A GUIDE TO USING SOFTWARE PROGRAMS TO CONDUCT A SYSTEMATIC REVIEW OF LITERATURE

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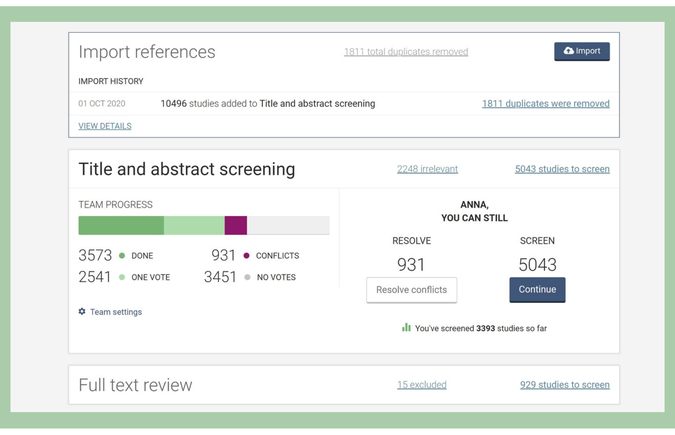
Introduction

The goal of this poster is to lay out the software and methods used in our systematic review as a guide to be easily replicated. We reviewed all of the journal articles in four major conservation journals **(Biological Conservation, Conservation Biology, Conservation Science and Practice, and Conservation Letters)** between the years of 2007 - 2010 and 2017 - 2020. The research methods we used are valuable for collaborative literature analyses that are being done with large amounts of journal articles to analyze. They provide a way to successfully organize, code, and sort articles to develop useful data and conclusions.



1st Step: Zotero

zotero

Create a group Zotero account with shared access. This also creates a Group Library, where everyone can access all articles downloaded.

Obtain access to different databases to download articles. In our case, we used our university library. **We downloaded from ScienceDirect, Wiley, ProQuest, and EBSCO,** as they provided access to our desired journals.

Select desired articles (can select multiple at once), then download them as RIS files. We download all types of articles, including op-eds and editorials to sort through later.

Upload these downloaded files into the Zotero group library. **They can now be uploaded into Covidence.**

2nd Step: Covidence

covidence

Import

Import: Upload RIS files into Covidence from Zotero into the group project page. Upload directly into Full-text review. Establish criteria for inclusion and exclusion, as well as a codebook (see Coding Examples).

Full text review

Full Text Review: Screening the article for inclusion/exclusion criteria is done simultaneously with tagging (coding into categories for the characteristics of the study). **First, two screeners decide whether or not an article should be included. If it is included, then they tag the article (or check the tags in the case of the second reviewer). If excluded, they note the reason.** Articles with conflicts are screened by our research supervisor to make the final decision.

Data Extraction

Data Extraction: Lastly, the data can be extracted into a usable form in excel as a CSV file.

Codebook Examples

This is an example of the codebook used when applying these methods for a conservation science on private lands study (see poster by Smith et al).

Inclusion/ Exclusion Criteria

Inclusion

- Research articles with specimans or data being collected in the field
  - Could be collected through use of telemetrics or drones
- Study is done on sites that are inland aquatic (rivers/ ponds) or terrestrial

Exclusion

- Research is not field-based (remote/ secondary data, meta-analysis, museum specimens)
- Sites are not inland aquatic (rivers/ ponds) or terrestrial
- Article contains no imperical evidence (editorial, book review, response)
- Piece is not an article (Table of Contents, notes, erratum, corrigendum)

Full-Text Review Tags

Site	Science	Taxa	Land Ownership	Location
Terrestrial, Aquatic	Community, Biological, Social	Flora, Fauna, People	Private, Public, Tribal, Unknown	US, (other countries documented through notes tool)

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Resources

Zotero Homepage:
https://www.zotero.org/

Covidence Homepage:
https://www.covidence.org/