# 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

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