This Gharnit\_et\_al.\_2022\_DATA\_README.txt file was generated on 2022-01-24 by Elouana Gharnit.

GENERAL INFORMATION

1. Title of Dataset: Data from: Resource availability, sex, and individual differences in exploration drive individual diet specialization.

2. Author Information

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3. Date of data collection: 2012-2017

4. Geographic location of data collection: Mansonville, southern Québec, Canada (45°05’N; 72°25’W)

5. Funding sources that supported the collection of the data: Natural Sciences and Engineering Research Council of Canada (NSERC), The Fonds de Recherche du Québec – Nature et technologies (FRQNT) and German Research Foundation (DFG).

DATA & FILE OVERVIEW

Note: Missing values containing “n/a” are unavailable data (non-sampled or non-identified).

1. File " Data\_exploration.csv " (Excel)

Exploration values from Open-field tests from 2012 to 2017.

The exploration score of each individual are used to calculate best linear unbiased predictors (BLUPs)

for exploration using an LMM controlling for date, hour of the test, waiting time before the test, site,

and number of trials, all specified as fixed effects, and year, chipmunk and experimenter IDs as random effects.

(see details and R codes in section 2, Online supplement).

R code associated:

“Rcode\_BLUPs.txt”

Variables:

id\_chipmunk: Chipmunk’ identities (N=396)

sex: Sexes of individuals (F/M)

site: Study sites (Site 1 to 3)

date: Date of the open-field test (d/m/y)

hour\_capture: Hour of capture check of Longworth traps

hour\_trial: Hour of the open-field test

julian\_min: Minutes from 8:00 a.m. (min)

julian\_day: Day from the first capture of the year:

2012 01/05/2012

2013 01/05/2013

2014 01/05/2014

2015 01/05/2015

2016 01/05/2016

2017 04/05/2017

delay\_trial: Time between the hour\_capture and the hour\_trial (min)

number\_trial: The number of the open-field

number\_cross: The number of crossed lines in the open-field arena (exploration)

experimenter: Name of the experimenter of the test

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2. File " data\_isotopy.csv " (Excel)

Stable Isotopes values extracted from chipmunks’ hair from 2012 to 2016. Data are compiled with the individual features and BLUPs (Exploration data) for use in statistical analyses (TNW, SEAB calculations, and linear mixed-effect models).

R code associated:

“Rcode\_standard ellipses.txt”

“Rcode\_LMM\_D15N\_D13C.txt”

Variables:

id\_chipmunk: Chipmunk' identities (N=107)

Laboratory: Isotopes analyses’ Laboratories: KOSI lab (Göttingen, Germany), GEOTOP lab (Montréal, Québec, Canada)

date\_analysis: Years corresponding to isotopes analyses in both laboratories (2013/2015/2017)

date\_hairsample: Date of the day corresponding to hairs sampling

site: Study sites (Site 1 to 3)

sex: Sexes of individuals (F/M)

age: Age of individuals (1 to 5)

year: Year corresponding to hairs samples (2013-2016)

year\_mast: Year corresponding to mast- and non-mast years

season: Season corresponding to hairs samples (spring/summer)

body\_mass: Body mass of individuals (g)

d15N: Raw stable nitrogen values (‰)

d13C: Raw stable carbon values (‰)

d15N\_corrected: Stable nitrogen values (‰) corrected by -0.57‰ (from GEOTOP data)

d13C\_corrected: Stable carbon values (‰) corrected by +0.38‰ ‰ (from GEOTOP data)

Mean\_Blup\_exploration: Mean individual exploration BLUP values from the 1000-simulated estimates

type\_explo: Functional classes of exploration profile (Slow/Inter/Fast)

symbol: ‰, 1 per 1000.

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3. File " Data\_Food\_sources.csv" (Excel)

Stable Isotopes values of food items sources sampled on study sites. Data used for measuring variation in food sources isotopes values (Table S2 and Figure 1).

Variables:

Type: latin name of the food source species

Fag\_gra: Fagus grandifolia

Cla\_car: Claytonia caroliniana

Ace\_rub: Acer rubrum

Ace\_sac: Acer saccharum

Ery\_ame: Erythronium americanum

Slug: slug sp.

Site: Study sites (Site 1 to 3)

d15N: Raw stable nitrogen values (‰) of the sample

d13C: Raw stable carbon values (‰) of the sample

mean\_d13C: Mean of carbon values (‰) for the species

min\_d13C: Minimum value of carbon values (‰) for the sampled species

max\_d13C: Maximum value of carbon values (‰) for the species

mean\_ d15N: Mean of nitrogen values (‰) for the species

min\_ d15N: Minimum value of nitrogen values (‰) for the species

max\_ d15N: Maximum value of nitrogen values (‰) for the species

symbol: ‰, 1 per 1000.

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4. File " Data\_trees\_sampling.csv" (Excel)

Data gathering the number of seeds collected from American beech trees and red maple trees on sites 1 to 3 from 2013 and 2016.

To obtain values of the number of seeds per m² and define mast and non-mast years, we applied the following equation (eq 1):

eq1∶ M/πr²

Where M is the mean of the number of collected seeds per species per year; and r is the radius of the circular quadrat (r = 0.2794 m).

Variables:

Site: study site (1 to 3)

ID\_bucket: Id of the bucket sampled

tree\_species: Latin name of the tree’s species

Fagus grandifolia: American beech

Acer rubrum: Red maple

Location: coordinates on the study sampling grid

Number\_seeds-2013: number of seeds per bucket in 2013

Number\_seeds-2014: number of seeds per bucket in 2014

Number\_seeds-2015: number of seeds per bucket in 2015

Number\_seeds-2016: number of seeds per bucket in 2016