

## Description of variables in Dryad file “Wise\_DH\_Lensing\_JR\_2019.csv”

The file contains the raw data that were analyzed for the following publication:

“Wise, D.H. & Lensing, J.R. (2019) Impacts of rainfall extremes predicted by climate-change models on major trophic groups in the leaf-litter arthropod community. *Journal of Animal Ecology*.”

Column headings are variable names. The first column is the row number. Columns 2-6 are the design variables. The remaining columns are the response variables. Each response variable is the sum of two sub-samples for each sampling method for each taxon, i.e. a combination of both taxon and sampling method. Thus, each row contains all the response variables for a sample from one of the 12 mesocosms, which were the experimental units for the study. Details on the experimental design, sampling techniques and the date each sample was taken are given in the manuscript.

NOTE: As explained in the manuscript, the two summer samples for the last year of the study were averaged to create a balanced design. This file contains the raw data, so the summer value for the last year that was used in all analyses is the average of the values for periods 6 and 7, expressed as the nearest integer because the Poisson and negative binomial distributions were used in the glm's.

### Key to the Design Variables:

period = sampling period

- 1: Fall 2001
- 2: Summer 2002
- 3: Fall 2002
- 4: Summer 2003
- 5: Fall 2003
- 6: Summer 2004
- 7: Summer 2004
- 8: Fall 2004

plot = number uniquely identifying each mesocosm (1-12)

trt = rainfall treatment

- l: LOW
- h: HIGH
- o: REF

site = number identifying each site (1 or 2)

season = S (summer) or F (fall)

## Key to the Response Variables

The first letter of each response variable indicates the sampling method:

K: Kempson (extraction of arthropods in a modified Kempson-MacFadyen apparatus)

S: Sifting (sampling arthropods in the field by hand-sorting through gently sifted litter)

The remainder of the name of each response variable is an abbreviation for the taxon of the sample arthropod. Thus:

**Kthom: Thomisidae** found in Kempson samples

**Sthom: Thomisidae** found in Sifting samples

Details on which response variables were included in each statistical model appear in the associated manuscript.

Below is given the taxon represented by each abbreviation in the name of the response variable. The prefix “K” or “S” is omitted. The taxa under “Kempson samples (K\_\_\_\_)” are listed in the order in which they appear in the file. The taxa under “Sifting samples (S\_\_\_\_)” are only those taxa that were not found in Kempson samples, also given in the order in which they appear in the file. Some taxa found in Kempson samples were not counted in Sifting samples because they were too small to be counted accurately, or because none were found.

<u>Abbrev.</u>	<u>Taxon</u>	<u>Common Name</u>
Kempson samples (K____):		
thom:	Thomisidae	Spider
salt:	Salticidae	“
titan:	Titanoecidae	“
lycosid:	Lycosidae	“
gnaphosd:	Gnaphosidae	“
linyph:	Linyphiidae	“
ctenid:	Ctenidae	“
therid:	Theridiidae	“
clubion:	Clubionidae	“
dictynid:	Dictynidae	“
seges:	Segestriidae	“
agelen:	Agelenidae	“
entomo:	Entomobryidae	Collembola (springtail)
tomo:	Tomoceridae	
hypo:	Hypogastruridae	“
sminth:	Sminthuridae	“
onychur:	Onychiuridae	“
isotom:	Isotomidae	‘
acarina:	Acarina	Mite
pseudo:	Pseudoscorpiones	Pseudoscorpion
opilion:	Opiliones	Harvestman

diplura:	Diplura	Two-pronged Bristletail
symph:	Symphyla	Pseudocentipede
diplopod:	Diplopoda	Millipede
scolo:	Scolopendromorpha	Centipede
litho:	Lithobiomorpha	“
geoph:	Geophilomorpha	“
hemip:	Hemiptera	True bug
homop:	Homoptera	“
coleoadu:	Coleoptera adult	Beetle adult
coleolar:	Coleoptera larva	Beetle larva
blatt:	Blattidae	Cockroach
psocop:	Psocoptera	Booklouse
isoptera:	Isoptera	Termite
diptera:	Diptera adult	Fly adult
gryllid:	Gryllidae	Cricket
formicid:	Formicidae	Ant
leplar:	Lepidoptera larva	Moth larva
diptlar:	Diptera larva	Fly larva
protura:	Protura	Proturan
pauro:	Pauropoda	Pauropod
thysan:	Thysanoptera	Thrip
hymenop:	Hymenoptera	Ant

Sifting samples (S\_\_\_\_):

araneid:	Araneidae	Spider
tetragnathid:	Tetragnathidae	“
pisaurid:	Pisauridae	“