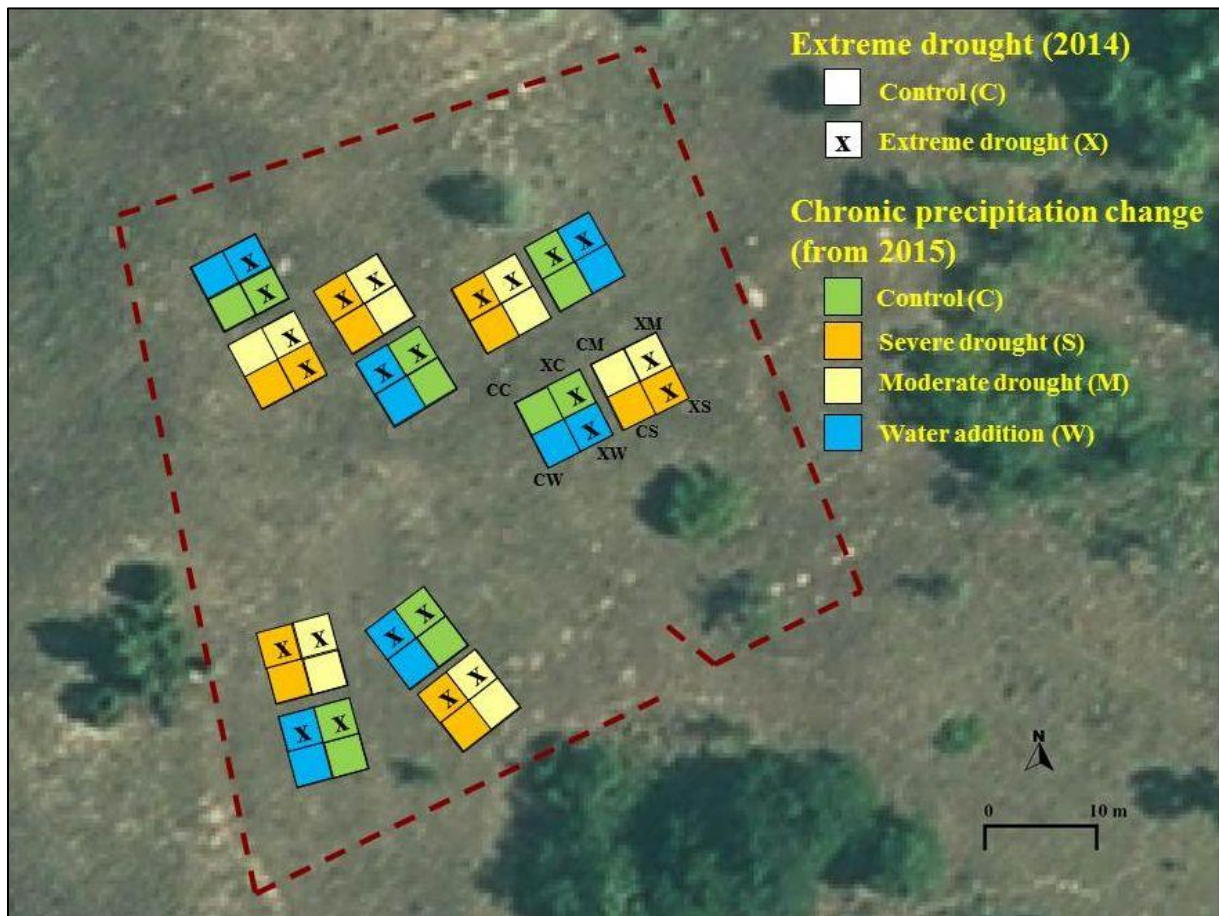
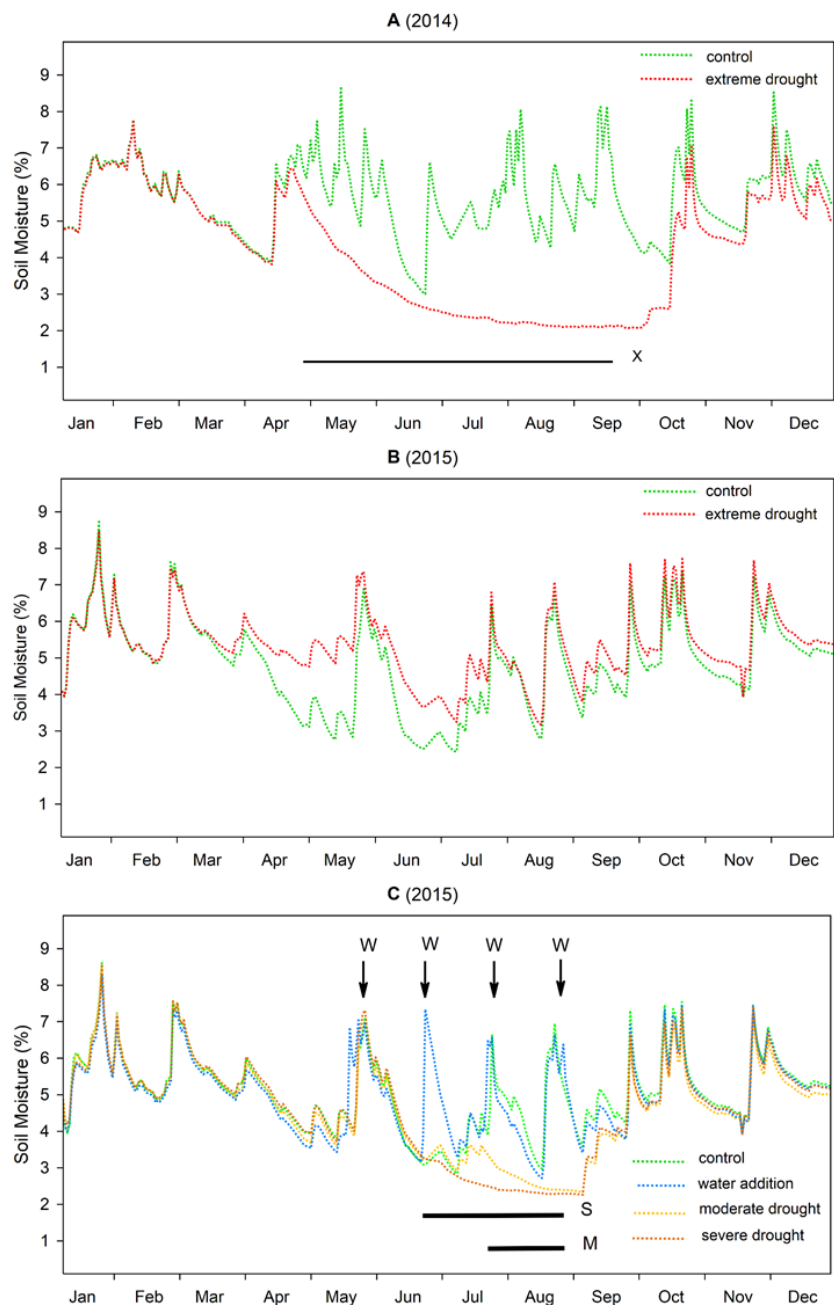


Supplement 2

S2 Fig A. Spatial layout of plots at the experimental site. X indicates the sites treated with extreme drought (factor 1), plots without X were used as controls in the first year (2014). In the consecutive year (2015) mild precipitation changes (factor 2) were used with 4 four levels: water addition (W, blue plots), control (C, green plots), moderate drought (M, light yellow plots) and severe drought (S, dark yellow plots). The study site is surrounded by a fence (dashed red line).



S2 Fig B. Temporal dynamics of soil moisture in the different treatment plots. y axis: Soil moisture (SM) (vol/vol%), x axis: time (days). A: first year of treatment (2014), B: second year of treatment (2015) showing the difference between previously X treated and untreated sites, C: second year of treatment (2015) showing the difference between the four levels of treatments. Red dotted line: SM at extreme drought treated sites, green dotted lines: SM at control sites, blue dotted line: SM at water addition sites, orange dotted line: SM at moderate drought treated sites, brown dotted line: SM at severe drought treated sites. W indicates the time when water addition treatments were applied. M, S, X represent the time frame of different treatments, respectively: moderate drought, severe drought, extreme drought).



S2 Table A. Collembola species captured at the study site during the experiment.

Collembola species	2015 Apr.- Nov.	2015 Jul.- Nov.	2014 Jul.- Nov.	main habitat	temperature and moisture	vertical stratification	category
Most frequent species	number of individuals						
<i>Arrhopalites caecus</i> (Tullberg, 1871)	574	93	381	synanthropic, caves ¹	troglophil, mesophil ^{2, 3}	hemiedaphic to euedaphic ^{2, 4, 5, 6}	soil living
<i>Entomobrya nigriventris</i> Stach, 1930	46803	19023	19271	grassland ⁷	xerothermophil ⁸	epedaphic	surface living

<i>Lepidocyrtus cyaneus</i> Tullberg, 1871	488	329	2	open ecosystem ^{1, 9}	mesophil ¹⁰	epedaphic ^{5, 11}	surface living
<i>Proisotoma minuta</i> (Tullberg, 1871)	556	273	2286	compost, ruderal ¹	thermophil, hygrophil ^{8, 10, 12, 13}	hemiedaphic ⁵	soil living
<i>Sphaeridia pumilis</i> (Krausbauer, 1898)	281	206	1103	open ecosystem ¹	mesophil to hygrotolerant ^{3, 8, 12, 14}	vegetation living, hemiedaphic ^{2, 12, 14}	vegetation living
<i>Xenylla maritima</i> Tullberg, 1869	2372	402	10	open, arid ecosystem ¹	xerophil ^{8, 15}	hemiedaphic ¹⁶	soil living
Rare species							
<i>Anurophorus pseudolaricis</i> Loksa, 1978	3	0	0	moist habitat ¹⁷	hygrophil ¹⁷	hemiedaphic ¹⁷	soil living
<i>Bourletiellida</i>	1	1	0	?	?	?	not included
<i>Brachystomella curvula</i> Gisin, 1948	7	3	30	steppe ecosystem, ravine forest ¹	xerothermophil ^{6, 8, 18}	hemiedaphic ⁶	soil living
<i>Ceratophysella succinea</i> (Gisin, 1949)	2	0	1	open ecosystem, anthropogenic origin ¹	mesophilous ¹⁸	hemiedaphic ⁶	soil living
<i>Cyphoderus albinus</i> Nicolet, 1842	34	6	23	myrmecophil, forest, steppe, flood meadow ¹	thermophil, mesophil to xerophil ^{6, 9, 11}	euedaphic ⁶	soil living
<i>Entomobrya multifasciata</i> (Tullberg, 1871)	7	1	8	open ecosystem, forest ¹	xerothermophilic ^{8, 15}	hemiedaphic ¹⁸	soil living
<i>Folsomia candida</i> (Willem, 1902)	7	0	5	ruderal, troglophilic ¹	probably thermophil, mesophil ⁶	euedaphic ^{6, 11}	soil living
<i>Heteromurus nitidus</i> (Templeton, 1835)	9	0	1	synanthropic, forests and meadows ¹	hygrophil to mesophil ^{6, 19}	hemiedaphic to euedaphic ^{4, 5, 6, 8}	soil living
<i>Orchesella taurica</i> (Stach, 1960)	49	0	2	forest, meadow steppe ecosystem ¹ new to the Hungarian fauna	xerophil ¹	hemiedaphic ¹	soil living
<i>Protaphorura serbica</i> (Loksa & Bogojevic, 1967)	0	0	3	open, arid ecosystem ¹	xerothermophil ^{8, 20}	eudepahic ⁹	soil living
<i>Pseudosinella sexoculata</i> Schött, 1902	38	12	0	open ecosystem ¹	?	hemiedaphic ¹⁸	soil living
<i>Sminthurus viridis</i> (Linnaeus, 1758)	18	1	14	open ecosystem, anthropogenic ¹	hygrophil, mesophil ^{15, 18}	vegetation living ¹⁵	vegetation living
<i>Sminthurus mulitpunctatus</i> Schäffer, 1896	0	0	1	low vegetation of dry habitats ²	xerothermophil ^{2, 8, 15}	vegetation living ^{2, 15}	vegetation living
<i>Sminthurus nigromaculatus</i> Tullberg, 1871	1	0	0	open ecosystems; steppe	xerothermophil ²	vegetation living ²	vegetation living

				ecosystem, ravine forests ¹			
<i>Sminthurus maculatus</i> Tömösváry, 1883	0	0	1	steppe ¹	xerothermophil ²	vegetation living ²	vegetation living
<i>Willowsia buski</i> (Lubbock, 1869)	6	2	2	synanthropic, corticophil, saxicolous and xerothermic grassland ^{1, 8, 15}	xerothermophil ^{8,} ₁₅	hemiedaphic ₁₅	soil living

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S2 Table B. Oribatida species captured at the study site during the experiment.

Oribatida species	2015 Apr.- Nov.	2015 Jul.-Nov.	2014 Jul.-Nov.	main habitat	moisture	feeding
Most frequent species						
<i>Scutovertex sculptus</i> Michael, 1879	315	231	228	moss, canopy, grassland ^{1, 2}	halophil, xerophil ^{1, 2}	microphytophag ₃
<i>Passalozetes perforatus</i> (Berlese, 1910)	327	177	253	grassland ²	xerophil ²	microphytophag ₄
<i>Oribatula divida</i> Mahunka, 1987	193	70	41	grassland (endemic?) ⁵	?	?
<i>Latoverx hungaricus</i> Mahunka, 1987	44	15	39	grassland (endemic?) ⁵	?	?
<i>Trichoribates trimaculatus</i> (Koch, 1836)	13	4	15	moss, canopy, grassland ²	xerophil ²	panphytophag ⁶
<i>Zygoribatula glabra</i> (Michael, 1890)	16	3	2	grassland, ruderal _{1,7}	xerophil ⁷	?
Rare species						
<i>Belba sculpta</i> Mihelčič, 1957	2	2	0	forest ⁸ new to the Hungarian fauna	?	?
<i>Scheloribates fimbriatus</i> Thor, 1930	2	2	4	grassland ⁵	?	?
<i>Micreremus brevipes</i> (Michael, 1888)	4	2	1	canopy, lichen, moss ²	xerophil ²	microphytophag ₆
<i>Galumna bimorpha</i> Mahunka, 1987	1	1	0	grassland (endemic?) ⁵	?	?
<i>Phauloppia lucorum</i> (Koch, 1841)	3	0	0	canopy, lichen ²	xerophil ²	panphytophag ⁹
<i>Gymnodamaeus bicostatus</i> (Koch, 1835)	1	0	1	forest, canopy, lichen, moss ²	xerophil ²	microphytophag ₁₀
<i>Pilogalumna crassiclava</i> (Berlese, 1914)	1	0	1	forest, ruderal ^{1,2}	xerophil ²	?
<i>Tectocephus sarekensis</i> Trägårdh, 1910	1	0	1	euryoecious ²	-	panphytophag ¹¹
<i>Aleurodamaeus setosus</i> (Berlese, 1883)	1	0	0	forest, moss ^{5,12}	xerophil ⁵	?
<i>Scheloribates pallidulus</i> (Koch, 1841)	2	0	0	forest ²	hygrophil ²	panphytophag ³
<i>Oppiella uliginosa</i> (Willmann, 1919)	1	0	0	forest, moss, canopy ²	?	?
<i>Scheloribates latipes</i> (Koch, 1844)	1	0	0	forest, grassland ¹	?	microphytophag ₁₃
<i>Camisia segnis</i> (Hermann, 1804)	2	0	0	canopy, moss ^{1,2}	xerophil ²	panphytophag ¹⁴
<i>Zygoribatula exilis</i> (Nicolet, 1855)	0	0	2	canopy, moss ²	xerophil ²	microphytophag ₁₅
<i>Ramusella insculpta</i> (Paoli, 1908)	0	0	1	forest, grassland ¹	xerophil ¹	microphytophag ₁₅
<i>Ramusella clavipectinata</i> (Michael, 1885)	0	0	1	grassland, moorland ¹	hygrophil ¹	microphytophag ₉

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S2 Table C. Mean number of captured Collembola individuals in 2015 across 4 treatment levels (control, water addition, moderate or severe drought). First table (Collembola) includes all of the Collembolan specimens, whereas thereafter separate groups are shown. The rows contain the months and the previous treatments (C: control, X: extreme drought).

Collembola (all groups) (mean $\pm$ SD (number of samples))					
month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	244.8 $\pm$ 140.7 (6)	307.3 $\pm$ 256.1 (6)	648 $\pm$ 301.6 (6)	507.2 $\pm$ 272.4 (6)
	x	167.8 $\pm$ 78.1 (6)	345.8 $\pm$ 315.6 (6)	437.8 $\pm$ 386.1 (6)	283.5 $\pm$ 222.7 (6)
5	c	127.7 $\pm$ 96.5 (6)	140.5 $\pm$ 149.3 (6)	281.7 $\pm$ 198.2 (6)	208.8 $\pm$ 82.3 (6)
	x	83.2 $\pm$ 62.2 (5)	164.8 $\pm$ 157 (6)	137.7 $\pm$ 184.7 (6)	98 $\pm$ 82 (6)
6	c	168 $\pm$ 214.4 (5)	148.8 $\pm$ 267.7 (6)	194 $\pm$ 231.4 (6)	184.2 $\pm$ 161.7 (5)
	x	79.3 $\pm$ 94.9 (4)	110.8 $\pm$ 182.8 (6)	42.4 $\pm$ 37.9 (5)	140.6 $\pm$ 193.1 (5)
7	c	347.5 $\pm$ 169 (2)	576.3 $\pm$ 712.3 (3)	667.5 $\pm$ 650.1 (4)	246.8 $\pm$ 220.9 (5)
	x	315.5 $\pm$ 351.7 (4)	544.3 $\pm$ 643.6 (4)	78.3 $\pm$ 40.9 (4)	400 $\pm$ 421 (5)
8	c	137 $\pm$ 190 (5)	307.3 $\pm$ 539.2 (4)	141.8 $\pm$ 234.2 (5)	18.7 $\pm$ 14.8 (6)
	x	111.3 $\pm$ 122.5 (6)	213.3 $\pm$ 189.7 (4)	50.7 $\pm$ 66.3 (3)	20.3 $\pm$ 13.8 (6)
9	c	56.8 $\pm$ 61.1 (6)	50 $\pm$ 55 (6)	57.5 $\pm$ 62.2 (6)	32.5 $\pm$ 28.8 (6)
	x	80.2 $\pm$ 102.9 (5)	125.3 $\pm$ 121.1 (4)	21.8 $\pm$ 19 (5)	21 $\pm$ 16.3 (6)
10	c	6.8 $\pm$ 5 (6)	26.3 $\pm$ 28 (6)	32.2 $\pm$ 30.9 (6)	44.6 $\pm$ 25.5 (5)
	x	6.8 $\pm$ 8.7 (6)	15.2 $\pm$ 13.6 (6)	36.7 $\pm$ 32 (6)	20.5 $\pm$ 10.7 (6)
11	c	5.3 $\pm$ 5.2 (6)	6.2 $\pm$ 5.8 (6)	5 $\pm$ 1.2 (5)	9.8 $\pm$ 5.9 (6)
	x	3.3 $\pm$ 3.6 (6)	5.5 $\pm$ 5.9 (6)	14.2 $\pm$ 7.1 (6)	7.2 $\pm$ 6.6 (6)
Soil living Collembola (mean $\pm$ SD (number of samples))					
month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	10.3 $\pm$ 18.5 (6)	44.2 $\pm$ 97.9 (6)	22.5 $\pm$ 45.9 (6)	14.7 $\pm$ 14.5 (6)
	x	14.7 $\pm$ 33 (6)	6.5 $\pm$ 9.3 (6)	2.7 $\pm$ 2.4 (6)	3.2 $\pm$ 3.5 (6)
5	c	42.2 $\pm$ 97.4 (6)	13.8 $\pm$ 20.8 (6)	27.8 $\pm$ 58 (6)	23.7 $\pm$ 50.3 (6)
	x	38.4 $\pm$ 79.3 (5)	4.2 $\pm$ 5 (6)	1 $\pm$ 1.7 (6)	3.5 $\pm$ 4.8 (6)
6	c	99.4 $\pm$ 221.1 (5)	13.3 $\pm$ 27.8 (6)	75 $\pm$ 164.7 (6)	1 $\pm$ 1 (5)
	x	8 $\pm$ 14.7 (4)	13 $\pm$ 29.9 (6)	0.4 $\pm$ 0.5 (5)	1.4 $\pm$ 1.5 (5)
7	c	4 $\pm$ 4.2 (2)	2.7 $\pm$ 2.3 (3)	7 $\pm$ 13.3 (4)	0.4 $\pm$ 0.5 (5)
	x	2.5 $\pm$ 5 (4)	91.8 $\pm$ 178.9 (4)	0.3 $\pm$ 0.5 (4)	0.8 $\pm$ 0.8 (5)

8	c	2.4 ± 5.4 (5)	1.3 ± 1.3 (4)	0.2 ± 0.4 (5)	0 ± 0 (6)
	x	1.8 ± 1.8 (6)	2.3 ± 3.9 (4)	0 ± 0 (3)	6.7 ± 16.3 (6)
9	c	1.5 ± 1.6 (6)	1.2 ± 1 (6)	3.3 ± 6.8 (6)	2.2 ± 4.8 (6)
	x	1.2 ± 1.3 (5)	1.3 ± 1.9 (4)	3.2 ± 3.6 (5)	1 ± 0.6 (6)
10	c	2.2 ± 4.8 (6)	3.8 ± 3.5 (6)	2.2 ± 4.4 (6)	1.4 ± 1.5 (5)
	x	0.2 ± 0.4 (6)	3.2 ± 6.8 (6)	4.8 ± 8.2 (6)	1.3 ± 1 (6)
11	c	1.3 ± 3.3 (6)	3.2 ± 4.2 (6)	2.2 ± 3 (5)	2.5 ± 2.4 (6)
	x	0.5 ± 0.8 (6)	0.2 ± 0.4 (6)	4 ± 4.6 (6)	1.7 ± 3.1 (6)

Surface living Collembola (mean ± SD (number of samples))

month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	234 ± 144.5 (6)	263.2 ± 279.6 (6)	625.2 ± 313.2 (6)	492.5 ± 278 (6)
	x	153 ± 94.6 (6)	337.5 ± 305.3 (6)	434.7 ± 385.1 (6)	279.8 ± 223.8 (6)
5	c	85 ± 45.5 (6)	126.3 ± 158.7 (6)	253 ± 211.4 (6)	184.8 ± 90.9 (6)
	x	44.8 ± 30.6 (5)	160.2 ± 152.9 (6)	136.5 ± 184.8 (6)	94.2 ± 84.1 (6)
6	c	68.2 ± 60.3 (5)	134.5 ± 272.8 (6)	117.5 ± 191.8 (6)	181.4 ± 161.7 (5)
	x	71.3 ± 98.7 (4)	96.7 ± 150.5 (6)	41.8 ± 37.4 (5)	137 ± 189.3 (5)
7	c	343 ± 164 (2)	573.7 ± 711 (3)	660 ± 636.5 (4)	246.4 ± 221.2 (5)
	x	313 ± 354.4 (4)	451.8 ± 503.4 (4)	77.8 ± 40.1 (4)	399.2 ± 421.6 (5)
8	c	133.8 ± 189.4 (5)	306 ± 538 (4)	141.6 ± 233.7 (5)	18.7 ± 14.8 (6)
	x	109.3 ± 123.7 (6)	210.8 ± 187.4 (4)	50.7 ± 66.3 (3)	13.7 ± 9.7 (6)
9	c	55 ± 60 (6)	48.2 ± 55.5 (6)	53.7 ± 63.9 (6)	26.3 ± 24.6 (6)
	x	78 ± 102.9 (5)	123.5 ± 119.7 (4)	18.2 ± 16.8 (5)	19.8 ± 15.6 (6)
10	c	4.3 ± 2.9 (6)	20.2 ± 30.6 (6)	29.7 ± 29.3 (6)	35 ± 29.6 (5)
	x	6.3 ± 7.7 (6)	10.8 ± 7.4 (6)	28.3 ± 23.4 (6)	16.8 ± 10.5 (6)
11	c	3.3 ± 4.6 (6)	2.8 ± 3 (6)	2.8 ± 2.2 (5)	5.5 ± 4.1 (6)
	x	2.3 ± 3.4 (6)	5 ± 5.7 (6)	8 ± 6.2 (6)	3 ± 3.6 (6)

Vegetation living Collembola (mean ± SD (number of samples))

month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	0.5 ± 0.8 (6)	0 ± 0 (6)	0.3 ± 0.5 (6)	0 ± 0 (6)
	x	0.2 ± 0.4 (6)	1.8 ± 2.9 (6)	0.5 ± 1.2 (6)	0.5 ± 0.8 (6)
5	c	0.5 ± 0.8 (6)	0.3 ± 0.5 (6)	0.8 ± 2 (6)	0.3 ± 0.8 (6)
	x	0 ± 0 (5)	0.5 ± 1.2 (6)	0.2 ± 0.4 (6)	0.3 ± 0.8 (6)
6	c	0.4 ± 0.5 (5)	1 ± 2 (6)	1.5 ± 2.1 (6)	1.8 ± 2.2 (5)
	x	0 ± 0 (4)	1.2 ± 2.9 (6)	0.2 ± 0.4 (5)	2.2 ± 4.9 (5)
7	c	0.5 ± 0.7 (2)	0 ± 0 (3)	0.5 ± 1 (4)	0 ± 0 (5)
	x	0 ± 0 (4)	0.8 ± 1.5 (4)	0.3 ± 0.5 (4)	0 ± 0 (5)

8	c	0.8 ± 1.8 (5)	0 ± 0 (4)	0 ± 0 (5)	0 ± 0 (6)
	x	0.2 ± 0.4 (6)	0.3 ± 0.5 (4)	0 ± 0 (3)	0 ± 0 (6)
9	c	0.3 ± 0.5 (6)	0.7 ± 0.8 (6)	0.5 ± 0.5 (6)	4 ± 8.4 (6)
	x	1 ± 1.7 (5)	0.5 ± 1 (4)	0.4 ± 0.9 (5)	0.2 ± 0.4 (6)
10	c	0.3 ± 0.5 (6)	2.3 ± 3.4 (6)	0.2 ± 0.4 (6)	8.2 ± 9.9 (5)
	x	0.3 ± 0.8 (6)	1.2 ± 2.9 (6)	3.5 ± 7.6 (6)	2.3 ± 2.7 (6)
11	c	0.7 ± 1.6 (6)	0.2 ± 0.4 (6)	0 ± 0 (5)	1.8 ± 1.7 (6)
	x	0.5 ± 1.2 (6)	0.3 ± 0.5 (6)	2.2 ± 1.8 (6)	2.5 ± 2.8 (6)

S2 Table D. Mean number of captured Acari individuals in 2015 across 4 treatment levels (control, water addition, moderate or severe drought). First table (Acari) includes all of the Acari specimens, whereas thereafter separate groups are shown. The rows contain the months and the previous treatments (C: control, X: extreme drought).

Acari (all groups) (mean $\pm$ SD (number of samples))					
month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	58.8 $\pm$ 44.6 (6)	45.2 $\pm$ 41.8 (6)	73.5 $\pm$ 34 (6)	75.7 $\pm$ 46.4 (6)
	x	44.5 $\pm$ 29 (6)	46.7 $\pm$ 30.8 (6)	73.3 $\pm$ 54.3 (6)	54.5 $\pm$ 61.7 (6)
5	c	41.7 $\pm$ 27.6 (6)	21.3 $\pm$ 19.5 (6)	62.3 $\pm$ 34.8 (6)	56.7 $\pm$ 18.8 (6)
	x	13.8 $\pm$ 10.7 (5)	15.3 $\pm$ 12.8 (6)	29.2 $\pm$ 31.4 (6)	21.7 $\pm$ 14.7 (6)
6	c	16.4 $\pm$ 19.1 (5)	5.2 $\pm$ 7.2 (6)	14.3 $\pm$ 10.9 (6)	41.4 $\pm$ 54.9 (5)
	x	12.5 $\pm$ 17.9 (4)	4.8 $\pm$ 7.1 (6)	12.8 $\pm$ 13.3 (5)	16.8 $\pm$ 22.8 (5)
7	c	29.5 $\pm$ 31.8 (2)	10.7 $\pm$ 18.5 (3)	10.3 $\pm$ 15.3 (4)	17 $\pm$ 17.6 (5)
	x	22 $\pm$ 28.8 (4)	12 $\pm$ 21.4 (4)	33.8 $\pm$ 52.4 (4)	20 $\pm$ 23 (5)
8	c	12 $\pm$ 10.1 (5)	1 $\pm$ 2 (4)	14.4 $\pm$ 16.7 (5)	33.8 $\pm$ 30.7 (6)
	x	8.5 $\pm$ 16 (6)	9 $\pm$ 15.3 (4)	27.7 $\pm$ 18.6 (3)	15.3 $\pm$ 14.9 (6)
9	c	15.5 $\pm$ 20.6 (6)	5.3 $\pm$ 9.8 (6)	20.5 $\pm$ 16.4 (6)	12.2 $\pm$ 6.9 (6)
	x	14.4 $\pm$ 18.8 (5)	14 $\pm$ 22.8 (4)	35.8 $\pm$ 62.4 (5)	4.8 $\pm$ 4.9 (6)
10	c	2.3 $\pm$ 3 (6)	3.2 $\pm$ 4.6 (6)	6.7 $\pm$ 7.6 (6)	12.8 $\pm$ 8.8 (5)
	x	3.3 $\pm$ 3.7 (6)	6.3 $\pm$ 8.7 (6)	9.8 $\pm$ 8.4 (6)	8.3 $\pm$ 5.9 (6)
11	c	0 $\pm$ 0 (6)	0 $\pm$ 0 (6)	2.6 $\pm$ 3.2 (5)	14.3 $\pm$ 32.2 (6)
	x	0.2 $\pm$ 0.4 (6)	1.8 $\pm$ 4 (6)	4.5 $\pm$ 5.5 (6)	15.5 $\pm$ 23.1 (6)

Astigmata (mean $\pm$ SD (number of samples))					
month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	1.7 $\pm$ 3.6 (6)	0.3 $\pm$ 0.5 (6)	6 $\pm$ 12.3 (6)	1.7 $\pm$ 3.6 (6)
	x	0.7 $\pm$ 1.6 (6)	0 $\pm$ 0 (6)	0 $\pm$ 0 (6)	0.2 $\pm$ 0.4 (6)
5	c	11.7 $\pm$ 16 (6)	2.7 $\pm$ 3.9 (6)	12.8 $\pm$ 16.1 (6)	4.5 $\pm$ 4.8 (6)
	x	0.2 $\pm$ 0.4 (5)	0.2 $\pm$ 0.4 (6)	0 $\pm$ 0 (6)	0.5 $\pm$ 0.5 (6)
6	c	6.2 $\pm$ 12.3 (5)	0.7 $\pm$ 1.2 (6)	3.5 $\pm$ 4.1 (6)	7 $\pm$ 8.2 (5)
	x	0.8 $\pm$ 1 (4)	0.2 $\pm$ 0.4 (6)	1.6 $\pm$ 2.3 (5)	8.2 $\pm$ 11.9 (5)
7	c	6 $\pm$ 8.5 (2)	2 $\pm$ 3.5 (3)	1 $\pm$ 1.4 (4)	4.6 $\pm$ 5.4 (5)
	x	8 $\pm$ 8.9 (4)	1.5 $\pm$ 1.9 (4)	2.3 $\pm$ 2.6 (4)	9.6 $\pm$ 11.4 (5)
8	c	1.6 $\pm$ 3.6 (5)	0 $\pm$ 0 (4)	3.8 $\pm$ 7.9 (5)	5.5 $\pm$ 3.9 (6)
	x	3 $\pm$ 5.9 (6)	5.5 $\pm$ 10.3 (4)	6.3 $\pm$ 5.7 (3)	4.3 $\pm$ 4.8 (6)
9	c	2.8 $\pm$ 4.2 (6)	1.5 $\pm$ 3.7 (6)	0.8 $\pm$ 1.2 (6)	1.7 $\pm$ 3.2 (6)
	x	1.2 $\pm$ 1.3 (5)	6 $\pm$ 10.1 (4)	28 $\pm$ 57.2 (5)	1.2 $\pm$ 1 (6)
10	c	0.7 $\pm$ 1 (6)	1 $\pm$ 1.5 (6)	0.2 $\pm$ 0.4 (6)	0 $\pm$ 0 (5)
	x	0.7 $\pm$ 0.8 (6)	0.5 $\pm$ 1.2 (6)	3.3 $\pm$ 4.4 (6)	1.3 $\pm$ 2.4 (6)
11	c	0 $\pm$ 0 (6)	0 $\pm$ 0 (6)	0.2 $\pm$ 0.4 (5)	0.3 $\pm$ 0.5 (6)
	x	0 $\pm$ 0 (6)	0 $\pm$ 0 (6)	1 $\pm$ 2.4 (6)	0 $\pm$ 0 (6)

Mesostigmata (mean $\pm$ SD (number of samples))					
month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	38.2 $\pm$ 34.9 (6)	31.8 $\pm$ 35.1 (6)	47.8 $\pm$ 29.2 (6)	55.7 $\pm$ 39.2 (6)

5	x	25.7 ± 17.4 (6)	28.5 ± 17.1 (6)	57.5 ± 44.3 (6)	37.5 ± 50.9 (6)
	c	24.8 ± 22.4 (6)	13.5 ± 14.5 (6)	30 ± 25.6 (6)	38.8 ± 19 (6)
6	x	8.8 ± 6.6 (5)	10.7 ± 8.4 (6)	20 ± 20.7 (6)	10.3 ± 11.8 (6)
	c	4.2 ± 3.5 (5)	1.8 ± 3.1 (6)	4.5 ± 5.1 (6)	28.4 ± 43.7 (5)
7	x	8.8 ± 14.4 (4)	1.3 ± 2.3 (6)	4.8 ± 4.9 (5)	4.2 ± 6 (5)
	c	9.5 ± 7.8 (2)	5.7 ± 9.8 (3)	4 ± 6.7 (4)	8.6 ± 9.6 (5)
8	x	11.3 ± 19.9 (4)	8.8 ± 16.8 (4)	28.3 ± 47 (4)	10 ± 18 (5)
	c	6.4 ± 5.5 (5)	0 ± 0 (4)	3.8 ± 5 (5)	14.7 ± 16.5 (6)
9	x	4.5 ± 10.1 (6)	2.3 ± 3.2 (4)	15.3 ± 12 (3)	4.8 ± 4.4 (6)
	c	6.5 ± 9.7 (6)	0.7 ± 1 (6)	5.2 ± 5.6 (6)	4.3 ± 3.5 (6)
10	x	6.2 ± 10.1 (5)	3.8 ± 6.8 (4)	5.4 ± 5.5 (5)	2.2 ± 2.3 (6)
	c	0.5 ± 0.8 (6)	0.5 ± 0.5 (6)	2.3 ± 3.4 (6)	7.2 ± 5.1 (5)
11	x	1 ± 1.5 (6)	3.5 ± 5.4 (6)	3.3 ± 3.1 (6)	4.5 ± 3.3 (6)
	c	0 ± 0 (6)	0 ± 0 (6)	1.8 ± 2.7 (5)	12.7 ± 29.1 (6)
	x	0.2 ± 0.4 (6)	0.8 ± 2 (6)	2.8 ± 3.1 (6)	13.7 ± 20.9 (6)

Oribatida (mean ± SD (number of samples))

month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	4.2 ± 3 (6)	2.7 ± 2.3 (6)	3.7 ± 2.1 (6)	3.3 ± 1.6 (6)
	x	2.5 ± 1.9 (6)	2.8 ± 2.6 (6)	3.3 ± 3.2 (6)	2.8 ± 3.1 (6)
5	c	2.2 ± 2.5 (6)	2 ± 2.1 (6)	10.3 ± 6.3 (6)	6.5 ± 3.6 (6)
	x	1.6 ± 1.5 (5)	0.8 ± 1 (6)	2.3 ± 2.5 (6)	3.3 ± 2 (6)
6	c	3.4 ± 3.7 (5)	1.7 ± 2.9 (6)	2.5 ± 2.7 (6)	4.6 ± 4.3 (5)
	x	1.5 ± 2.4 (4)	1.7 ± 3.1 (6)	3.4 ± 4.1 (5)	3.4 ± 4.2 (5)
7	c	12 ± 15.6 (2)	1.7 ± 2.9 (3)	5.3 ± 7.5 (4)	2 ± 2.3 (5)
	x	1 ± 2 (4)	1.5 ± 2.4 (4)	2.8 ± 3.2 (4)	0.2 ± 0.4 (5)
8	c	3 ± 3.7 (5)	0.8 ± 1.5 (4)	5.4 ± 8 (5)	9.5 ± 9.2 (6)
	x	0.2 ± 0.4 (6)	0.3 ± 0.5 (4)	3.7 ± 0.6 (3)	3.7 ± 5.6 (6)
9	c	5.8 ± 8.2 (6)	2.8 ± 5.5 (6)	12 ± 10.2 (6)	5 ± 3.2 (6)
	x	6.2 ± 7.2 (5)	2.3 ± 3.9 (4)	1.4 ± 0.9 (5)	0.7 ± 1 (6)
10	c	0.8 ± 1.6 (6)	1.5 ± 2.8 (6)	3 ± 3.6 (6)	4.4 ± 4.3 (5)
	x	1.3 ± 1.8 (6)	1.8 ± 2.1 (6)	2.5 ± 2.7 (6)	1.2 ± 1.5 (6)
11	c	0 ± 0 (6)	0 ± 0 (6)	0.4 ± 0.5 (5)	0.7 ± 1.2 (6)
	x	0 ± 0 (6)	0.8 ± 1.6 (6)	0.2 ± 0.4 (6)	1.3 ± 2.4 (6)

Prostigmata (mean ± SD (number of samples))

month	first treatment	Control	Water	Moderate d.	Severe d.
4	c	14.8 ± 12.2 (6)	10.3 ± 9.4 (6)	16 ± 8.6 (6)	15 ± 11.5 (6)
	x	15.7 ± 12.6 (6)	15.3 ± 12.4 (6)	12.5 ± 9.2 (6)	14 ± 11.2 (6)
5	c	3 ± 3.9 (6)	3.2 ± 2.6 (6)	9.2 ± 10.2 (6)	6.8 ± 6 (6)
	x	3.2 ± 2.9 (5)	3.7 ± 4.9 (6)	6.8 ± 9.4 (6)	7.5 ± 8.5 (6)
6	c	2.6 ± 3.2 (5)	1 ± 1.7 (6)	3.8 ± 4.2 (6)	1.4 ± 0.9 (5)
	x	1.5 ± 1.9 (4)	1.7 ± 2 (6)	3 ± 3.5 (5)	1 ± 1.2 (5)
7	c	2 ± 0 (2)	1.3 ± 2.3 (3)	0 ± 0 (4)	1.8 ± 1.9 (5)
	x	1.8 ± 1.7 (4)	0.3 ± 0.5 (4)	0.5 ± 0.6 (4)	0.2 ± 0.4 (5)
8	c	1 ± 1.7 (5)	0.3 ± 0.5 (4)	1.4 ± 2.6 (5)	4.2 ± 5.7 (6)
	x	0.8 ± 1.3 (6)	1 ± 1.4 (4)	2.3 ± 4 (3)	2.5 ± 3.1 (6)

9	c	0.3 ± 0.8 (6)	0.3 ± 0.5 (6)	2.5 ± 5.2 (6)	1.2 ± 2.4 (6)
	x	0.8 ± 1.1 (5)	2 ± 2.2 (4)	1 ± 1.2 (5)	0.8 ± 1.6 (6)
10	c	0.3 ± 0.8 (6)	0.2 ± 0.4 (6)	1.2 ± 1.2 (6)	1.2 ± 1.6 (5)
	x	0.3 ± 0.5 (6)	0.5 ± 0.8 (6)	0.7 ± 0.5 (6)	1.3 ± 0.8 (6)
11	c	0 ± 0 (6)	0 ± 0 (6)	0.2 ± 0.4 (5)	0.7 ± 1.6 (6)
	x	0 ± 0 (6)	0.2 ± 0.4 (6)	0.5 ± 0.8 (6)	0.5 ± 0.8 (6)

S2 Table E. Mean (SD) values for the collembolan species in 2014. X: extreme drought treated, C: control sites.

Collembola species	C	X
Most frequent species	mean (SD) of individuals	
<i>Arrhopalites caecus</i> (Tullberg, 1871)	13.3 (42.2)	2.6 (9.8)
<i>Entomobrya nigriventris</i> Stach, 1930	543.4 (928.3)	259.5 (257.5)
<i>Proisotoma minuta</i> (Tullberg, 1871)	88.2 (207.6)	7.1 (26.3)
<i>Sphaeridia pumilis</i> (Krausbauer, 1898)	45.4 (64.2)	0.5 (1)
Rare species		
<i>Brachystomella curvula</i> Gisin, 1948	1 (2.4)	0.3 (0.8)
<i>Ceratophysella succinea</i> (Gisin, 1949)		0.04 (0.2)
<i>Cyphoderus albinus</i> Nicolet, 1842	0.04 (0.2)	0.9 (3.2)
<i>Entomobrya multifasciata</i> (Tullberg, 1871)	0.04 (0.2)	0.3 (0.6)
<i>Folsomia candida</i> (Willem, 1902)		0.04 (0.2)
<i>Heteromurus nitidus</i> (Templeton, 1835)	0.04 (0.2)	
<i>Lepidocyrtus cyaneus</i> Tullberg, 1871	0.04 (0.2)	0.04 (0.2)
<i>Orchesella taurica</i> (Stach, 1960)		0.1 (0.3)
<i>Protaphorura serbica</i> (Loksa & Bogojevic, 1967)	0.1 (0.6)	
<i>Sminthurus viridis</i> (Linnaeus, 1758)	0.4 (0.8)	0.2 (0.5)
<i>Sminthurus multipunctatus</i> Schäffer, 1896	0.04 (0.2)	
<i>Sminthurus maculatus</i> Tömösváry, 1883	0.04 (0.2)	
<i>Willowsia buski</i> (Lubbock, 1869)		0.1 (0.3)
<i>Xenylla maritima</i> Tullberg, 1869	0.2 (0.5)	0.2 (0.4)