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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



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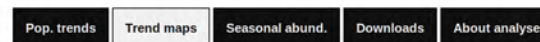
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## Online repository

- 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



Change project: Canadian Migration Monitoring Network

Species: White-crowned Sparrow Season: Spring Go

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



## R package

- Access raw data (dataframe, database)
- Access metadata (species taxonomy, etc.)
- Data formatting (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,
                        sql_db = "cardinals",
                        username = "sample")
```

## Package Source

<https://github.com/BirdStudiesCanada/naturecounts>

## Support (Tutorials, Examples)

<https://birdstudiescanada.github.io/naturecounts/>