# Evidence Synthesis in Biology, Ecology, and Agriculture

### **Guidelines for Writing Evidence Syntheses:**

- <u>Campbell Collaboration</u> a multidisciplinary guide to knowledge synthesis methodology
- Systematic Reviews for Animals & Food A collection of resources to support the steps of the review process
- <u>The Collaboration for Environmental Evidence</u> guidelines for knowledge synthesis methodologies in environmental management
- <u>Guidelines for systematic review in conservation and environmental management</u> paper published in *Conservation Biology* by A. Pullin (2006).

# **Evidence Synthesis Reporting Standards:**

- <u>PRISMA Preferred Reporting Items for Systematic Reviews and Meta-analysis</u> The most popular reporting standards used in systematic reviews. PRISMA also provides reporting standards for various other types of knowledge synthesis (including protocols).
  - PRISMA for Ecology and Evolutionary Biology (PRISMA-EcoEvo)
- <u>Systematic Review Checklist: A Standardized Technique for Assessing and Reporting Reviews of Life Cycle Assessment Data</u> based on the 2009 PRISMA guidelines, but specialized for LCA.

### Where to Find & Register Protocols:

- Open Science Framework Registries – a multidisciplinary registry for knowledge synthesis protocols

#### Potential Places to Search:

| Databases                                | Grey Literature                                     |
|--|---|
| Scopus                                   | ProQuest Dissertations and Theses                   |
| Biosis Citation Index                    | Site searching – Major organizations & associations |
| Earth, Atmospheric, & Aquatic Sciences   | Site searching – Government websites                |
| Aquatic Sciences and Fisheries Abstracts | science.gov   |
| Wildlife & Ecology Studies Worldwide     | worldwidescience.org                                |
| Academic Search Premier                  | Scopus – Conference papers                          |

## **Examples of Evidence Syntheses:**

The Effects of Training, Innovation and New Technology on African Smallholder Farmers' Economic Outcomes and Food Security: A Systematic Review

<u>Experimental Studies of Front-of-Package Nutrient Warning Labels on Sugar-Sweetened Beverages and Ultra-Processed</u> Foods: A Scoping Review

\*\* Article: Critical appraisal in ecology: What tools are available, and what is being used in systematic reviews? \*\*