

## HISTORY OF STATISTICS IN ECOLOGY: SEARCH ENGINE PROTOCOL

1. Go to [Web of Science](#) via the University of Chicago Library.
2. Click on **Advanced Search** > Copy and Paste the following Search Criteria in the search box:  
((TS=("ecolog\*") AND SU=Environmental Sciences & Ecology AND WC=Ecology))
  - a. Under "Restrict results by languages and document types:" select **English** and **Article**.
  - b. Under "Timespan" select **Custom year range** from years **1900** to **1999**.
  - c. Under "Web of Science Core Collection: Citation Indexes" **keep all indexes selected** (SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC.)
3. Press **Search**. You will see **13,613 results**. Scroll down to "**Source Titles**" at the bottom of the left hand side handle. Click on the drop down and select **ECOLOGY**. Click **Refine**. You will see **1,100 results**.
4. Here is a summary of your **search criteria that you can copy** in the top right corner of the page under the "Results" number. Be sure to copy this each time you search in a **new way**.

You searched for: (((TS=("ecolog\*") AND SU=Environmental Sciences &

Ecology AND WC=Ecology))) AND LANGUAGE:(English) AND DOCUMENT TYPES:(Article)

Refined by: SOURCE TITLES: ( ECOLOGY )

Timespan: 1900-1999. Indexes: SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI, CCR-

EXPANDED, IC.

5. Scroll to the very bottom of the first page. Set "**Show**" to **50 per page**, which means 22 pages to flip through.
6. At the top of each page, click on **Export** > **Excel** > select "**All records on page**" (e.g. 1-50) > under "Record Content" click on "**Full Record**" > **Export**
7. Now apply Manual Filtering Criteria.

### FILTERING CRITERIA

1. Remove articles that are not studies. An article needs to contain a topic on natural research in the title. Ask yourself, *is it a direct study rather than a scientific review, meta-analysis, or opinion?*
  - a. What is 'research'? Research is observations, conclusions, experiments, and/or methods.
  - b. What is 'natural'? Natural is biotic and abiotic factors decentralized from humans. For example, we are not interested in 'human ecology', but the ecology of non-human life forms.
2. Remove studies that are duplicated in the search.
  - a. In the exported Excel sheet(s), select the "**Article Title**" column > **Home** tab > **Conditional Formatting** > **Highlight Cell Rules** > **Duplicate Values...** > **OK**
3. Remove papers with citation counts of <= 0.
  - a. Compute a new column called **CiteX**. **CiteX = "Times Cited, All Databases" – "Since 2013 Usage Count"**
  - b. Sort the data based on citation count. Press **Ctrl + a** to select the data then > **Data** tab > **Sort** > **Sort by CiteX** > **Order Largest to Smallest** > **OK**

STOP