README:

Data Summary

DATA TITLE: A decade of field physiology in Eagle Lake garter snakes

PROJECT TITLE: Over a decade of field physiology reveals life-history specific strategies to drought in garter snakes (*Thamnophis elegans*)

DATA ABSTRACT: These data include information on natural populations of western terrestrial garter snakes (*Thamnophis elegans*) with naturally occurring variation in life-history strategies. Data were collected over a 14-year period and include biomarkers of stress physiology. Specifically, there are both baseline and stress-induced maximal measures of plasma corticosterone, blood glucose, and immune cell distribution (heterophil-to-lymphocyte ratios).

AUTHORS:

Author: Kaitlyn G. Holden

ORCiD: 0000-0002-2101-3295 Institution: Iowa State University Email: pettinkg@iastate.edu

Author: Eric J. Gangloff

ORCiD: 0000-0002-9074-8009

Institution: Ohio Wesleyan University

Email: ejgangloff@owu.edu

Author: David A.W. Miller

ORCiD: 0000-0002-3011-3677 Institution: Penn State University

Email: dxm84@psu.edu

Author: Ashley R. Hedrick

Institution:lowa State University

Email: hedrick@iastate.edu

Author: Carli Dinsmore

Institution:Penn State University Email: cdinsmorepsu@gmail.edu

Author: Alison Basel

Institution:Iowa State University

Email: abasel@tamu.edu

Author: Greta Kutz

Institution:Iowa State University Email: greta.kutz@gmail.edu

Author: Anne M. Bronikowski ORCiD: 0000-0001-6432-298X Institution: Iowa State University Email: abroniko@iastate.edu

Corresponding author: Kaitlyn Holden

COLLECTION INFORMATION:

Time period: Data collected between 2006 and 2019, uploaded to repository in October of 2021

Location: Eagle Lake vicinity, Lassen County, California, USA

FILE DIRECTORY

Eagle Lake Physiology

|-> README.pdf

|-> DataCodebook.xlsx

-> ELPhysData.csv

FILE LIST

- README.pdf: README file
- DataCodebook.xlsx: Codebook containing explanation of variables found in data file
- ELPhysData.csv: Comma-separated file containing information on experimental animals and physiological measures

METHODS AND MATERIALS

DATA COLLECTION METHODS

These data were collected from natural populations of western terrestrial garter snakes (*Thamnophis elegans*). Blood samples were collected at time of capture and following a 3hr capture-restraint protocol (stress-induced). Samples were analyzed for circulating plasma corticosterone, blood glucose, and heterophil-to-lymphocyte ratios. All data were collected under lowa State University IACUC protocol 3-2-5125-J under Dr. Anne Bronikowski.

SOFTWARE

Name: R

Version: Macintosh 4.0.2

URL: https://www.r-project.org/

Developer: The R Foundation for Statistical Computing

Name: SAS Version: 9.4

URL: https://www.sas.com/en_us/home.html
Developer: Analytics Software & Solutions

Licensing

This work is licensed under the Creative Commons Attribution (CC-BY) 4.0 International License. For more information visit: https://creativecommons.org/licenses/by/4.0