Stoker, D., A.J. Falkner, K.M. Murray, A.K. Lang, T.R. Barnum, J. Hepinstall-Cymerman, M.J. Conroy, R.J. Cooper, and C.M. Pringle. Decomposition of terrestrial resource subsidies in headwater streams: does consumer diversity matter? Ecosphere.

Supplement 1: Data files and R script for all analyses described in the main text.

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File List
CWT-site_survey.csv
CWT-traits.csv
CWT-model_data.csv
Stoker-CWT-LD.R

Description

The provided supplements should allow the reader to run each analysis in the manuscript as well as create all figures excluding the path diagrams. The data are set into three files: (1) CWT-site_survey.csv, (2) CWT-traits.csv, and (3) CWT-model_data.csv.

CWT-site_survey.csv provides all the environmental data collected for the four focal streams.

CWT-traits.csv provides all the trait assignments for each taxon included in the functional trait diversity analyses.

CWT-model_data.csv is the primary data for all analyses.

Stoker-CWT-LD.R file provides all the code for loading required R packages, running analyses ANOVAs, calculating functional trait diversity, Bray-Curtis dissimilarities and PERMANOVA, and structural equation modeling), and creating figures for the manuscript.

Column metadata

CWT-site_survey.csv

stream: the stream from which the measurements were taken, whereby LE_1 = Low-Elevation Stream 1, LE_2 = Low-Elevation Stream 2, HE_1 = High-Elevation Stream 1, and HE_2 = High-Elevation Stream 2.

transect: the transect at which the measurements were taken

width: the measured wetted-width (cm) of the stream at the corresponding transect

depth: the measured mean depth (cm) of the stream at the corresponding transect

cover: measured mean canopy cover (%) of the stream at the corresponding transect

flow: measured mean flow (m s^{-1}) of the stream at the corresponding transect

temp: measured mean daily temperature (°C) of the stream

CWT-traits.csv

taxon: list of taxa included in the functional trait analyses, whereby amph = *Amphinemura* sp., chir = Chironomidae, lepi = *Lepidostoma* sp., lept = *Leptotarsus* sp., leuc = *Leuctra* sp., paral = *Paraleptophlebia* sp., pycn = *Pycnopsyche* sp, and tall = *Tallaperla* sp.

biomass: mean per capita biomass (mg) of the respective taxon

habi.1: presence (1) or absence (0) of foraging habit 1 (burrow)

habi.2: presence (1) or absence (0) of foraging habit 2 (climb)

habi.3: presence (1) or absence (0) of foraging habit 3 (sprawl)

habi.4: presence (1) or absence (0) of foraging habit 4 (cling)

habi.5: presence (1) or absence (0) of foraging habit 5 (swim)

habi.6: presence (1) or absence (0) of foraging habit 6 (skate)

rheo.1: presence (1) or absence (0) of rheophilic preference 1 (depositional)

rheo.2: presence (1) or absence (0) of rheophilic preference 2 (depositional and erosional)

rheo.3: presence (1) or absence (0) of rheophilic preference 3 (erosional)

ther.1: presence (1) or absence (0) of thermal preference 1 (cold/cool)

ther.2: presence (1) or absence (0) of thermal preference 2 (cool/warm)

ther.3: presence (1) or absence (0) of thermal preference 3 (warm)

CWT-model_data.csv

id: leaf pack type (L or H) and number (integer)

stream: stream where the leaf pack was deployed (1 = LE$_1$, 2 = LE$_2$, 3 = HE$_1$, and 4 = HE$_2$)

pack: leaf pack type (LEP or HEP)

deployment: deployment site of the leaf pack (Home or Away)

decomp: decomposition (i.e. percentage of mass lost) of the leaf pack

CN: ratio of carbon:nitrogen

CP: ratio of carbon:phosphorous

density: abundance of detritivores standardized by leaf mass remaining

biomass: biomass of detritivores standardized by leaf mass remaining

amph.abund: abundance of *Amphinemura* sp.

chir.abund: abundance of Chironomidae

lepi.abund: abundance of *Lepidostoma* sp.

lept.abund: abundance of *Leptotarsus* sp.

leuc.abund: abundance of *Leuctra* sp.

paral.abund: abundance of *Paraleptophlebia* sp.

pycn.abund: abundance of *Pycnopsyche* sp.

tall.abundance: abundance of *Tallaperla* sp.