

# Data summarizing monitoring and evaluation for three European environmental policies in 9 cases across Europe

Article

**Published Version** 

Creative Commons: Attribution 4.0 (CC-BY)

Open access

Waylen, K. A., Blackstock, K. L., Van Hulst, F. J., Damien, C., Horváth, F., Johnson, R. K., Kanka, R., Külvik, M., Macleod, C. J. A., Meissner, K., Oprina-Pavelescu, M. M., Pino, J., Primmer, E., Rîşnoveanu, G., Šatalová, B., Silander, J., Špulerová, J., Suškevičs, M. and Van Uytvanck, J. (2019) Data summarizing monitoring and evaluation for three European environmental policies in 9 cases across Europe. Data In Brief, 23. 103785. ISSN 2352-3409 doi: 10.1016/j.dib.2019.103785 Available at https://centaur.reading.ac.uk/82604/

It is advisable to refer to the publisher's version if you intend to cite from the work. See <u>Guidance on citing</u>.

Published version at: https://doi.org/10.1016/j.dib.2019.103785

To link to this article DOI: http://dx.doi.org/10.1016/j.dib.2019.103785

Publisher: Elsevier

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other



copyright holders. Terms and conditions for use of this material are defined in the <u>End User Agreement</u>.

# www.reading.ac.uk/centaur

## **CentAUR**

Central Archive at the University of Reading

Reading's research outputs online



#### Contents lists available at ScienceDirect

### Data in brief





#### Data Article

# Data summarizing monitoring and evaluation for three European environmental policies in 9 cases across Europe



Kerry A. Waylen <sup>a, \*</sup>, Kirsty L. Blackstock <sup>a</sup>, Freddy J. van Hulst <sup>a, 1</sup>, Carmen Damian <sup>b</sup>, Ferenc Horváth <sup>c</sup>, Richard K. Johnson <sup>d</sup>, Robert Kanka <sup>e</sup>, Mart Külvik <sup>f</sup>, Christopher J.A. Macleod <sup>g</sup>, Kristian Meissner <sup>h</sup>, Mihaela M. Oprina-Pavelescu <sup>b</sup>, Joan Pino <sup>i</sup>, Eeva Primmer <sup>h</sup>, Geta Rîşnoveanu <sup>b</sup>, Barbora Šatalová <sup>e</sup>, Jari Silander <sup>j</sup>, Jana Špulerová <sup>e</sup>, Monika Suškevičs <sup>f</sup>, Jan Van Uytvanck <sup>k</sup>

<sup>&</sup>lt;sup>a</sup> Social, Economic & Geographical Sciences, The James Hutton Institute, Cragiebuckler, Scotland, AB15 8QH, UK

<sup>&</sup>lt;sup>b</sup> Department of Systems Ecology and Sustainability, University of Bucharest, 91-95 Spl. Independentei, Bucharest, 050095, Romania

<sup>&</sup>lt;sup>c</sup> Institute of Ecology and Botany, Centre for Ecological Research, Hungarian Academy of Sciences, Alkotmány u. 2-4, 2163 Vácrátót, Hungary

<sup>&</sup>lt;sup>d</sup> Department of Aquatic Sciences and Assessment, Swedish University of Agricultural Sciences, Box 7050, 750 07 Uppsala, Sweden

<sup>&</sup>lt;sup>e</sup> Institute of Landscape Ecology of the Slovak Academy of Sciences Stefanikova 3, 814 99 Bratislava, Slovakia <sup>f</sup> Institute of Agricultural and Environmental Sciences, Estonian University of Life Sciences, Kreutzwaldi 5, 51006 Tartu. Estonia

 $<sup>^{</sup>m g}$  Information and Computational Sciences, The James Hutton Institute, Cragiebuckler, Scotland, AB15 8QH, UK

<sup>&</sup>lt;sup>h</sup> Programme for Environmental Information, Finnish Environment Institute - SYKE, Survontie 9a, 40500 Jyväskylä, Finland

<sup>&</sup>lt;sup>i</sup> Centre for Research on Ecology and Forestry Applications - CREAF, Universitat Autònoma de Barcelona, E08193 Bellaterra (Cerdanyola del Vallès), Catalonia, Spain

<sup>&</sup>lt;sup>j</sup> Freshwater Centre, Freshwater Centre, Finnish Environment Institute - SYKE, P.O. Box 140, 00251 Helsinki, Finland

<sup>&</sup>lt;sup>k</sup> Research Institute for Nature and Forest (INBO), Havenlaan 88 bus 73, 1000 Brussels, Belgium

DOI of original article: https://doi.org/10.1016/j.scitotenv.2018.12.462.

<sup>\*</sup> Corresponding author.

E-mail address: Kerry.Waylen@hutton.ac.uk (K.A. Waylen).

<sup>&</sup>lt;sup>1</sup> Present address: School of Agriculture, Policy & Development, University of Reading, Agriculture building, Early gate, Whiteknights, Reading, RG6 6AR, UK.

#### ARTICLE INFO

Available online 28 February 2019

Article history: Received 2 January 2019 Received in revised form 6 February 2019 Accepted 18 February 2019

#### ABSTRACT

The data presented in this DiB article provide an overview of Monitoring and Evaluation (M&E) carried out for 3 European environmental policies (the Water Framework Directive, the Natura 2000 network of protected areas, and Agri-Environment Schemes implemented under the Common Agricultural Policy), as implemented in 9 cases (Catalonia (Spain), Estonia, Finland, Flanders (Belgium), Hungary, Romania, Slovakia, Scotland (UK), Sweden). These data are derived from reports and documents about monitoring programs that were publicly-available online in 2017. The literature on M&E to support adaptive management structured the issues that have been extracted and summarized. The data is related to the research article entitled "Policy-driven monitoring and evaluation: does it support adaptive management of socio-ecological systems?" [Stem et al., 2005]. The information provides a first overview of monitoring and evaluation that has been implemented in response to key European environmental policies. It provides a structured overview that permits a comparison of cases and policies and can assist other scholars and practitioners working on monitoring and evaluation.

© 2019 The Author(s). Published by Elsevier Inc. This is an open access article under the CC BY license (http://creativecommons. org/licenses/by/4.0/).

#### Specifications table

Data format

Subject area Environmental policy; More specific subject Monitoring; evaluation; European Policy; Water Framework Directive; Natura 2000; Agriarea **Environment Schemes** 

Type of data Tables and text

Review and analysis of any publicly-available information on monitoring programs How data was

acquired

Experimental factors In 2017 the authors searched for publicly available about monitoring programs associated with 3 policy areas: the Water Framework Directive, Natura 2000 and Agri-Environment Schemes under the Common Agricultural Policy. Authors from each organization searched for information about monitoring in the country or region of the organization where they are based: Catalonia (Spain), Estonia, Finland, Flanders (Belgium), Hungary, Romania, Slovakia, Scotland (UK), Sweden. Internet searches of grey and academic literature were used: some authors also contacted policy contacts for advice about where this information could be found, but did not use any information that was not

already publicly available.

Summarized, analyzed

Experimental features Bibliographic information on the information sources was recorded (see reference list below), and each author team searched for and summarized information about monitoring and evaluation

according to a standard template (see below).

Data source location Catalonia (Spain), Estonia, Finland, Flanders (Belgium), Hungary, Romania, Slovakia, Scotland (UK),

Sweden

Data accessibility All of the data are within this article.

Related research Companion paper to: article

Waylen, K.A.; Blackstock, K.L.; van Hulst. F.; Damian, C.; Horváth, F.; Johnson, R.; Kanka, R.; Külvik, M.; Macleod, C.; Meissner, C.; Oprina-Pavelescu, M.; Pino, J.; Primmer, E.; Rîşnoveanu, G.; Šatalová, B.; Silander, J.; Špulerová, J.; Suškevičs, M.; Van Uytvanck, J. 2019. Policy-driven monitoring and evaluation: does it support adaptive management of socio-ecological systems? Science of the Total

Environment, 662: 373-384 [2].

#### Value of the data

- The data provide the first overview of monitoring and evaluation (M&E) practices carried out by a selection European member states and regions, under 3 European environmental policies (the Water Framework Directive, the Natura 2000 network of protected areas, and Agri-Environment Schemes under the Common Agricultural Policy).
- The data permit comparison across cases as well as across policies, and so provide a baseline for comparative studies.
- The source of information used to describe monitoring in each case are provided, thus providing a baseline for researchers seeking more in-depth analyses.

#### 1. Data

The dataset provided by this article allows an overview of key aspects of monitoring and evaluation carried out in 9 cases in response to 3 European environmental policies. M&E has been identified as an essential part of adaptive management [1]: therefore the information about M&E has been extracted and summarized in terms of attributes that can support adaptive management.

The data are provided in two supplementary files. Appendix A provides a list of the reports and documents from which the data are derived. For ease of reference these lists are separated firstly by each of the 9 cases, and then within each case are subdivided by each policy. Many of the sources are not academic papers, but reports published by government and state agencies: where possible we provide weblinks for ease of access. Appendix B lists of sets of tables summarizing the authors' summaries of aspects of M&E carried out for each policy within each case. Sets of tables describe firstly what is monitored, then describe how monitoring is carried out, and finally describe what is known about how monitoring information is used in evaluation. The summary judgements in these tables are derived from the authors' review and analysis of the documents provided in Appendix A.

#### 2. Experimental design, materials, and methods

In early 2017, nine teams of co-authors agreed to collect information about policy-driven monitoring and evaluation in their country (or in their region, where environmental policy has been devolved). The three European policy areas were: the Water Framework Directive, Natura 2000 network of protected areas, and Agri-Environment Schemes under the Common Agricultural Policy. The nine cases were; Catalonia (Spain), Estonia, Finland, Flanders (Belgium), Hungary, Romania, Slovakia, Scotland (UK), Sweden. In mid-2017 each team used major search engines (e.g. google) to search for any publicly available documentation about monitoring under each policy area in their region or country. To ensure all relevant documents were identified, authors also consulted experts from their networks: however, the study explicitly used only publicly-available documentation, even when participants, their institutions or other experts may have had "insider" or tacit knowledge of the practical implementation of monitoring of some schemes. The final set of documents is contained within the references list. They then documented policy-driven monitoring in their country or region, for all three policy areas, using a common template which is already available as supplementary information to Ref. [2]. The templates were filled in based on information available from publicly available documents, with references to these documents made for all statements within the completed templates. Please see below for a copy of the template which guided the expert review of the documents. The criteria in these table are derived from previously published work on monitoring and evaluation suitable for supporting adaptive management [3].

#### Acknowledgments

We thank the ALTER-Net High Impact Action for its financial support for the study that has led to this paper. ALTER-Net (http://www.alter-net.info/) is a network of partner institutes who research biodiversity and ecosystem services and inform policymakers and the public about these topics. The research time for KAW, KLB, KM and FH was funded by the Scottish Government Strategic Research Programme 2016—21. Research time for JP was funded by CREAF (Centre for Ecological Research and

Forestry Applications) and the Autonomous University of Barcelona. Each author team would also like to thank colleagues who provided input or expert feedback: in Catalonia, Carles Castells (Barcelona Province Council) and Pau Sainz de la Maza (Autonomous Government of Catalonia); in Estonia, Irja Truumaa (Estonian Ministry of Environment); in Flanders, Desiré Paelinckx, An Leyssen, Jo Packet (Research Institute for Nature and Forest - INBO); in Scotland, Alison Hester, Antonia Eastwood, Marc Stutter, Rob Brooker, Robin Pakeman; and Sophie Tindale (James Hutton Institute); in Slovakia, Miriam Vlachovičová (the Slovak Academy of Sciences); in Sweden, Pavel Bina (Swedish Species Information Centre, SLU) and Katarina Kyllmar (Department of Soil and Environment, SLU).

#### **Transparency document**

Transparency document associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2019.103785.

#### Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.dib.2019.103785.

#### References

- [1] C. Stem, R. Margoluis, N. Salafsky, M. Brown, Monitoring and evaluation in conservation: a review of trends and approaches, Conserv. Biol. 19 (2) (2005) 295–309.
- [2] K.A. Waylen, K.L. Blackstock, F.J. Van Hulst, C. Damian, F. Horváth, R. Johnson, R. Kanka, M. Külvik, C. Macleod, C. Meissner, M. Oprina-Pavelescu, J. Pino, E. Primmer, G. Rîşnoveanu, B. Šatalová, J. Silander, J. Špulerová, M. Suškevičs, J. Van Uytvanck, Policy-driven monitoring and evaluation: does it support adaptive management of socio-ecological systems? Sci. Total Environ. 662 (2019) 373–384.
- [3] K.A. Waylen, K.L. Blackstock, Monitoring for Adaptive Management or Modernity: lessons from recent initiatives for holistic environmental management, Environ. Pol. Gov. 27 (4) (2017) 311–324.