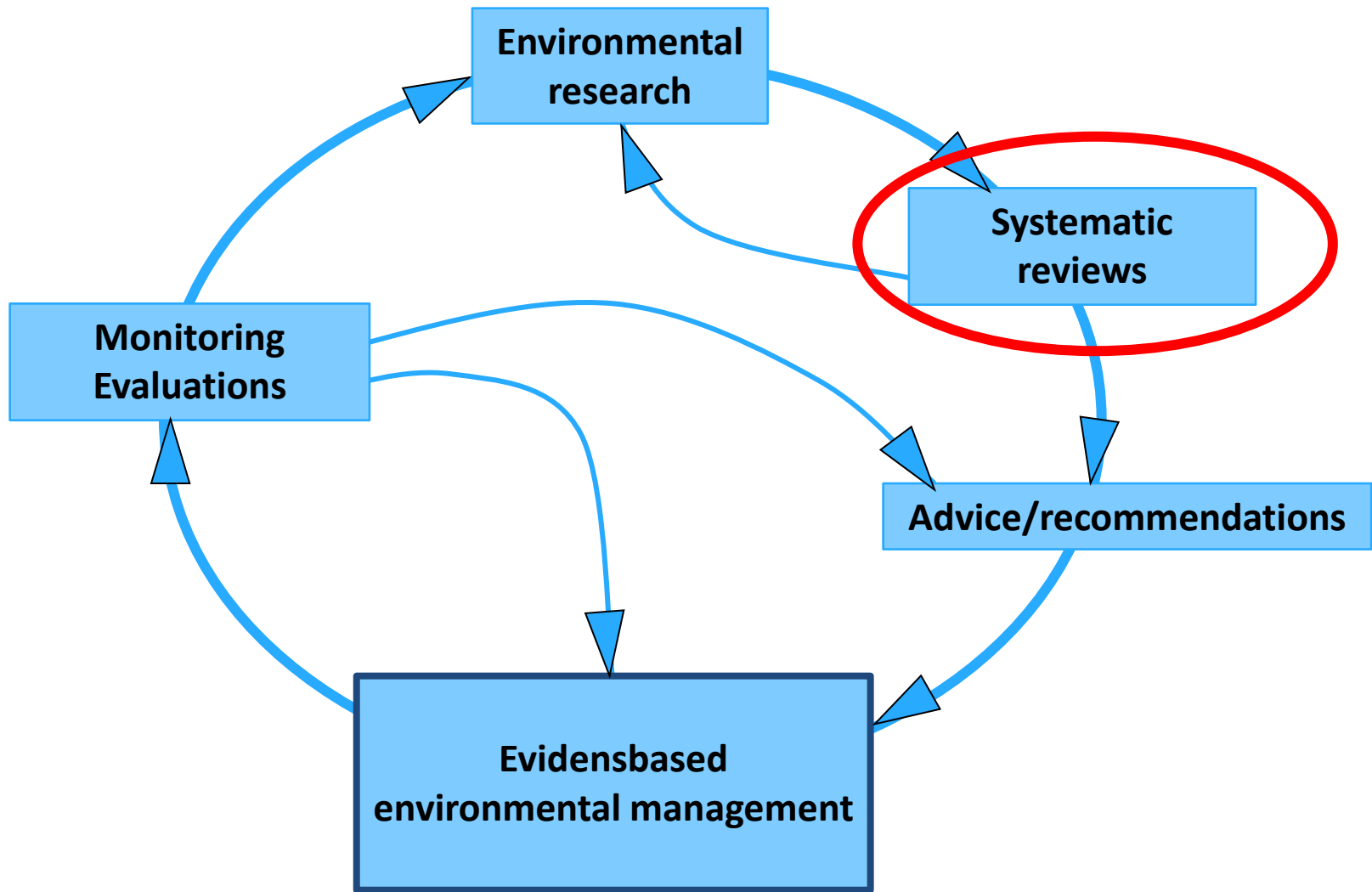


Systematic reviews – a solid base for environmental policies and management

EEEN 2014
Helsinki 28th April

Sif Johansson, Claes Bernes,
Matilda Miljand, Magnus Land,
Bo Söderström







- Evaluation of environmental protection measures – do they have the intended effect?
- Evaluation of pressures from human activities – how do they affect the environment?

Mandatory criteria

The topic should:

- deal with conditions in the natural environment
- be well-defined, conceptually clear and reasonably limited in scope,
- deal with problem descriptions or countermeasures whose scientific support is insufficiently known (or questioned),
- be covered in the scientific literature (or by other investigations) to such an extent that a systematic assessment can be implemented.

The answers should have clearly defined recipients able to put them into practice or to benefit from them in other way.

Stakeholder meetings

KEMI

Swedish Chemicals Agency



TRAFIKVERKET

SWEDISH TRANSPORT ADMINISTRATION



CBM Swedish
Biodiversity Centre



SWEDISH ENVIRONMENTAL
PROTECTION AGENCY

Swedish Agency
for Marine and
Water Management



Swedish Board
of Agriculture



REGERINGSKANSLIET
Government Offices of Sweden



IVL Swedish Environmental
Research Institute



SGU

Sveriges geologiska undersökning
Geological Survey of Sweden



The Swedish Research Council Formas

Committed to excellence in research for sustainable development



Swedish Society for Nature Conservation



Havsmiljöinstitutet

Swedish Institute for the Marine
Environment

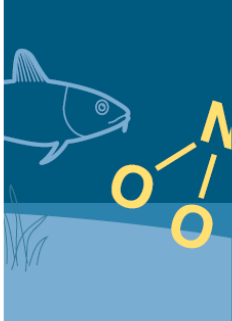
ArtDatabanken

The Swedish Species Information Centre

MISTRA

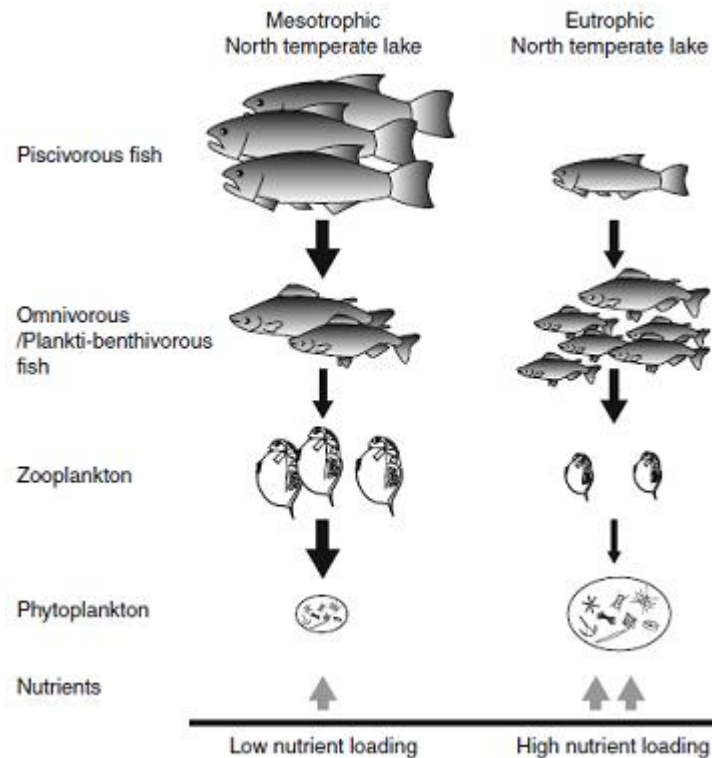


Zero Eutrophication



AUTHORITY RESPONSIBLE:
SWEDISH AGENCY FOR MARINE
AND WATER MANAGEMENT

Can biomanipulation improve water quality in eutrophicated lakes?

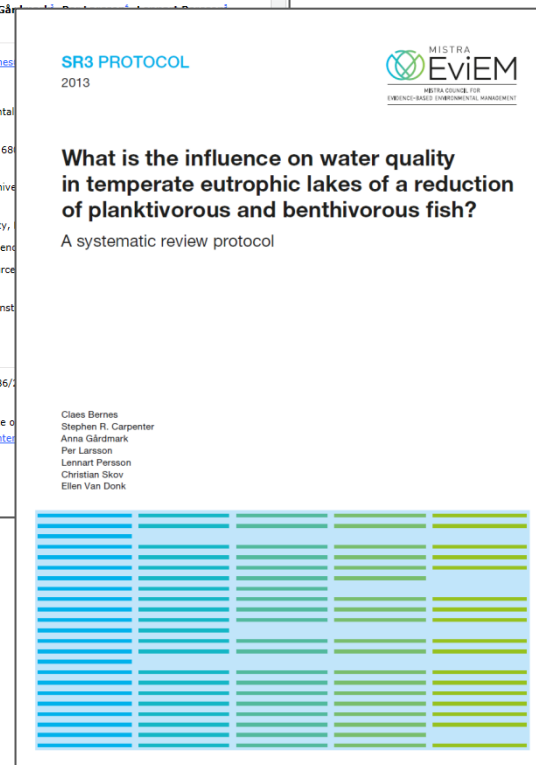
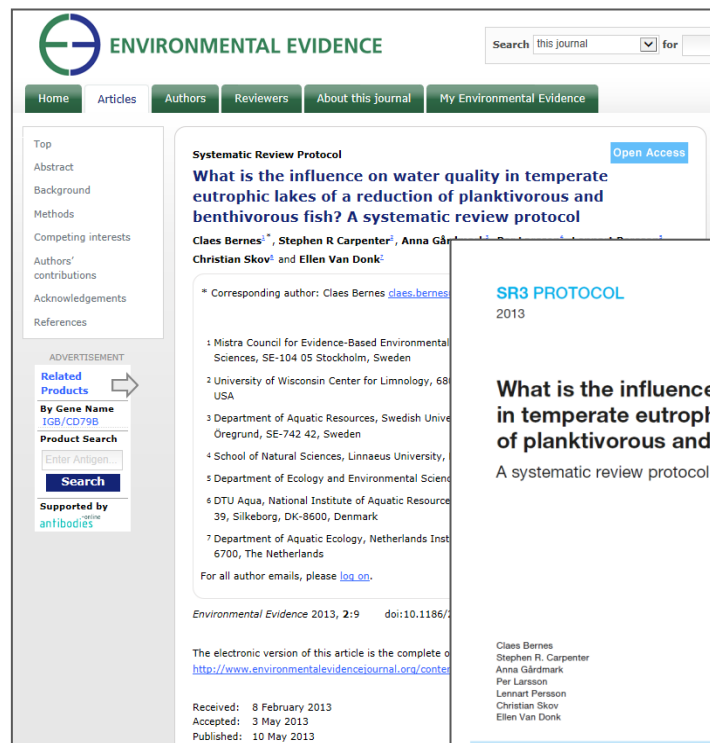


SR3.Can biomanipulation improve water quality in eutrophicated lakes?

Chair. Per Larsson
Linné University

Stephen R. Carpenter, USA
Anna Gårdmark, Sweden
Lennart Persson, Sweden
Christian Skov, Denmark
Ellen Van Donk, Netherlands

EviEM: Claes Bernes



Comments from stakeholders;
- meeting
- draft protocol at the net



PROJECTS

HOW WE WORK

NEWS

ABOUT US

PROJECTS

[Managing protected forests](#)

[Phase-out of PFAS chemicals](#)

[Soil organic carbon stocks](#)

[Fish removal in eutrophic lakes](#)

[Wetlands as nutrient traps](#)

[Reindeer grazing](#)

Can biomanipulation improve water quality in eutrophicated lakes?



Fishing in Lake Finjasjön. Photo: Johan Forssblad.

Reducing the populations of roach and bream in a eutrophicated lake can be a way of curbing algal blooms and similar problems. The method has been tried in many parts of the world, often with good results, but in Sweden it is still uncommon. EviEM now plans to assess how useful it is.

Project status

Planning
of project

Review
of protocol

Systematic review
conducted

Review
of report

Approval
and publication

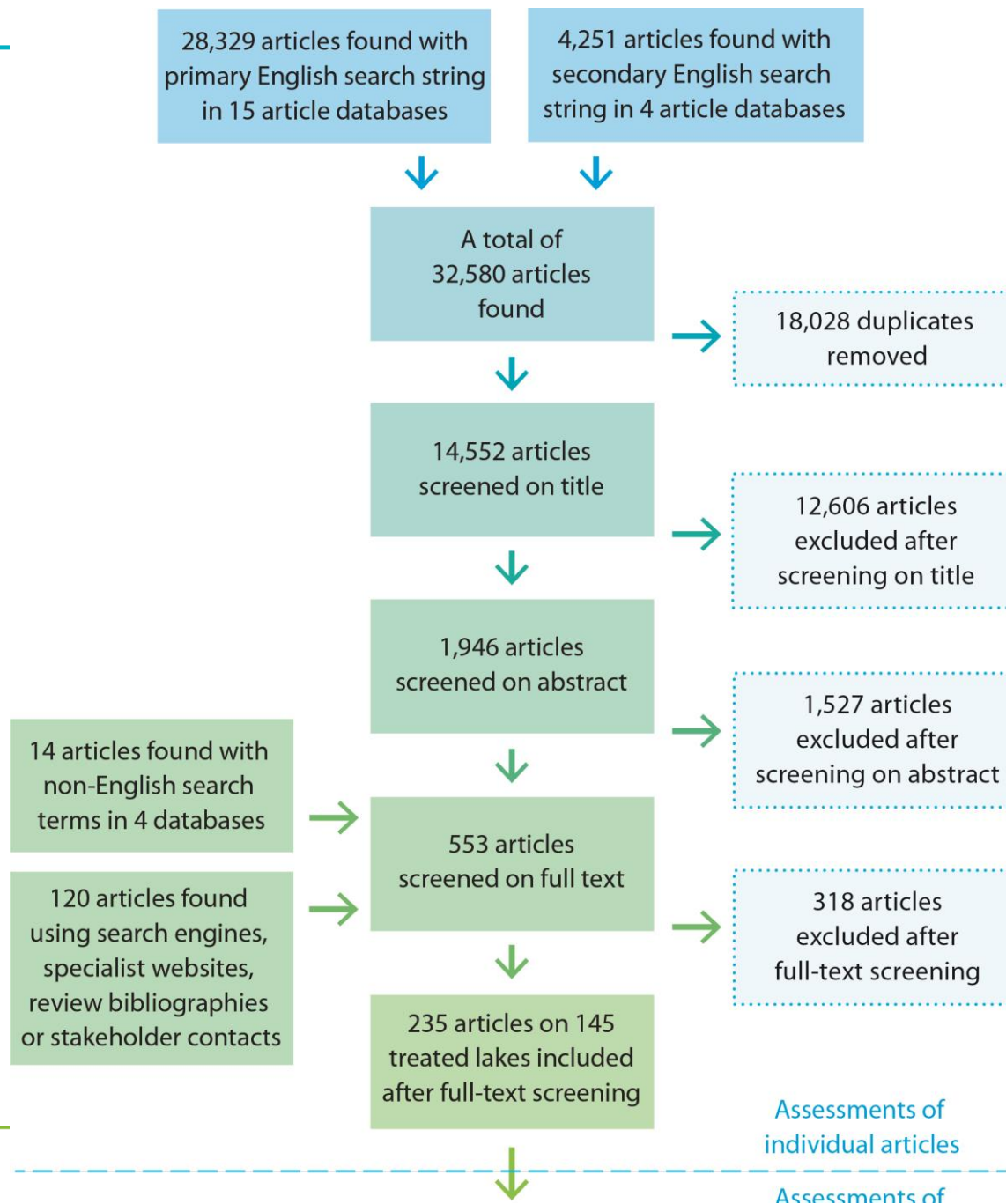
SHARE

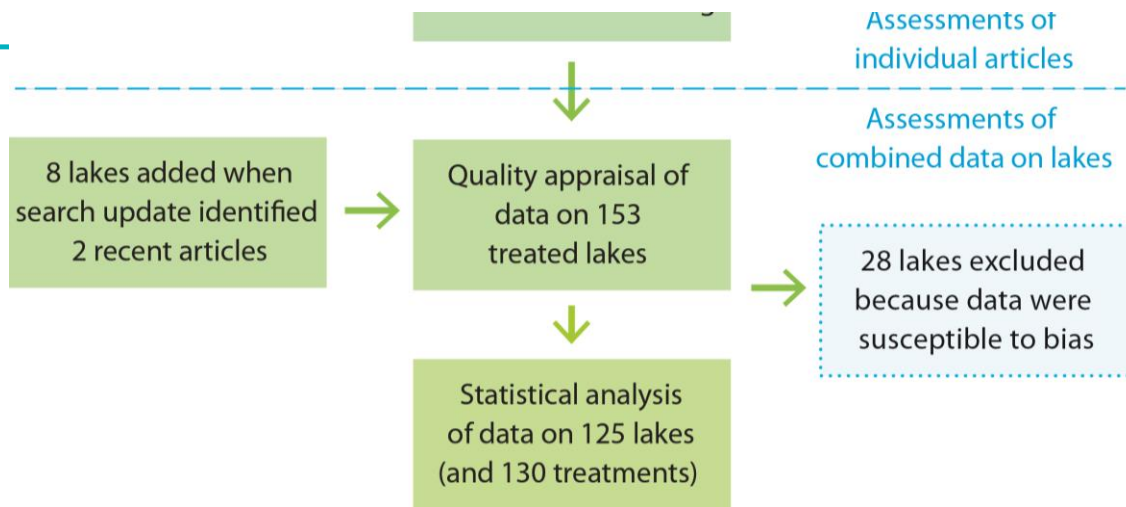


REVIEW PROTOCOL

[Published by EviEM](#)

[Published in Environmental Evidence](#)





— What is a systematic review?

The idea: To provide the best possible scientific basis for some kind of activity (healthcare, education, environmental management etc.)

Well-defined topics

Narrow issues, but possible to provide specific answers

Literature review

Based on existing studies (articles, grey literature but also unpublished data)
Focused on observations (rather than model studies, interpretations etc.)

Rigour

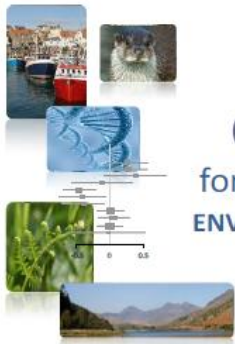
Meticulous planning, documented in a detailed review protocol
Thorough and systematic searches for data
Aggregation and weighing of data from many different studies
This is time-consuming!

Transparency

Comments invited from stakeholders both before and after the evaluation
Detailed documentation of all assessments and decisions made during the review



COLLABORATION FOR
ENVIRONMENTAL EVIDENCE



GUIDELINES for SYSTEMATIC REVIEWS in ENVIRONMENTAL MANAGEMENT

Version 4.2
March 2013

Compiled on behalf of CEE by



Centre for Evidence-Based Conservation
Bangor University, UK



The Cochrane Collaboration

Working together to provide the best
evidence for health care



THE CAMPBELL COLLABORATION

What helps? What harms? Based on what evidence?

... preparing, maintaining and disseminating systematic reviews in
education, crime and justice, social welfare and international
development



The CEE is an international network of scientists and environmental managers working towards the conservation of biodiversity and a sustainable environment by promoting systematic reviews of environmental issues.



**Centre for Evidence-Based
Conservation**



**The Collaboration for Environmental
Evidence's
Johannesburg Centre – CEE Johannesburg**



We work for environmental management to be placed on a scientific foundation. Through systematic reviews of various environmental issues, we aim to improve the basis for decisions in Swedish environmental policy.



EviEM Executive Committee

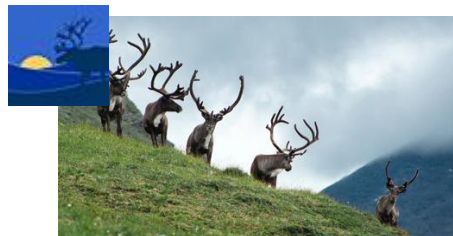


The Secretariat

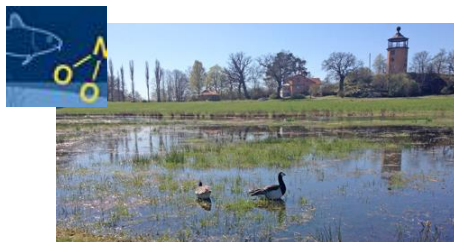


Financed by the Swedish Foundation for
Strategic Environmental Research 2012-2016

Ongoing EviEM systematic reviews



SR1. How is mountain vegetation affected by reindeer grazing?



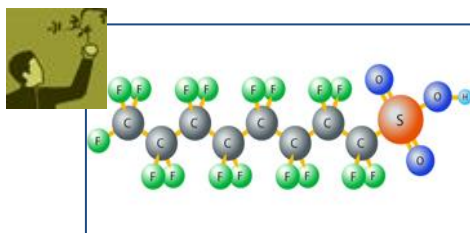
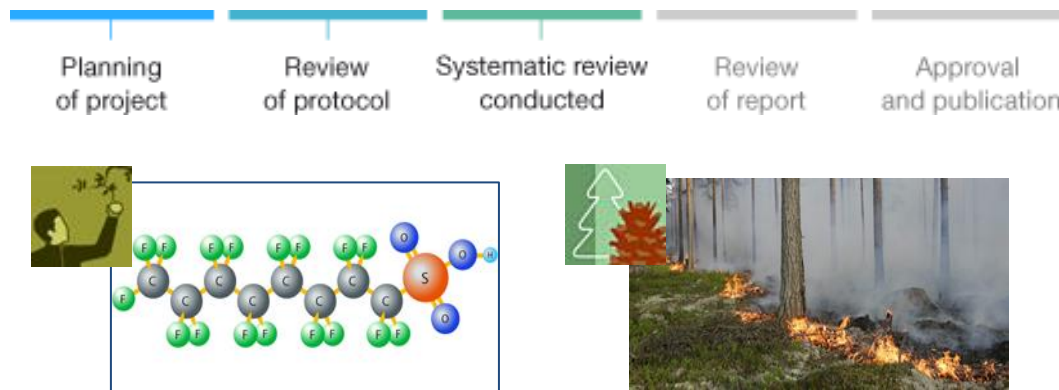
SR2. How effective are wetlands for nitrogen and phosphorus removal?



SR3. Can biomanipulation improve water quality in eutrophicated lakes?



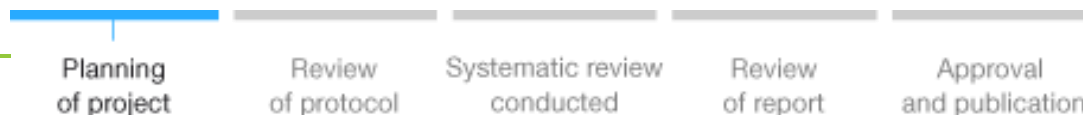
SR4. How do different farming methods affect the organic carbon content of arable soils?



SR5. Have the phase-outs of PFASs affected concentrations in the environment?



SR6. How is biodiversity influenced by active management of protected forests?



CEE review 09-020

ARE WOODLAND KEY HABITATS BIODIVERSITY HOTSPOTS IN BOREAL FORESTS?

Systematic Review

TIMONEN, J., GUSTAFSSON, L., KOTIAHO, J.S. & MÖNKKÖNEN, M.

Department of Biological and Environmental Science - P.O.Box 35, FI-40014 - University of Jyväskylä - Finland

Are woodland key habitats more diverse than production forests?

NEWS | 2012-06-03

Four scientists from Sweden and Finland have recently conducted a systematic review of woodland key habitats. Their results confirm that such biotopes are usually more species-rich than ordinary production forests.



Deciduous swamp woods of this kind count as key habitats since they often contain red-listed species. Photo: Claes Bernes.

In Swedish forests, more than 80,000 woodland key habitats (WKHs) have been identified to date. These consist of small woodland areas where red-listed species are, or could be, found. WKHs may, for example, be patches of forest with a high proportion of old trees, fallen timber and dead wood: such areas are thought to contain more red-listed species than are normally found in areas of large-scale forestry. The term 'woodland key habitats' is used in Norway, Finland, the Baltic countries and Russia as well, although the definition may not be precisely the same as in Sweden.

Correspondence:
Telephone:

Draft protocol published on website

Cite as: Timonen
biodiversity hotspot
Evidence: www.cbd.int/doc/abstracts/2006/06/06-06-01-en.pdf

PS3 PILOT STUDY
2016

Is thiamine deficiency a significant cause of declining bird populations in the Baltic Sea area?

Co-Editorial Board



Thank you !

www.eviem.se

