FRB
FONDATION POUR LA RECHERCHE SUR LA BIODIVERSITÉ

Biodiversity Knowledge

ENVIRONMENT AGENCY AUSTRIA umweltbundesamt

BiodiversityKnowledge, a European meta-network for collecting and synthesising knowledge about biodiversity and ecosystem services.

ENHANCING NATURAL PEST CONTROL : WHAT DO WE KNOW?

A PROJECT TO COLLATE AND SYNTHESIZE SCIENTIFIC AND NON-ACADEMIC OR TRADITIONAL KNOWLEDGE TO HELP AGRICULTURE

All over Europe, farmers are trying to decrease the use of pesticides and chemicals, whilst maintaining high yields and quality standards. Pest control agents living naturally in farmland (e.g. birds, insects, bats...) can help, by eating, parasitising or competing with pests. To attract these beneficial animals, hedgerows, ditches, holes, attractive plants and other resources can be protected or grown to provide food, shelter and space to breed.

Do we know whether such habitat management really enhances natural pest control?

- How can we collect knowledge from scientists, advisors and managers, as well as traditional farming knowledge, on interventions that favour natural pest control?
- How can we synthesize these different types of knowledge to provide a sound and reliable report to decision-makers?
- How can we organise ourselves at the national and European scales to encourage exchanges of knowledge and know-how?
- How can this work inform policy and research?
- How can we provide useful feedback to farmers, and benefit from their comments when testing our recommendations?

Join the network and contribute

LET'S MOBILISE TO...

◗ Create a list of possible habitat management interventions to favour natural pest control.

◗ Examine the evidence for the effectiveness of different interventions by synthesizing scientific, technical and traditional knowledge and experience. Highlight knowledge gaps, innovations and individual experiments.

◗ Use existing networks of end-users, managers, farmers, consultants and decision-makers to facilitate knowledge exchange, and strengthen our impact on decision-makers, from the local to the national and European levels.

THE EXPECTED OUTCOMES

◗ List of habitat management interventions, including innovations.

◗ List of knowledge holders and stakeholders in functional agro-biodiversity in several countries in Europe (unless one already exists).

◗ Evidence of « useful » or « useless » interventions, as provided by the scientific literature but also directly by networks of farmers, consultants, technicians… Increased knowledge of conditions under which an intervention works.

◗ Systematic review and synopsis of evidence based on scientific and grey literature (using standard methods developed in medicine).

◗ Identification of needs for subsequent research programmes and opportunities of collaboration to fill knowledge gaps, build capacity and broker knowledge.

◗ Various reports and publications about the project and its outcomes.

◗ Enhanced knowledge exchange and comparison of situations between European countries.

BiodiversityKnowledge is a project funded by the European Commission. It aims to establish a methodology to collect and synthesize all types of knowledge about biodiversity and ecosystem services, to inform decision-makers. It is building on existing knowledge networks, and encouraging contributions from many knowledge holders (scientists, managers, consultants, research users...). Procedures are established to make sure that the results are sound and objective, that all types of knowledge are taken into account and that all possible knowledge holders have a chance to contribute.

The Foundation for Research on Biodiversity, Paris, France, is the case-study leader for the meta-network Agriculture and biodiversity. Together with 17 other European partners, it contributes to the brainstorming and experimentation about how to exchange knowledge. It is linked to the preparation of stakeholders to contribute to the International Platform for Biodiversity and Ecosystems Services (www.ipbes.net) and the work of its possible regional and sub-regional (national) counterparts.

A prototype for knowledge synthesis has been designed in 2011 and is being tested using three case-studies in the marine realm (kelps), conservation (green infrastructures) and agriculture (natural pest control).

WORKING GROUPS TO EXCHANGE KNOWLEDGE AND GENERATE IDEAS

1. WORKING GROUP KNOWLEDGE NETWORKS

- Identify knowledge holders and their hubs or networks : where are different types of knowledge held?
- Identify end-users of knowledge about natural pest control : decision-makers, networks, businesses, NGOs…
- Build up a map or a diary of existing networks and rely on them to relay messages and facilitate knowledge exchange.
- Decide together which tools and processes to promote that would facilitate communication and knowledge exchange among knowledge holders/users.

2. WORKING GROUPS SYNTHESIS (several groups, depending on actions on habitat/landscape)

Synthesize scientific knowledge on each intervention, using systematic review and synopsis methods
(see Collaboration for Environmental Evidence www.environmentalevidence.org and the Conservation Evidence project www.conservationevidence.com). These methods are derived from evidence-based approaches in medicine (Cochrane collaboration) and acknowledge by the scientific community.

- Include non-academic knowledge in this review: technical, ecological knowledge from farmers, technicians and managers.
- Make sure that the results and outcomes are relevant to policy and society, and include economic information, if available.

3. WORKING GROUP DECISIONMAKERS AND USERS

- Make sure that the reports and publications are adapted to an audience of policy-makers and users.
- Identify the best possible media and tools to transfer this knowledge to decision-makers, and get to know whether it was used or not.
- Define efficient strategies to transfer messages about needs for knowledge to researchers.
- Identify the needs for evidence expressed by users and decision makers and consequence on priorisation of programmes for synthesis, research and capacity building.

WHO CAN CONTRIBUTE ?

Scientists, managers, farmers, technical advisors, teachers... let us know, join the network and contribute.

WHEN ?

Working groups will meet between December 2012 and March 2013. Contact us to get the details about these events.

HOW TO CONTRIBUTE

To join the network of knowledge you can:

- **Contact us** and tell us about your experience, let us know about your knowledge (email, fax, mail, telephone),
- Let us know about your **network or structure/organisation,**
- **Comment on the protocol** describing the method we are using to synthesize knowledge on interventions favouring natural pest control,
- **Host one or several meetings of the Working groups,**
- **Contribute to the systematic review and synopsis**, including a critical assessment of the literature, synthesis of results and draft of recommendations,
- **Provide comments** on various documents produced by working groups, to incorporate your experience and knowledge,
- Answer our **online survey** at : http://fr.surveymonkey.com/s/WDR92QZ,
- Contribute to our **big seminar** January 17-18th, in Paris
- Join us on LinkedIn (look for the group "natural pest control").

Biodiversity Knowledge www.biodiversityknowledge.eu

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