



*Testing the NoK Prototype – Case study Agriculture*

## REPLACING PESTICIDES BY NATURAL PEST CONTROL

Barbara Livoreil, FRB  
Peter Zulka, EEAustria  
Cécile Blanc, FRB

and collaborators





## THE REQUEST & DIALOGUE

**Which types of landscape management are effective at maintaining or increasing natural pest regulation in a context of decreased use of pesticides ?**



## PESTS

## WEEDS

## BIRDS

## INSECTS

## RODENTS

## DISEASES



## CULTURES

## ECOSYSTEM SERVICES

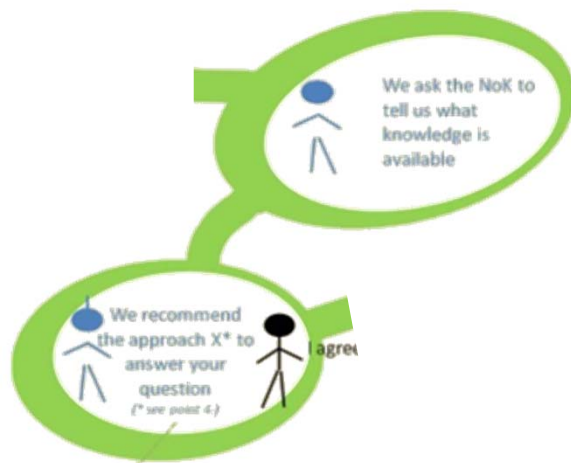
### Agents (helpers)

- Predators
- Competitors
- Parasitoids

### Habitat management

## PESTICIDES

- Herbicides
- Insecticides
- Avicides (birds)
- Rodenticides
- Fongicides (fungus)
- Parasiticides
- Bactericides
- and so on*



## THE CALL TO THE NoK

-Call to the hubs identified by KNEU Work Package 1 ( E. Balian et al.) by email

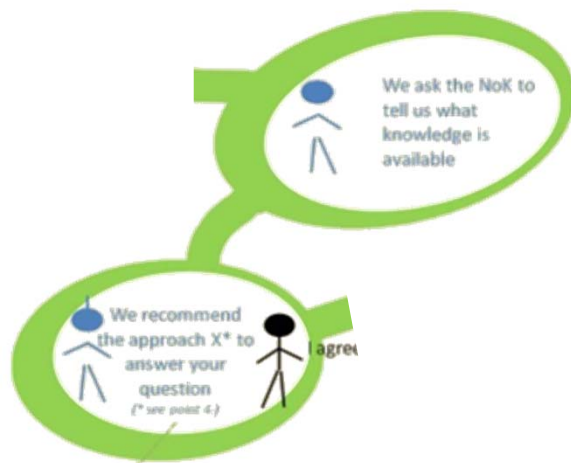
Very little feedback

- FRB, EAA and ALTER-NET (+ some individuals) relayed call to NoK based on own experts databases, or authorship from bibliography

Expressions of interest

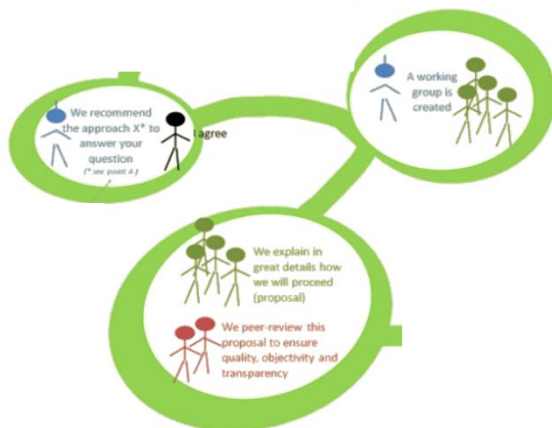


## SCOPING LITERATURE



- Initial very broad searches on Web of Knowledge, Scopus and Biosis: about 6000 initial hits
- Identification of existing reviews and meta-analysis
- Identification of many research projects: Ecophyto2018, APPEAL , SMaCH, various calls for tenders...
- List of 30 broad interventions identified by Sutherland et al. (Cambridge, Conservation evidence group), or other networks (ENDURE...)





## THE APPROACH (ES)

- Synergy with current programme Synopsis of Evidence (Sutherland, Cambridge)
- Enlargement to a **SYSTEMATIC MAP** (syst. review approach)
- Possible **SYSTEMATIC REVIEWS** on a subset of topics ?
- **EXPERT CONSULTATION** for traditional knowledge and grey literature
  - group of stakeholders
  - group of farmers
- Possible final recommendations as an Adaptive Management approach to tackle knowledge gaps and build-up evidence base



## WHAT'S NEXT



- Be realistic (very little resources) means careful strategic planning
- Back to requesters to identify priorities (crops, pests, interventions...)
- Clarifying possible collaborations (Sutherland, INRA/Searches, Experts for workshop or working group...)
- Draft protocol



THANK YOU



**Contacts:**

Barbara Livoreil  
Peter Zulka

[barbara.Livoreil@fondationbiodiversite.fr](mailto:barbara.Livoreil@fondationbiodiversite.fr)  
[KlausPeter.Zulka@umweltbundesamt.at](mailto:KlausPeter.Zulka@umweltbundesamt.at)