

The (Ecological) Tribe Has Spoken: Investigating the Applications and Limitations of a TV Show as Another Method in the Ecologist's Toolbox

Supplemental Material 1: Background README File

Christopher Crowder^{1,2}, Thabisa McAnyana³, Geoffrey Cook¹

¹Department of Biology, University of Central Florida

²Wildlife Division, Nebraska Game and Parks Commission

³Biology Department, Nebraska Wesleyan University

Corresponding Author:

Christopher Crowder – CrowderFishScience[at]gmail.com

Date:

November 6, 2025

1. Overview

This README file provides an overview and description of the supplemental material associated with the manuscript titled *The (Ecological) Tribe Has Spoken: Investigating the Applications and Limitations of a TV Show as Another Method in the Ecologist's Toolbox*. The supplemental file includes a dataset that support the findings presented in the main text.

2. File List

File Name	Description and Notes	File Type
Survivor_SupplementalMaterial1_BackgroundREADME.pdf	This file – providing context and additional information.	PDF
Survivor_SupplementalMaterial2_LMDataForIdentifiedSpecies.xlsx	Full linear model results for all taxa that could be identified with notes regarding invasive or IUCN red list status.	Excel spreadsheet

3. Data Origin, Availability, and Additional Resources

All data were collected by viewing seasons 33-46 of Survivor. All animals that could be identified to a specific family, genus, or species, are listed in the Linear Model excel document. This document lists the organism's common name, scientific name, total abundance observed over the 14 seasons, and the number of different years the organisms observed. The next columns have linear model results including the intercept, slope, and R² value. The last column makes note if the taxa is considered invasive or has a status with the IUCN red list. A cleaned-up database of all observations, including those of animals we could not identify will be made available upon reasonable and agreeable request. Please contact corresponding author.

Data Structure:

The following variables can be found in the “Survivor_SupplementalMaterial2_LMDataForIdentifiedSpecies” excel file:

Variable Name	Description	Unit / Type
Common Name	The common name of the taxa.	Text
Scientific Name	The scientific name of the taxa.	Text
Abundance	Total abundance of the taxa observed over the course of the footage reviewed	Integer
Number of Years	The number of different years that taxa was observed.	Integer
Linear Model Intercept	The intercept from the linear model.	Integer
Linear Model Slope	The slope from the linear model.	Integer
R2_value	The R ² value from the linear model.	Integer
Invasive or IUCN?	Note if the taxa is considered invasive or has a status on the IUCN red list.	Text

Missing Data:

Please note that some linear model results have “NA”. This is because the slope is undefined or there was no variation in counts resulting in zero degrees of freedom leading to an R² value that cannot be computed. If there is no text noting invasive or IUCN status, then we did not find evidence that particular taxa was considered invasive or had a status on the IUCN red list.

4. Analysis Tools

We conducted our analysis using the following:

- R (version 4.5.0 “How About a Twenty-Six”), with the following package:
 - Vegan (version 2.7-2) for diversity and species accumulation curve: <https://cran.r-project.org/web/packages/vegan/index.html>
 - Ggplot2 (version 3.5.2) for graphing: <https://cran.r-project.org/web/packages/ggplot2/index.html>
 - Dplyr (version 1.1.4) for data handling: <https://cran.r-project.org/web/packages/dplyr/index.html>
- Operating systems: Windows 11 and macOS Ventura