal.org/files/New_EBP_data_standard.pdf) was agreed in 2016 with the objective of improving the opportunities for data analysis and modelling and to serve as the basis for data collection and storage once the automated data flow was put in place (see below). The main characteristic of the new EBP data standard are:

- Properly deals with both complete and fixed lists, a requisite to be able to collect data proceeding from standard bird monitoring schemes. The potential to collect lists from standard bird monitoring projects open lots of new possibilities in terms of data analysis and regarding the development of further synergies with other EBCC initiatives like the PECBMS and the European Atlas.
- Casual records are aggregated by 10x10 km square and date.
- Complete and fixed lists are collected as individual records (one species in the lists = one record; i.e. not aggregated) using an event identifier. Regarding location, partners could choose between giving the exact original location or the 10x10 square reference.
- A few important new fields (e.g. maximum breeding code, distance covered) are added to help improve the analytical potential of the data collected and increase future synergies with other EBCC projects (e.g. Atlas work).

The new central database and the automated data flow

To develop a new central database repository and to automate the data flow with the different local online portals have been two of the key tasks undertaken in the framework of the LIFE EBP project (cf. <http://life.eurobirdportal.org/overview#A6>). The new database has been developed using PostgreSQL on an Amazon instance and a JSON schema and API solution has been used to encode and transfer the data. The central database collects and updates the data received from the different portals in the new EBP data standard and creates the tables that CARTO, a top-notch location intelligence and data visualization platform, requires to generate the viewer maps on the fly. These CARTO tables are created once a day using the latest information received from the local online portals and, therefore, the whole content of the LIVE EBP viewer (not publicly available until April 9th) is also updated once a day.

Currently 11 online systems (83,1% of the whole EBP data) are automatically connected on a daily basis using the EBP API service. Complete instructions, with a detailed API documentation and specifications as well as a specific website were prepared to facilitate the work of the partners. Moreover a test submission mode was developed so that partners could try the connectivity before submitting real data.

Moreover, 4 online systems (16,1% of the whole EBP data) are automatically connected on a daily basis using the API services provided by their systems. This means that 99,2% of the whole EBP data and 15 online systems are connected automatically, a big accomplishment since the LIFE EBP target was 12 systems or 80% of the data. Only the data from Hungary and part of the data from Romania and Bulgaria is received manually.

Launch of the LIVE version of the EBP viewer

The launch of the new version of the EBP viewer took place on April 9th in the framework of Bird Numbers 2019. This new version of the viewer is showing the distribution of 105 bird species on weekly animated maps spanning from January 2010 up to the current week, hence the term LIVE. This is an unprecedented development in European ornithology and among citizen science projects and the most important result of the LIFE EBP project.

The whole content of the viewer is updated on a daily basis with the latest bird observations collected by the EBP partner's online bird portals. Functionally, this version is identical to the previous one (see above) but adds a new option, the LIVE maps, which show data from the previous day back to one year ago (as in all other EBP maps grouped in 52 weeks).

The main characteristics of the new EBP data standard are:

- Shows weekly animated maps spanning from January 2010 up to the current week.
- Includes 105 species & 5 different map types.
- 50 million different map combinations are available to choose from.
- Based on 320 million bird records (c. 120,000 new records every day).
- The whole content is updated daily with the latest bird records.

Data quality and coverage

Since 2016, the quality of the data collected and the level of coverage has improved considerably. In 2017 and 2018, in the framework of LIFE EBP Action A10 (life.eurobirdportal.org/overview#A10), several campaigns were conducted in some of the EU countries where data collection was less intense (Portugal, Spain, Poland, Ireland and Latvia) in order to improve participation in poorly covered areas.

Currently a large part of Europe collects data during most weeks of the year though coverage still needs to improve in parts of Spain, Ireland and E Europe, particularly the SE.

Collection of more structured data has also improved significantly and, currently, about one third of the whole data is comprised in complete lists. Overall, submission of complete lists has been increasing by c. 23% every year since 2016.

12. Collaboration projects with other organisations

Wetlands International

Verena Keller represented EBCC in the African Eurasian Waterbird Monitoring Partnership (AEWMP) set up as a steering body for the International Waterbird Census (IWC) and other waterbird monitoring projects in the AEWA region. The AEWMP has held annual meetings and discussed issues relating in particular to better coordination of reporting on population trends for different purposes (AEWA, European Red List etc), and guidelines for monitoring waterbirds. The relationship to EBCC was also strengthened during EBCC conferences, which provide the platform for specific meetings of IWC national coordinators. An observer from Wetlands International, Szabolcs Nagy or Tom Langendoen, has attended EBCC board meetings.

BirdLife International

The BirdLife offices in Brussels and Cambridge deliver crucial support for our main projects (PECBMS, EBBA2 and EBP). This involves networking and lobbying at the EU-level. We had a number of strategic meetings particularly discussing the strategic value of the EBBA2 results for the

European biodiversity policy. Also BirdLife assisted in contacts and organising network meetings with responsible organs within the EU (DG-Environment and Agri and Eurostat) in order to secure funding for PECBMS at the EU level.

Research opportunities: workshops

On behalf of the Board Aleksi Lehikoinen organised a EBBA2 Research Workshop held 13-14 March 2018. This workshop was attended by 15 people from the inner circle of EBCC and associated researchers. Its aim was to formulate research ideas and facilitate research proposals. From the Board particular highlighting data use policies. Themes were categorised as high or medium priority and key themes that emerged were changes in bird distribution, effects of climate change and effects of land use change, as well as conservation planning. There is potential for further workshops to reach more researchers. In addition there was an informal meeting on use of EBBA2 data in research In Solsona Spain on the 13th of March organised by Aleksi Lehikoinen.

On March 11-13 a miniworkshop was organised by the PECBMS team dedicated to the regional farmland bird indicators and new forest bird indicators. The workshop was held in Solsona, Spain and hosted by Centre Technologic Forestal de Catalunya (with kind help of Lluís Brotons). Twenty-two experts agreed on further steps in developing a new Forest Bird Indicator, discussed on potential to develop regional Farmland Bird Indicator and needs for other indicators to be developed at a European level.

Thank you!

It has been a real honour to serve as your chairman since 2010. I always felt privileged to work with and for you. Many thanks to all the Board Members (formerly the ExCo members) and the Observers attending the Board meetings that I had the pleasure to work with. This report proves that the EBCC is thriving. An important contribution to this success is the three major projects (PECBMS, EBP and EBBA2). The project teams are working and coordinating in a very professional way. It is also very reassuring that we are able to organise such great and inspiring conferences thanks to host organisations within our network. Essential gatherings where we meet and discuss. Last but not least I want to thank you, dear Delegates, for your support and trust and with you the thousands of bird watchers in Europe that collect the data which I believe are so instrumental for a successful and efficient biodiversity conservation policy within Europe.

Ruud P.B. Foppen

On behalf of EBCC's Board and Observers

(March 2019)

Publications involving EBCC authors and data (2016-2019)

Articles connected to EBBA2 published in BCN:

Herrando, S., Keller, V., Vorisek, P., Kipson, M., Franch, M., Anton, M., Pla, M., Villero, D., Sierdsema, H., Kampichler, C., Telensky, T., Gillings, S., Johnston, A., Gottschalk, T., Guélat, J., Sattler, T., Brotons, L., Titeux, N., Jiguet, F., Kéry, M. & Milanese, P. 2017. High resolution maps for the second European Breeding Bird Atlas: a first provision of standardised data and pilot modelled maps. *Vogelwelt* 137: 33–41.

Keller, V., Bauer, H.-G., Franch, M., Herrando, S., Kipson, M., Milanese, P. & Vorisek, P. 2016. EBBA2: Der zweite europäische Brutvogelatlas macht Fortschritte. *Vogelwarte* 54: 409–410.

Keller, V. 2017. Neuer europäischer Brutvogelatlas. *Falke* 32–33.

Keller, V. 2017. Wie geht es Europas Vogelwelt? *Ornis* 5/17: 38–39.

Keller, V. 2017. Atlases as a tool to document changes in distribution and abundance of birds. *Vogelwelt* 137: 43–52.

Keller, V. 2017. Le deuxième atlas européen en bonne voie. *Nos Oiseaux* 64: 14–15.

Milanese, P., Herrando, S., Pla, M., Villero, D. & Keller, V. 2017. Towards continental bird distribution models: environmental variables for the second European breeding bird atlas and identification of priorities for further surveys. *Vogelwelt* 137: 53–60.

Sudfeldt, C., Bauer, H.-G., Gerlach, B. & Keller, V. 2017. Der neue europäische Brutvogelatlas - ein Blick in die Zukunft nach Abschluss der Kartierungen. *Vogelwarte* 55: 351–352.

Vorisek, P., Gregory, R.D., Keller, V., Herrando, S., Lindström, Å., Nagy, S., Burfield, I.J., Noble, D., Ramirez, I. & Foppen, R.P.B. 2018. Wetzel et al. fail to identify the real gaps in European bird monitoring. *Biological Conservation* 225: 245–246.

Herrando, S. V. Keller, H-G. Bauer, L. Brotons, M. Eaton, M. Kalyakin, O. Voltzit, A. Lehikoinen, P. Milanese, D. Noble, I. Ramirez, P. Vorisek & R. Foppen. (2019). Using the first European Breeding Bird Atlas for science and perspectives for the new Atlas. *Bird Study* *accepted paper*.

Articles connected to EBBA2 published in BCN:

Kipson, M., Vorisek, P., Franch, M., Kalyakin, M.V., Major, G., Herrando, S. & Keller, V. 2015. EBBA2 training workshops in 2016. *Bird Census News* 28: 59–64.

Herrando, S., Franch, M., Vorisek, P., Kipson, M., Milanese, P. & Keller, V. 2017. EBBA2: Latest pilot maps, modelling work and planning ahead. *Bird Census News* 30: 12–18.

Publications connected to PECBMS

Bowler, D. et al (2019): Long-term declines of European insectivorous bird populations and potential causes. *Conservation Biology*, doi: 10.1111/cobi.13307

Gamero, A. et al. (2017): Tracking Progress Toward EU Biodiversity Strategy Targets: EU Policy Effects in Preserving its Common Farmland Birds. *Conservation Letters*, doi:10.1111/conl.12292. PDF