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naturecounts

a new R package to access standardized data on plant and animal populations

https://github.com/BirdStudiesCanada/naturecounts

CRSC 2019







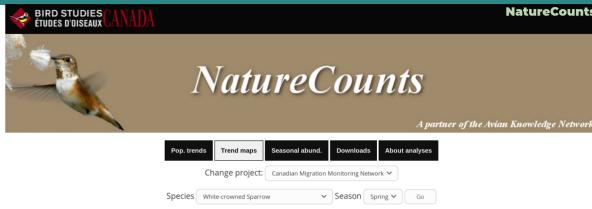
@steffilazerte

Online repository

- Data stored in a standardized format
- 128 million occurrence records (>400 sources)
- 12,000 dataset requests
- 2.3 billion total record requests by 1850 users

Goals

- 1. Safely archive data
- 2. Facilitate data entry into repository
- 3. Facilitate data access
- 4. Develop tools for exploration, analysis, interpretation, and decision support



The **Trend Maps** tool allows you to produce a map showing regional population trends for a selected species and season. Trends are calculated using the same period among sites (usually **the 10 most recent years available**). Only sites or regions with sufficient data are presented. To see more details about the trend at a site or region, simply click on a symbol. For more information about maps, click here.

Download as a Google Earth file

Map Satellite

BERTA

MANITOBA

Canada

Calgary

Regina

MINNESOTA

naturecounts

R package

- Access raw data (dataframe, database)
- Access metadata (species taxonomy, etc.)
- Data formating (dates, zero-fill)
- Quick and reproducible

Users

- Sign up on NatureCounts.ca (basic access)
- Request access to other datasets

Development Status

- **Download tools**: Alpha
- Data tools: In Development

Basic Usage

```
library(naturecounts)
# Find species id
species_search(name = "Northern Cardinal")
# Download to dataframe
cardinals <- nc_data_dl(species = 19360,
                         username = "sample")
# Download to SQLite Database
cardinals <- nc_data_dl(species = 19360,</pre>
                         sql db = "cardinals",
                         username = "sample")
```

Package Source
https://github.com/BirdStudiesCanada/naturecounts

Support (Tutorials, Examples) https://birdstudiescanada.github.io/naturecounts/