

**Andrew S. Pullin**  
**Centre for Evidence-Based Conservation**  
**University of Wales Bangor, UK**

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# **Introduction to the work of the CEBC**



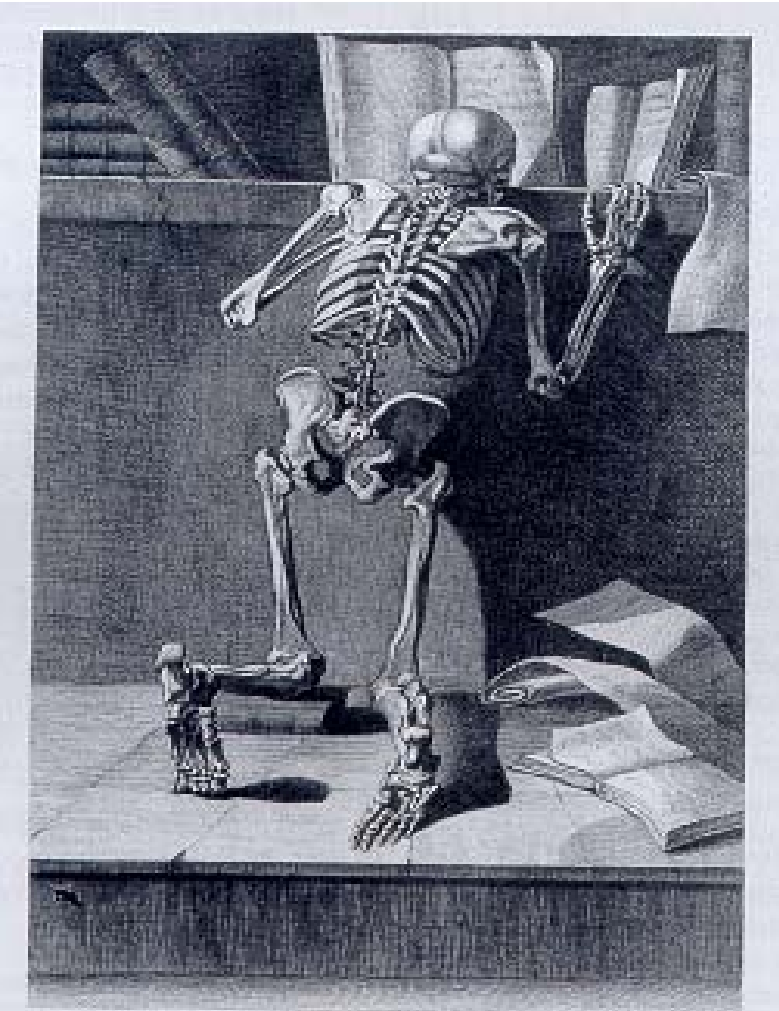
# The Goal: making environmental management more effective

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- **Focus on decision-makers in policy and practice**
- **What works and what doesn't in the context of interventions**

# Mortality – a barrier to searching scientific literature



Pullin & Knight 2001. *Conservation Biology*

Pullin et al. 2004. *Biological Conservation*

Sutherland et al. 2004. *TREE*

Pullin & Knight 2005. *Conservation Biology*

# THE COCHRANE COLLABORATION



*The reliable source of evidence in healthcare*

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We are an international not-for-profit organisation, providing up-to-date information about the effects of health care. [learn more](#)

We produce the Cochrane Database of Systematic Reviews, part of The Cochrane Library, the definitive resource for evidence-based health care.

## **The Cochrane Library**

contains regularly updated evidence-based healthcare databases.

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## **Top resources:**

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[Cochrane Library access](#)

[Authors' Handbook](#)

[Training resources](#)

[Review Manager software](#)

[Cochrane Manual](#)

[Archie \(IMS\)](#)

## **Highlights:**

[Newsroom & Our growth](#)

[Newcomers' Guide](#)

[Evidence Aid](#) - Resources for healthcare emergencies

[Cochrane Reviews on ISI!](#)

## **Cochrane Colloquium!**

[Dublin, Ireland, 23-26 Oct. 2006](#)

[Previous Cochrane Colloquia](#)

# Cochrane Review Groups

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[Cochrane Acute Respiratory Infections Group](#)

[Cochrane Airways Group](#)

[Cochrane Anaesthesia Group](#)

[Cochrane Back Group](#)

[Cochrane Bone, Joint and Muscle Trauma Group](#)

[Cochrane Breast Cancer Group](#)

[Cochrane Colorectal Cancer Group](#)

[Cochrane Consumers and Communication Group](#)

[Cochrane Cystic Fibrosis and Genetic Disorders Group](#)

[Cochrane Dementia and Cognitive Improvement Group](#)

[Cochrane Depression, Anxiety and Neurosis Group](#)

[Cochrane Developmental, Psychosocial and Learning Problems Group](#)

[Cochrane Drugs and Alcohol Group](#)

[Cochrane Ear, Nose and Throat Disorders Group](#)

[Cochrane Effective Practice and Organisation of Care Group](#)

[Cochrane Epilepsy Group](#)

[Cochrane Eyes and Vision Group](#)

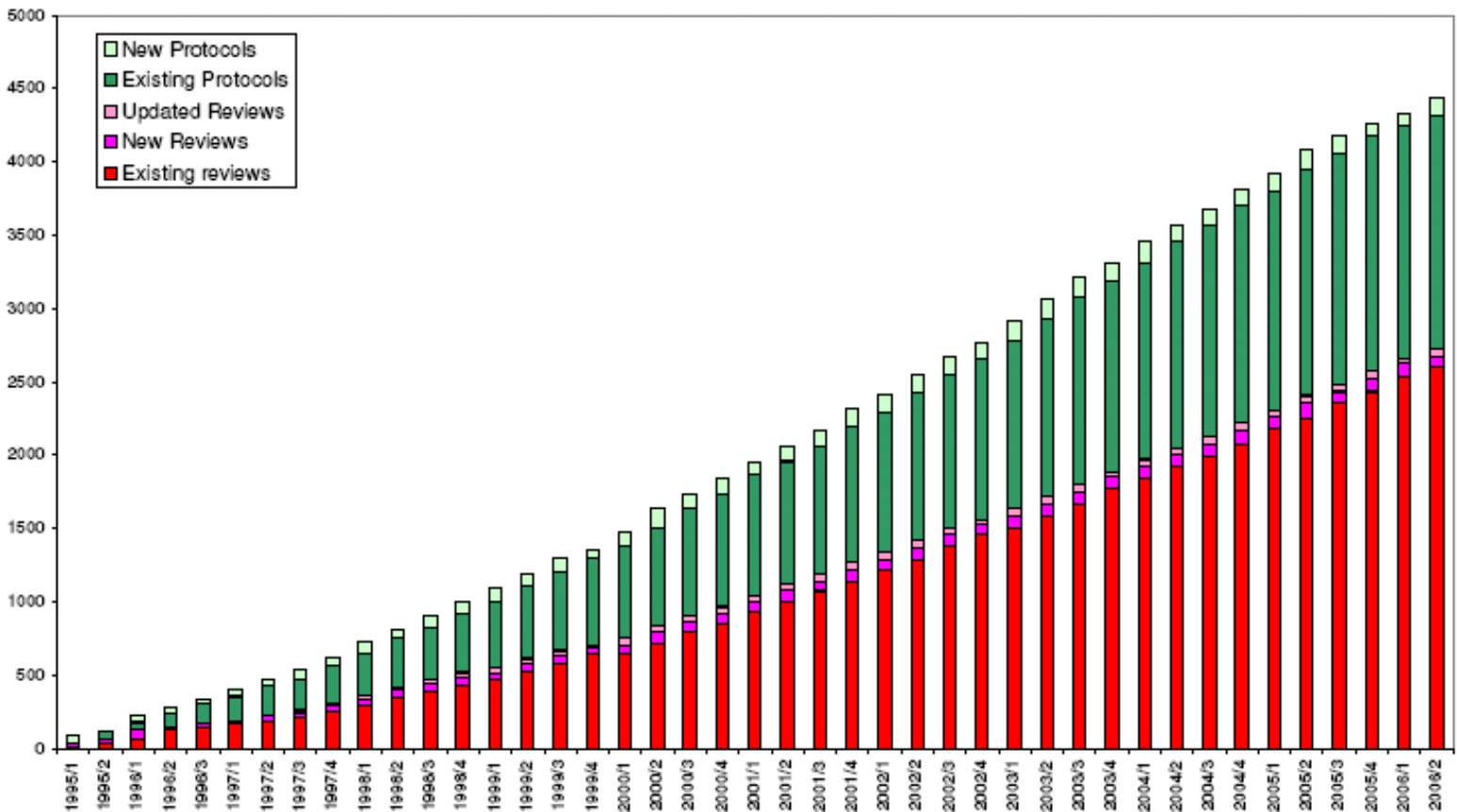
[Cochrane Fertility Regulation Group](#)

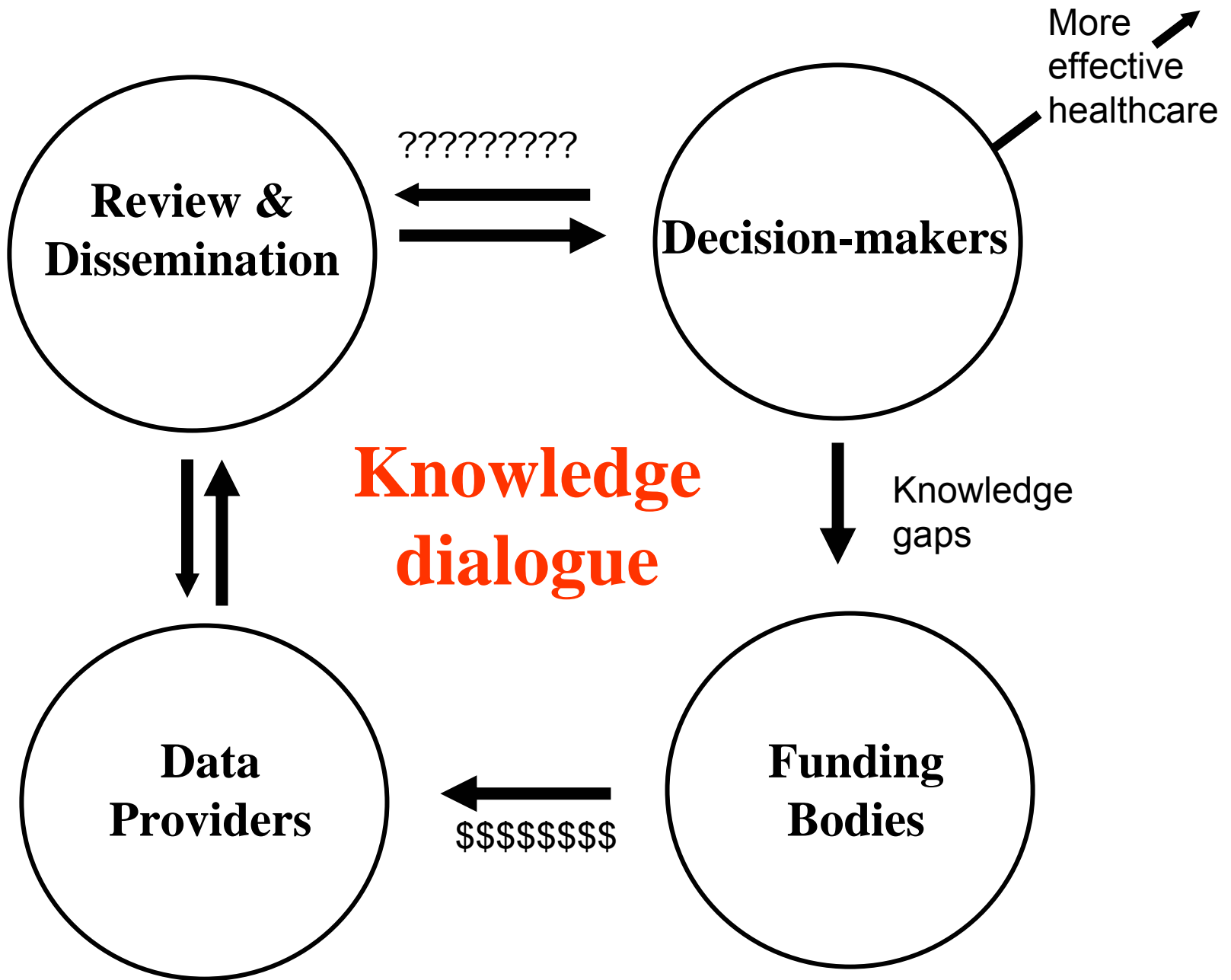
[Cochrane Gynaecological Cancer Group](#)

[Cochrane HIV/AIDS Group](#)

# Growth of the Cochrane Library

Reviews and protocols for reviews on the  
*Cochrane Database of Systematic Reviews*





# Features of an Evidence-Based Framework

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- demands explicit user-generated question (including subject, intervention and desired outcome)
- systematic review and evaluation of evidence (methodology ensuring standards of rigour, incl. peer review)
- “push” delivery of information to point of need (active dissemination tailored to end user)



# The Challenge

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**Can we construct something similar for environmental management?**

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# Centre for Evidence-Based Conservation

**The Centre for Evidence-Based Conservation was established in 2003 with the goal of supporting decision making in conservation and environmental management through the production and dissemination of systematic reviews on the effectiveness of management and policy interventions. With support from a wide range of organisations in the environmental and academic sectors the CEBC now acts as both a source of evidence and co-ordinator of a fast-growing collaborative network undertaking systematic reviews. This website acts as the primary gateway to reliable information on effectiveness based on the best available scientific evidence.**

## About CEBC

- [Background To CEBC](#)
- [Introduction to Systematic Review](#)
- [Getting involved in Evidence-Based Conservation](#)
- [CEBC News and Events](#)
- [CEBC Job Opportunities](#)

## CEBC Library

- [Protocols](#)
- [Systematic Reviews](#)
- [External Publications](#)
- [Conference Presentations](#)

## Systematic Review Terminology

## Consortium Partners

## Contact Us

# Methodological development: Stages of a systematic review

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- Formulating a question (stakeholder engagement)
- Generating a protocol (peer reviewed)
- Systematic searching
- Data selection
- Data quality assessment (critical appraisal)
- Data extraction
- Synthesis of data (meta-analysis)
- Implications

Guidelines now published as Pullin & Stewart 2006. *Conserv. Biol.*

# Does the use of in-stream structures and woody debris increase the abundance of salmonids?

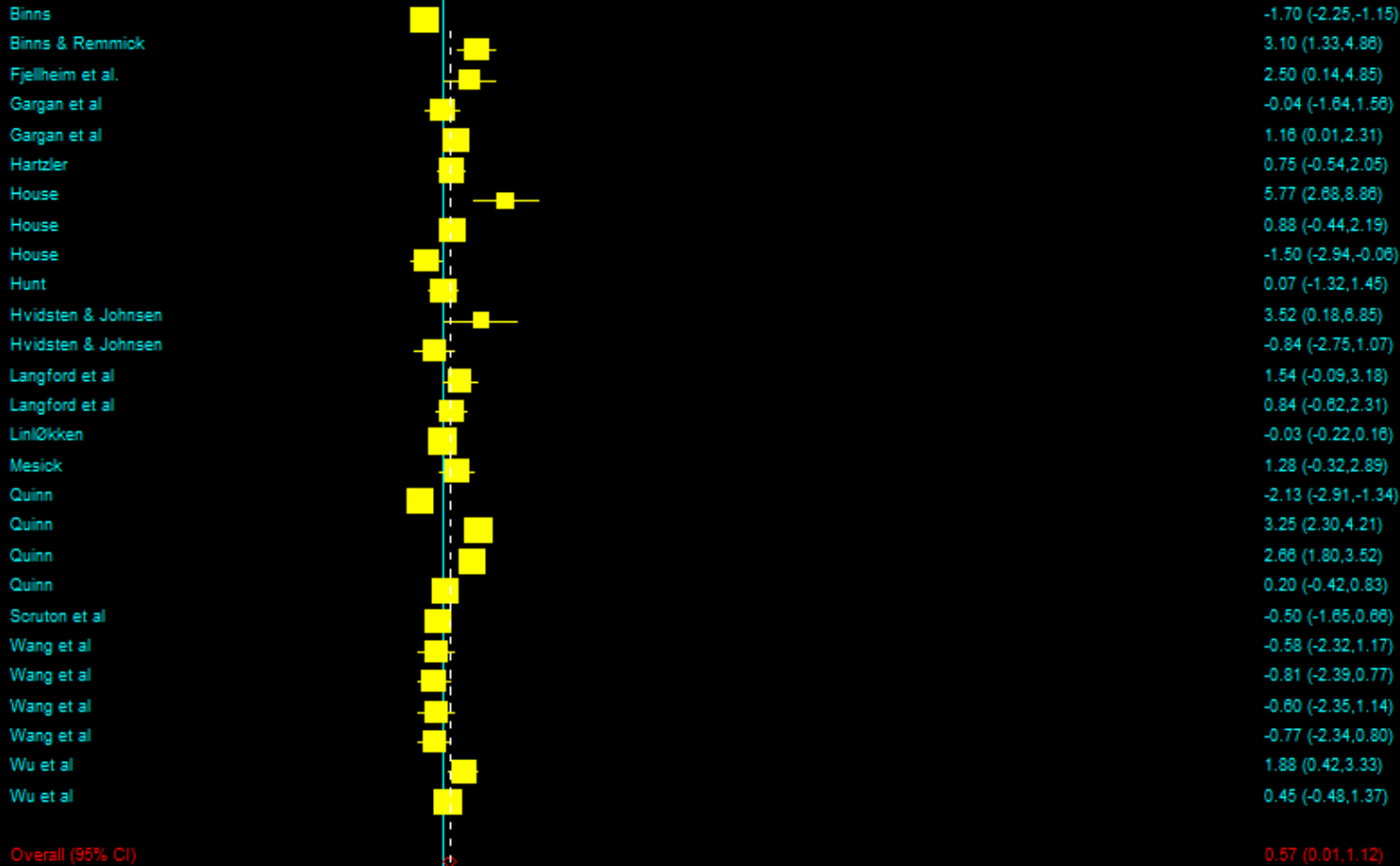
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# In-stream devices

Study —

Standardised Mean diff.  
(95% CI)



-5 0 5

75

Standardised Mean diff.

# Is evidence-based approach cost effective?

Annual spend about \$40million in England & Wales.  
At least 10x this figure worldwide

Assume 10% uptake of knowledge

Each review cost c \$100,000

Thus about 1 in 400 reviews need to  
have this outcome for the process to be  
cost effective

Using future discounting about 1 in 10,000 reviews  
have to be this effective for it to be worthwhile

# Next Steps

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- Development of independent organisation to promote systematic review methodology and co-ordinate 'Cochrane-style' collaboration

## ***'Collaboration for Environmental Evidence'***

- Development of web-based library of reviews

***[environmentalevidence.org](http://environmentalevidence.org)***

# Realising the potential of data



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- Significant benefits in synthesising data on issues of concern to environmental practice and policy – **the concept of leverage**
  - Funding bodies should encourage Review Groups to form and undertake systematic reviews



# Collaboration for Environmental Evidence systematic reviews for conservation & environmental management

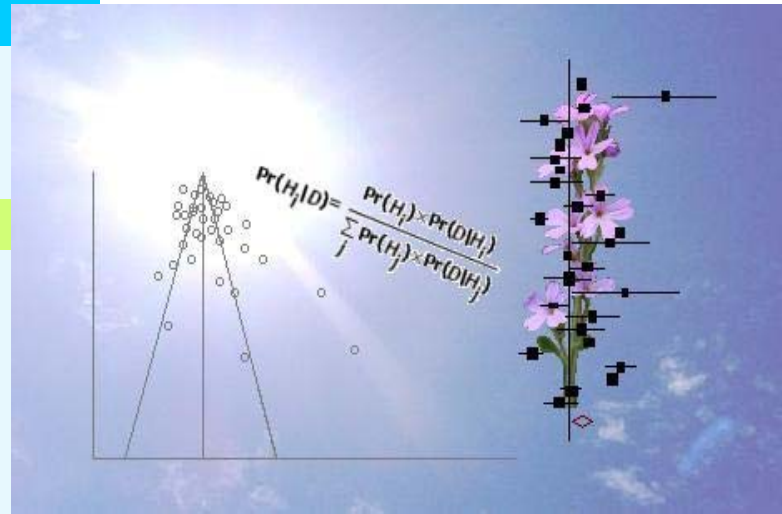
## Welcome to the Collaboration for Environmental Evidence

### CEE Home

- [About CEE](#)
- [News and events](#)
- [Contact us](#)

### Resources - Get involved

- [Introduction to systematic review](#)
- [Information for users](#)
- [Information for authors](#)



### RECENTLY ADDED...

- [DRAFT Protocol 30](#)  
In-stream wood placement
- [DRAFT Review 13](#)  
Salmonid stocking in lakes

### Library

- [Library of Systematic Reviews](#)
- [Finalised Protocols](#)
- [Drafts for comment](#)

## Latest news...

[CEE website goes live May 2007!](#)  
[30th Draft protocol added to the site - in-stream wood placement and salmonids](#)  
[Draft systematic review 13 available for consultation - salmonid stocking in lakes](#)