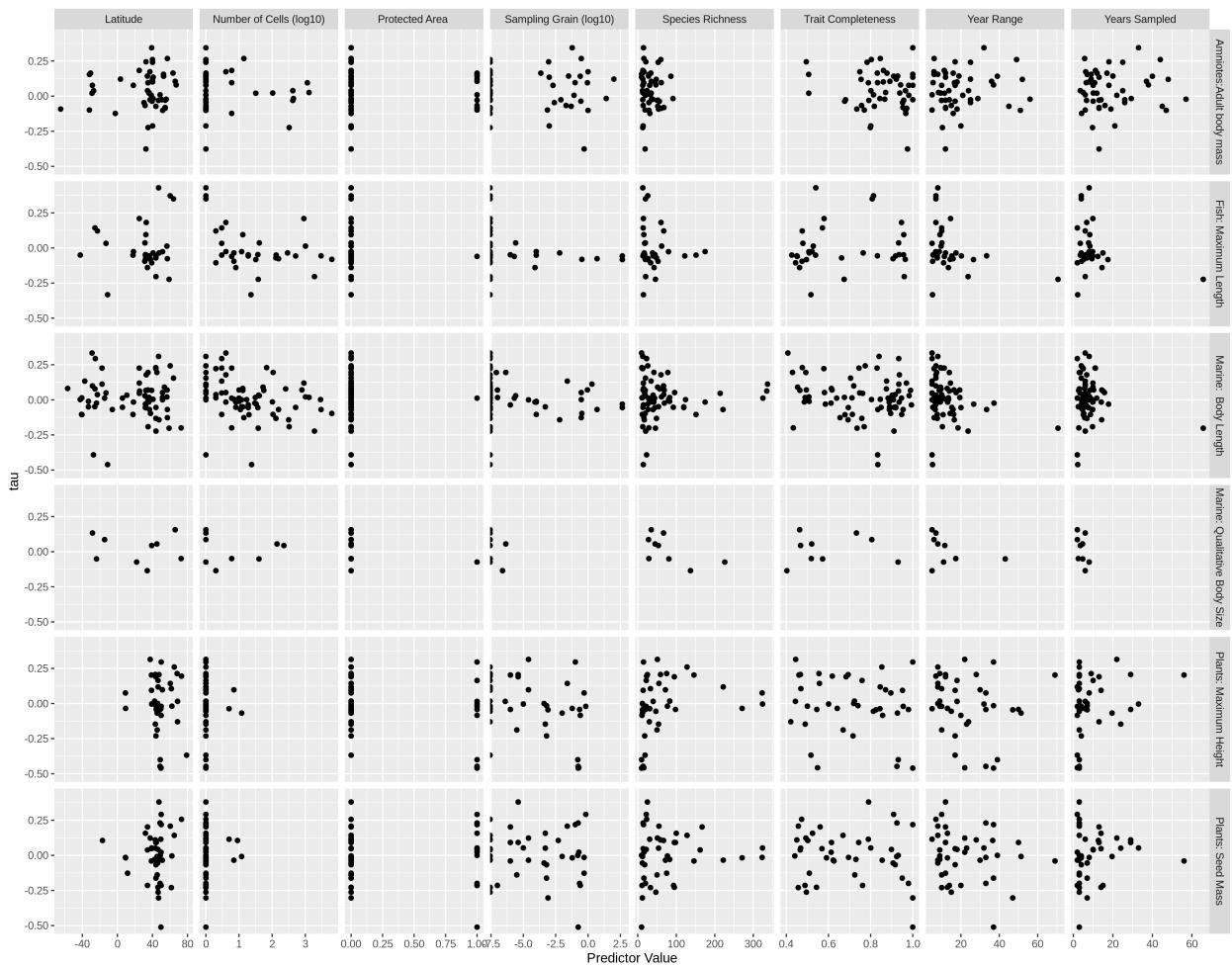


Extended Data

Extended Data Table 1 Full statistical results underlying Figure 2. Tests were two-sided Welch's two-sample t-tests, which approximates the relevant degrees of freedom given different variance in the observations and the null model. No corrections were made to the reported values for multiple comparisons.

Trait	Estimated Difference	Lower CI	Upper CI	Estimated Mean (Observed)	Mean (Null)	t-statistic	p-value	Effective Degrees of Freedom	Sample Size
Marine									
Body Length	0.0140	-0.0201	0.0481	0.0149	0.0010	0.8173	0.4165	70.8705	71
Qualitative Body Size	0.0182	-0.0589	0.0954	0.0182	0.0000	0.5422	0.6021	8.2094	9
Fish									
Maximum Length	0.0030	-0.0553	0.0612	0.0007	-0.0023	0.1043	0.9175	32.2650	33
Amniotes									
Adult body mass	0.0406	0.0007	0.0806	0.0416	0.0010	2.0446	0.0463	49.0707	49
Plants									
Seed Mass	0.0005	-0.0546	0.0556	0.0021	0.0016	0.0183	0.9855	42.6548	43
Maximum Height	-0.0103	-0.0765	0.0560	-0.0095	0.0007	-0.3131	0.7559	39.5603	40

Extended Data Figure 1 Raw relationships between the suite of study-level predictors and the principal response variable τ .



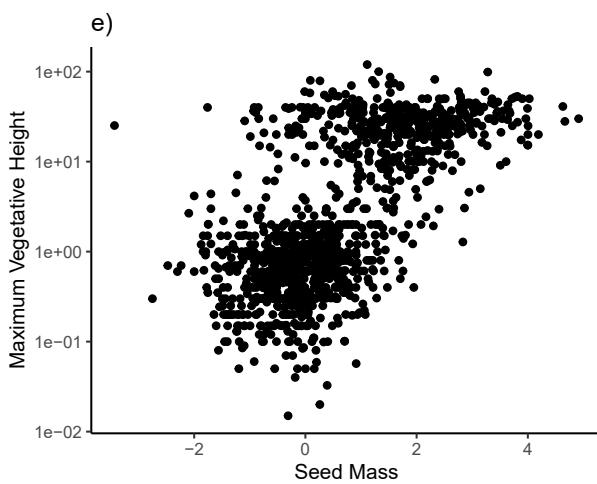
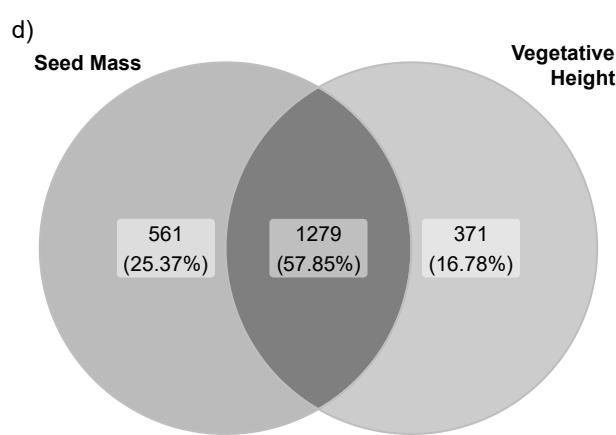
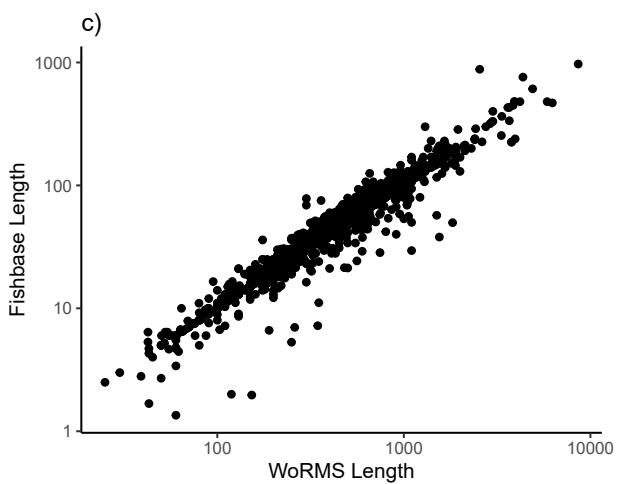
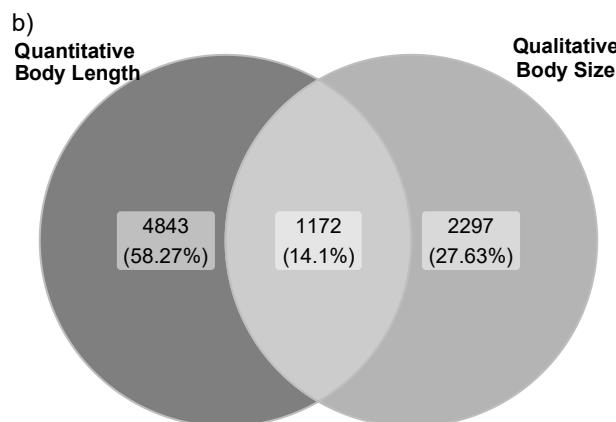
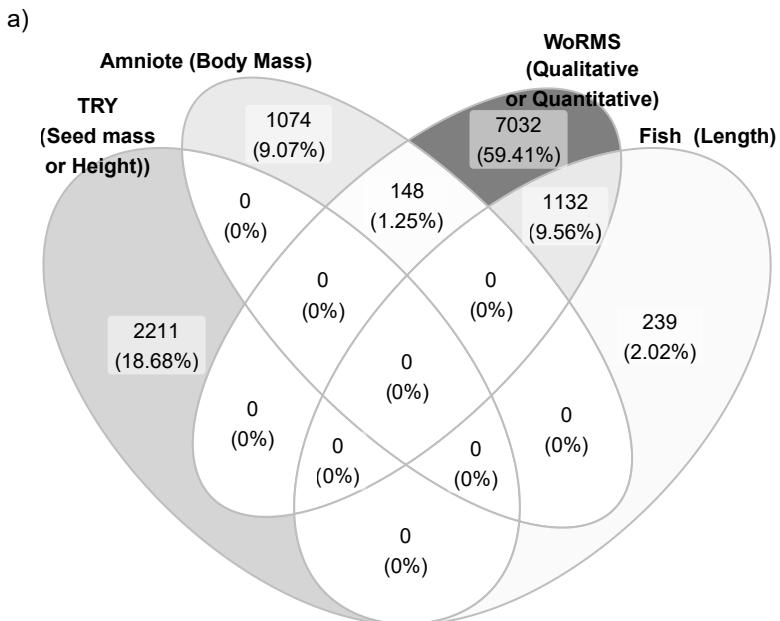
Extended Data Table 2 Full statistical results of linear models for the putative study-level drivers of τ . Each trait was tested independently and no corrections were made to the reported values for multiple comparisons. There was no consistent drivers - only three relationships were identified as significant at $p<0.05$ (highlighted in **bold**), but these had low explanatory power. Inspection of Extended Data Figure 1 suggests that the impact of number of cells within the fish studies was driven by three outlier single-site studies, while the study-duration and sampling frequency relationships identified for plant height can be seen to be driven by one long term study.

	Marine				Fish		Amniotes			Plants		
	Body Length		Qualitative Body Size		Maximum Length		Adult body mass		Seed Mass		Maximum Height	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
Coefficients												
Intercept	0.2	0.0796	-0.0328	0.931	-0.0578	0.635	0.16	0.32	-0.0855	0.639	-0.223	0.454
Species Richness	-7.86e-05	0.758	-0.0016	0.379	-0.00042	0.553	-0.000755	0.518	0.000154	0.726	0.000384	0.432
Trait Completeness	-0.147	0.176	0.233	0.57	0.112	0.431	-0.157	0.355	0.0702	0.722	0.245	0.321
Years Sampled	0.00177	0.615	0.0144	0.778	-0.00245	0.669	-0.00204	0.756	0.00543	0.17	0.0121	0.0143
Year Range	-0.00432	0.157	-0.00266	0.563	-0.0021	0.691	0.00299	0.636	-0.00501	0.107	-0.00782	0.0151
Number of Cells (Log10)	-0.0354	0.0626	-0.00322	0.96	-0.0723	0.017	-0.015	0.532	0.113	0.313	0.0395	0.778
Absolute Latitude	0.000359	0.795	0.000226	0.946	0.00418	0.0543	0.000679	0.728	0.0017	0.51	0.00154	0.622
Summary												
Observations	71		9		33		49		43		40	
Adjusted R-squared	0.087		-0.389		0.261		-0.0957		-0.025		0.127	

Table S3 Full statistical results of tests for the drivers of τ^2 , in order to test if there are drivers for deviations from trait-neutrality. Each trait was tested independently and no corrections were made to the reported values for multiple comparisons. Here also, there were no consistent drivers.

	Marine				Fish		Amniotes		Plants			
	Body Length		Qualitative Body Size		Maximum Length		Adult body mass		Seed Mass		Maximum Height	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
Coefficients												
Intercept	0.0615	0.0385	0.038	0.203	0.0357	0.32	0.0387	0.252	0.0124	0.786	0.00756	0.932
Species Richness	-0.000192	0.00508	-5.21e-05	0.608	-0.000366	0.0852	-0.000321	0.195	-0.000102	0.357	-0.000116	0.429
Trait Completeness	-0.00364	0.897	-0.0355	0.232	0.000468	0.991	-0.00322	0.928	0.0161	0.745	-0.00268	0.971
Years Sampled	0.000188	0.837	0.00182	0.572	-0.000602	0.72	0.00102	0.461	-0.00131	0.189	-0.00179	0.208
Year Range	-0.000125	0.874	-0.00013	0.634	0.000635	0.681	-0.000819	0.538	0.000768	0.32	0.00181	0.056
Number of Cells (Log10)	-0.00953	0.054	-0.00848	0.134	-0.0218	0.014	-0.0033	0.514	-0.0427	0.132	-0.0647	0.128
Absolute Latitude	-0.000406	0.26	-7.5e-05	0.714	0.000908	0.146	-0.000156	0.703	0.000341	0.599	0.000488	0.602
Summary												
Observations	71		9		33		49		43		40	
Adjusted R-squared	0.0692		0.3		0.182		-0.0531		0.0922		0.0884	

Extended Data Figure 2 Further details of degree of overlap and correspondence between traits. a) Number of species that could be related to at least one trait from the four sources. b) Overlap within the WoRMS database between the quantitative and qualitative body lengths was relatively low. In cases where the data was available on both categories, the Spearman's rank correlation was 0.65. c) Very strong correlation between the size traits for species that had data in both the WoRMS and the FishBase databases. d) Overlap in trait data between then plant species held in the TRY database was comparatively high. e) Correlation between the seed mass and vegetative height trait values was moderate, and considerably less within guilds.



Extended Data Table 4 - List of studies used from BioTIME, including key statistics and description. Studies are ordered by trait, then by τ . If a study could be linked to multiple traits, it will therefore appear multiple times. Note this table is also available in .csv format. ID numbers correspond to the BioTIME database, and columns ‘Latitude’ to ‘Data Source’ are directly drawn from the BioTIME metadata.

Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Amniotes:Adult body mass	321	-0.376	19.0	13.000	98	12.0	1	32.550	-106.812	0.500	Count	Weight	Small Mammal Exclosure Study. Jornada LTER. SMES rodent trapping data	http://jornada.nmsu.edu/lter/dataset/49
Amniotes:Adult body mass	172	-0.224	13.0	9.696	80	10.4	326	35.010	-24.225	0.000	Count	NA	POPA cetacean, seabird, and sea turtle sightings in the Azores area 1998-2009 (OBIS SEAMAP)	http://www.iobis.org/mapper/?dataset=4
Amniotes:Adult body mass	308	-0.212	14.0	21.000	80	20.0	1	40.171	-79.260	0.001	Count	Weight	Powdermill Nature Reserve monitored small mammal populations from 1979-1999.	https://portal.lternet.edu/nis/metadata/lter-vcr.67.17
Amniotes:Adult body mass	516	-0.123	31.5	4.167	97	16.0	6	-2.386	-59.919	0.000	Count	NA	A large-scale fragmentation experiment for Neotropical bats	None
Amniotes:Adult body mass	46	-0.102	29.0	47.000	97	51.0	1	51.698	-5.277	1.000	Count	NA	Skokholm Bird Observatory	http://ecologicaldata.org/wiki/skokholm-bird-observatory
Amniotes:Adult body mass	275	-0.099	19.0	6.000	77	5.0	1	-31.968	115.833	0.001	Count	Size	Response of an urban remnant reptile community to summer wildfire	http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0000000
Amniotes:Adult body mass	419	-0.092	54.0	19.000	73	18.0	1	-64.770	-64.050	0.000	Count	NA	Data collected aboard cruises off the coast of the Western Antarctic Peninsula	https://portal.lternet.edu/nis/mapbrowser/lter-pal.100.1
Amniotes:Adult body mass	441	-0.087	61.0	13.000	97	12.0	1	54.504	60.294	0.000	Count	NA	Long-term dynamics of bird populations in birch forests of Ilmen Nature Reserve during the breeding period individuals / km ²	http://ashipunov.info/shipunov/school/b
Amniotes:Adult body mass	440	-0.081	68.0	13.000	95	12.0	1	54.504	60.294	0.000	Density	NA	Long-term dynamics of bird populations in pine-birch forests of Ilmen Nature Reserve during the breeding period individuals / km ²	http://ashipunov.info/shipunov/school/b
Amniotes:Adult body mass	39	-0.073	52.0	45.000	82	45.0	1	43.910	-71.750	0.050	Density	NA	Bird community dynamics in a temperate deciduous forest Long-term trends at Hubbard Brook	http://www.esajournals.org/toc/emon/56/1
Amniotes:Adult body mass	358	-0.067	14.0	16.000	76	15.0	1	31.583	-94.817	0.020	Density	NA	Neotropical Migratory Bird Communities in a Developing Pine Plantation	http://www.srs.fs.fed.us/pubs/520
Amniotes:Adult body mass	59	-0.046	29.0	26.000	95	25.0	1	30.323	-103.501	0.002	Count	NA	Long-term monitoring and experimental manipulation of a Chihuahuan Desert ecosystem near Portal, Arizona, USA	http://esapubs.org/archive/ecol/E090/11
Amniotes:Adult body mass	41	-0.036	56.0	10.000	68	17.0	1	39.500	-82.480	0.280	Count	NA	Time and space and the variation of species	http://www.esajournals.org/toc/ecol/41/1
Amniotes:Adult body mass	217	-0.031	50.5	6.664	79	9.9	420	46.829	-109.982	0.000	Count	NA	Landbird Monitoring Program (UMT-LBMP)	http://www.treesearch.fs.fed.us/pubs/320
Amniotes:Adult body mass	439	-0.029	52.0	13.000	96	12.0	1	54.504	60.294	0.000	Density	NA	Long-term dynamics of bird populations in pine forests of Ilmen Nature Reserve during the breeding period individuals / km ²	http://ashipunov.info/shipunov/school/b

(continued)

Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Amniotes:Adult body mass	319	-0.026	35.0	14.000	68	14.0	1	37.250	-96.717	0.008	Count	NA	Effects of rangeland management on community dynamics of herpetofauna to the tallgrass prairie	http://www.bioone.org/doi/pdf/10.1655/0831%282006%2962%5B378%3AEORMOC
Amniotes:Adult body mass	47	-0.026	13.0	26.000	100	25.0	1	50.845	-107.446	0.000	Count	NA	Detection of Density-Dependent Effects in Annual Duck Censuses	http://www.esajournals.org/toc/ecol/65/
Amniotes:Adult body mass	339	-0.022	39.0	57.000	87	56.0	1	55.717	13.333	0.000	Count	NA	Species trends turnover and composition of a woodland bird community in southern Sweden during a period of 57 years.	http://springer
Amniotes:Adult body mass	195	-0.017	91.5	29.305	84	28.8	439	40.809	-96.187	25.427	Count	NA	Breeding birds survey North America	https://www.pwrc.usgs.gov/bbs/
Amniotes:Adult body mass	361	0.006	20.0	22.000	98	21.0	1	38.610	-79.835	0.083	Count	NA	A long-term bird population study in an Appalachian spruce forest	http://www.jstor.org/stable/4161914.
Amniotes:Adult body mass	442	0.009	33.0	6.000	81	5.0	1	48.669	85.654	0.000	Count	NA	Composition and abundance of bird species in the village Matabay in June 1980-1985 (absolute indicators (area 025 km ²))	http://cyberleninka.ru/article/n/ptitsy-naselyonnyh-punktov-markakolskoy-kotloviny-yuzhnnyy-altay
Amniotes:Adult body mass	67	0.021	15.4	11.906	51	11.4	32	-28.954	24.951	0.000	Count	NA	Animal Demography Unit - Coordinated Waterbird Counts (CWAC) (AfrOBIS)	http://www.iobis.org/mapper/?dataset=6
Amniotes:Adult body mass	374	0.022	34.9	10.067	94	9.4	104	35.961	136.046	0.000	Count	NA	Monitoring site 1000 Shorebird Survey	http://www.biodic.go.jp/moni1000/findin
Amniotes:Adult body mass	166	0.026	13.0	4.926	87	8.3	1298	36.075	-70.992	0.000	Count	NA	PIROP Northwest Atlantic 1965-1992 (SEAMAP)	http://www.iobis.org/mapper/?dataset=2
Amniotes:Adult body mass	366	0.039	24.0	25.000	97	24.0	1	34.350	-106.880	0.000	Count	NA	Small Mammal Exclosure Study (SMES)	https://portal.lternet.edu/nis/mapbrowse/lter-sev.8.297976
Amniotes:Adult body mass	108	0.039	12.2	3.524	80	13.7	420	-27.174	3.946	0.000	Count	NA	Seabirds of the Southern and South Indian Ocean (Australian Antarctic Data Centre)	https://data.aad.gov.au/
Amniotes:Adult body mass	58	0.077	31.0	18.000	98	17.0	1	18.190	-65.430	0.002	Count	NA	Avian populations long-term monitoring dataset. San Juan, Puerto Rico Luquillo Long Term Ecological Research Site Database Grid points bird counts DBAS 23	http://luq.lternet.edu/data/luqmetadata2
Amniotes:Adult body mass	348	0.077	13.0	10.000	100	10.0	1	-28.609	-48.981	0.000	Count	Weight	Bats (Mammalia Chiroptera) in restinga in the municipality of Jaguaruna south of Santa Catarina Brazil.	None
Amniotes:Adult body mass	420	0.080	47.0	38.000	94	37.0	1	67.077	17.435	0.000	Count	NA	Species composition and population fluctuations of alpine bird communities during 38 years in the Scandinavian mountain range	http://www.luvre.org/data_o_pdf/Luvre135%202006%20Svensson%20Heden%2038

(continued)

Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Amniotes:Adult body mass	169	0.095	15.4	10.799	79	16.7	1152	34.858	-121.615	0.900	Count	NA	CalCOFI and NMFS Seabird and Marine Mammal Observation Data. 1987-2006 (SEAMAP)	http://www.iobis.org/mapper/?dataset=2
Amniotes:Adult body mass	372	0.096	61.0	6.500	83	5.5	6	34.952	134.975	0.100	Count	NA	Monitoring site 1000 Village survey - Bird survey data	http://www.biodic.go.jp/moni1000/findin
Amniotes:Adult body mass	415	0.101	45.0	8.000	86	18.0	1	40.133	-88.300	0.000	Density	NA	Bird populations in east central Illinois. Fluctuations variations and development over a half-century	https://www.ideals.illinois.edu/handle/21
Amniotes:Adult body mass	363	0.105	35.0	37.000	89	36.0	1	65.968	16.317	0.000	Count	NA	The 37-year dynamics of a subalpine bird community with special emphasis on the influence of environmental temperature and <i>Epirrita autumnata</i> cycles.	http://www.luvre.org/data_o_pdf/Luvre130%202004%20Enemar%20mfl%2037%20
Amniotes:Adult body mass	414	0.120	48.0	48.000	75	52.0	1	39.983	-88.650	0.000	Density	NA	Bird populations in east central Illinois. Fluctuations variations and development over a half-century	https://www.ideals.illinois.edu/handle/21
Amniotes:Adult body mass	312	0.121	13.0	9.000	92	25.0	1	3.500	35.750	100.000	Count	NA	Stability in a Multi-Species Assemblage of Large Herbivores in East Africa	http://www.jstor.org/stable/4219351?seq
Amniotes:Adult body mass	357	0.135	10.0	13.000	100	12.0	1	40.829	-104.758	0.001	Count	NA	Small Mammal Trapping Webs on the Central Plains Experimental Range	https://portal.lternet.edu/nis/mapbrowse/lter-sgs.137.17
Amniotes:Adult body mass	360	0.142	86.0	40.000	91	39.0	1	52.717	24.267	0.250	NA	Weight	Bialowieza National Park bird assemblage	http://www.bioone.org/doi/abs/10.3161/
Amniotes:Adult body mass	56	0.143	28.0	20.000	93	19.0	1	34.200	-106.430	0.031	Count	Weight	Small Mammal Mark-Recapture Population Dynamics at Core Research Sites	http://sev.lternet.edu/data/sev-8
Amniotes:Adult body mass	381	0.155	29.0	7.000	51	6.0	1	-31.933	115.767	0.000	Count	NA	Long-term sampling of a herpetofaunal assemblage on an isolated urban bushland	http://www.rswa.org.au/publications/Jou
Amniotes:Adult body mass	447	0.156	10.0	9.000	100	8.0	1	52.601	38.928	0.000	Density	NA	Long-term population dynamics of small mammals in the Natural Boundary Morozova Gora (individuals / 100 trap-nights)	http://elibrary.ru/item.asp?id=24990048
Amniotes:Adult body mass	327	0.164	12.0	17.000	88	16.0	1	-30.600	-71.700	0.000	Count	Weight	Fray Jorge Small Mammals 1989-2005	http://esapubs.org/archive/ecol/E094/08
Amniotes:Adult body mass	475	0.164	34.0	12.000	83	12.0	1	63.417	10.500	0.000	Count	NA	Structure and dynamics of a passerine bird community in a spruce-dominated boreal forest	http://www.sekj.org/PDF/anzf30/anz30-043-054.pdf
Amniotes:Adult body mass	373	0.174	16.0	6.250	75	6.0	4	37.071	137.152	1.000	Count	NA	Village survey Medium and large mammal survey data	http://www.biodic.go.jp/moni1000/findin

(continued)

Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Amniotes:Adult body mass	171	0.183	13.3	11.167	86	11.3	6	24.896	-76.292	0.000	Count	NA	Bahamas Marine Mammal Research Organisation Opportunistic Sightings (SEAMAP)	http://www.iobis.org/mapper/?dataset=2
Amniotes:Adult body mass	416	0.241	53.0	25.000	78	25.0	1	40.133	-88.300	0.000	Density	NA	Bird populations in east central Illinois. Fluctuations variations and development over a half-century	https://www.ideals.illinois.edu/handle/2142/10000
Amniotes:Adult body mass	316	0.244	21.0	18.000	49	17.0	1	32.620	-106.740	0.001	Count	Weight	Lizard pitfall trap data (LTER-II LTER-III)	http://jornada.nmsu.edu/lter/dataset/49
Amniotes:Adult body mass	413	0.260	60.0	44.000	80	49.0	1	39.983	-88.650	0.000	Density	NA	Bird populations in east central Illinois. Fluctuations variations and development over a half-century	https://www.ideals.illinois.edu/handle/2142/10000
Amniotes:Adult body mass	91	0.268	15.9	5.714	85	6.1	14	57.039	20.556	0.300	Count	NA	Baltic seabirds transect surveys	http://www.iobis.org/mapper/?dataset=2
Amniotes:Adult body mass	311	0.345	15.0	33.000	100	32.0	1	39.083	-96.583	0.060	Count	NA	Seasonal summary of numbers of small mammals on 14 LTER traplines in prairie habitats at Konza Prairie	http://lter.konza.ksu.edu/content/csm01-seasonal-summary-numbers-small-mammals-14-lter-traplines-prairie-habitats-konza
Marine: Body Length	284	-0.461	14.5	2.208	83	5.2	24	-11.206	-43.617	0.000	Count	Weight	Previous_fisheries_REVIZETropical and Subtropical Western South Atlantic OBIS)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	142	-0.392	23.0	2.000	83	5.0	1	-27.328	-45.330	0.000	Count	NA	Pelagic and Demersal Fish Database II. REVIZEE South Area (WSAOBIS)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	119	-0.223	20.5	6.017	91	23.7	1896	43.987	-63.670	0.000	Count	Weight	DFO Maritimes Research Vessel Trawl Surveys Fish Observations (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	428	-0.202	46.0	65.737	74	70.6	38	58.959	9.768	0.000	Count	NA	Long term monitoring of fish abundances from coastal SKagerrak	None
Marine: Body Length	97	-0.200	28.8	2.750	43	18.5	6	72.739	10.694	0.000	Count	NA	Archives of the Arctic Seas Zooplankton (ARC)	http://www.iobis.org/mapper/?dataset=4
Marine: Body Length	172	-0.191	13.0	9.696	77	10.4	326	35.010	-24.225	0.000	Count	NA	POFA cetacean, seabird, and sea turtle sightings in the Azores area 1998-2009 (OBIS SEAMAP)	http://www.iobis.org/mapper/?dataset=4
Marine: Body Length	182	-0.142	16.9	14.321	69	16.6	315	47.481	-62.762	0.006	Count	NA	Snow crab research trawl survey database (Southern Gulf of St. Lawrence, Gulf region, Canada) from 1988 to 2010 (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	123	-0.132	48.6	6.885	76	7.7	130	43.891	-68.941	0.000	Count	Weight	Maine Department of Marine Resources Inshore Trawl Survey 2000?2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	91	-0.127	15.9	5.714	65	6.1	14	57.039	20.556	0.300	Count	NA	Baltic seabirds transect surveys	http://www.iobis.org/mapper/?dataset=2

(continued)

Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Marine: Body Length	432	-0.106	12.7	5.000	68	10.8	20	-40.493	172.716	0.000	Count	NA	The New Zealand Freshwater Fish Database - Observation (Spotlighting visual)	https://www.niwa.co.nz/our-services/online-services/freshwater-fish-database
Marine: Body Length	190	-0.104	151.3	8.667	95	7.7	3	17.757	-64.604	0.000	Count	NA	St. Croix. USVI Fish Assessment and Monitoring Data (2002 - Present) (NOAA-CCMA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	430	-0.104	11.9	5.189	71	16.3	106	-40.943	172.499	0.000	Count	NA	The New Zealand Freshwater Fish Database - Electric fishing - Backpack	https://www.niwa.co.nz/our-services/online-services/freshwater-fish-database
Marine: Body Length	180	-0.097	19.4	5.252	90	14.4	6328	37.771	-50.793	0.333	Count	NA	ECNASAP - East Coast North America Strategic Assessment (OBIS Canada)	http://www.iobis.org/mapper/?dataset=3
Marine: Body Length	436	-0.069	221.4	4.636	95	6.6	11	-5.819	110.363	0.000	Density	Weight	Karimunjawa WCS fish survey	None
Marine: Body Length	213	-0.069	39.6	9.802	83	33.4	2996	36.625	-72.636	0.000	Count	Weight	Northeast Fisheries Science Center Bottom Trawl Survey Data (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	466	-0.069	26.7	9.410	89	15.9	156	56.991	-9.073	5.000	Count	NA	Trawl Survey Data from Rockall Scotland (1986 - 2008)	http://www.gov.scot/Topics/marine/scien
Marine: Body Length	212	-0.056	44.6	4.162	92	5.6	37	31.941	-78.825	0.000	Count	Weight	MARMAP Yankee Trawl 1990-2009	http://www.usgs.gov/obis-usa/search/?datasetid=MARMAP_Yanke
Marine: Body Length	505	-0.055	119.6	7.632	69	20.1	19	32.133	34.668	445.000	Count	NA	Fish and marine invertebrates from the Israeli Eastern Mediterranean sea 1990-4, 2000, 2008-2012	none
Marine: Body Length	288	-0.054	13.6	5.262	85	15.3	511	43.977	-63.682	0.000	Count	NA	DFO Maritimes Research Vessel Trawl Surveys Fish Observations (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	437	-0.053	92.4	3.375	91	5.4	8	5.753	95.280	0.000	Density	Weight	Ach WCS fish survey 2010 to 2016	None
Marine: Body Length	295	-0.050	119.5	6.000	92	6.4	13	-33.051	139.184	0.000	Count	Weight	Systematic global assessment of reef fish communities by the Reef Life Survey program	http://reeflifesurvey.imas.utas.edu.au/
Marine: Body Length	290	-0.049	53.9	2.500	89	6.2	12	-25.813	135.278	0.000	Count	Weight	CSIRO Marine Data Warehouse (OBIS Australia)	http://www.iobis.org/mapper/?dataset=5
Marine: Body Length	127	-0.036	14.7	6.421	99	6.8	19	32.335	-78.992	0.000	Count	Weight	MARMAP Florida Antillean Trap Survey 1990-2008 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	507	-0.031	25.7	17.833	59	26.7	33	31.912	34.392	445.000	NA	Weight	Trawl fisheries in Israeli Mediterranean	none
Marine: Body Length	330	-0.023	69.1	4.250	61	37.2	30	-23.831	136.449	0.000	Density	NA	Over 75 years of zooplankton data from Australia	http://esapubs.org/archive/ecol/E095/27
Marine: Body Length	271	-0.016	41.8	14.125	89	13.1	8	34.306	-119.875	0.000	Count	NA	Santa Barbara Coastal LTER	http://sbc.lternet.edu//index.html
Marine: Body Length	189	-0.016	175.0	9.750	94	8.8	4	18.309	-64.749	0.000	Count	NA	St. John. USVI Fish Assessment and Monitoring Data (2002 - Present) (NOAA-CCMA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	374	-0.015	35.7	9.944	49	9.3	102	35.961	136.046	0.000	Count	NA	Monitoring site 1000 Shorebird Survey	http://www.biocid.go.jp/moni1000/findin

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Marine: Body Length	296	-0.011	82.7	5.800	51	6.3	10	-33.051	139.184	0.000	Count	NA	Systematic global assessment of reef fish communities by the Reef Life Survey program	http://reeflifesurvey.imas.utas.edu.au/
Marine: Body Length	371	0.000	32.0	6.000	50	5.0	1	36.705	137.265	0.000	NA	Cover	Monitoring site 1000 coastal zone research - Algae survey transects	http://www.biodic.go.jp/moni1000/findin
Marine: Body Length	501	0.000	79.8	7.917	91	6.9	12	51.530	2.730	0.000	Count	NA	Epibenthos and demersal fish monitoring at long-term monitoring stations in the Belgian part of the North Sea	none
Marine: Body Length	500	0.001	124.1	9.588	50	9.1	17	51.495	2.812	0.300	Density	NA	Macrofauna monitoring at long-term monitoring stations in the Belgian part of the North Sea from 2001 on	none
Marine: Body Length	148	0.002	29.3	4.147	80	13.6	2898	-42.407	172.260	0.000	NA	Weight	South Western Pacific Regional OBIS Data provider for the NIWA Marine Biodata Information System (South Western Pacific OBIS)	http://www.gbif.org/dataset/83b58bb2-f762-11e1-a439-00145eb45e9a
Marine: Body Length	467	0.004	38.6	4.000	85	12.0	7	40.676	-8.685	0.000	Count	Weight	Spatial and temporal organisation of a coastal lagoon fish community	None
Marine: Body Length	133	0.012	28.0	2.000	64	6.0	1	-14.617	-42.219	0.000	Count	NA	Copepods (Tropical and Subtropical Western South Atlantic OBIS)	http://www.iobis.org/mapper/?dataset=5
Marine: Body Length	359	0.012	43.8	11.833	88	10.8	6	34.309	-119.874	0.000	Count	NA	SBC LTER Reef Kelp Forest Community Dynamics Fish abundance	https://portal.lternet.edu/nis/mapbrowse/lter-sbc.17.27
Marine: Body Length	438	0.012	325.0	6.000	95	7.1	10	5.765	95.219	0.000	Density	Weight	Aceh WCS fish surveys	None
Marine: Body Length	431	0.014	11.0	5.500	71	13.5	2	-40.634	172.450	0.000	Count	NA	The New Zealand Freshwater Fish Database - Traps- Gee Minnow traps	https://www.niwa.co.nz/our-services/online-services/freshwater-fish-database
Marine: Body Length	204	0.016	82.9	5.516	49	19.5	31	51.439	2.683	0.000	Count	NA	MACROBEL Long term trends in the macrofauna of the Belgian Continental Shelf	http://www.emodnet-biology.eu/data-catalog?module=dataset&dasid=145
Marine: Body Length	166	0.017	13.0	4.928	68	8.3	1298	36.075	-70.992	0.000	Count	NA	PIROP Northwest Atlantic 1965-1992 (SEAMAP)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	163	0.021	61.6	8.261	51	9.7	1015	56.500	-168.150	0.000	Count	Weight	North Pacific Groundfish Observer (North Pacific Research Board)	http://www.iobis.org/mapper/?dataset=6
Marine: Body Length	125	0.029	19.7	7.707	98	10.1	41	31.442	-78.849	0.000	Count	Weight	MARMAP Chevron Trap Survey 1990-2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	121	0.033	39.8	4.846	90	7.0	39	10.778	-169.454	0.000	Count	NA	CRED Rapid Ecological Assessments of Fish Belt Transect Surveys and Fish Stationary Point Count Surveys in the Pacific Ocean 2000-2010 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	511	0.037	67.5	6.000	92	10.0	2	-22.821	-43.149	0.000	Count	Weight	Demersal fish hauls from Guanabara Bay Brazil 2005-2015	None

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Marine: Body Length	412	0.046	214.0	6.000	76	5.0	1	25.042	121.942	0.000	Density	NA	Icthyoplankton data collected from Yenliao Bay in 6 stations northeast of Taiwan (1995-2000)	None
Marine: Body Length	135	0.049	18.0	3.333	75	5.0	3	-13.022	-45.166	0.000	NA	Weight	Previous_fisheries_REVIZE	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	499	0.052	95.8	15.750	58	17.5	4	51.485	2.895	0.300	Density	NA	Macrobenthos monitoring at long-term monitoring stations in the Belgian part of the North Sea between 1979 and 1999	none
Marine: Body Length	246	0.063	335.0	15.000	93	14.0	1	25.244	121.624	0.000	Count	NA	Long-term monitoring dataset of fish assemblages impinged at nuclear power plants in northern Taiwan	http://datadryad.org/resource/doi:10.506
Marine: Body Length	252	0.067	15.8	8.308	99	9.1	13	32.454	-78.968	0.000	Count	Weight	MARMAP Blackfish Trap Survey 1990-2009	http://www2.usgs.gov/obis-usa/search/?datasetid=MARMAP_Black
Marine: Body Length	191	0.067	19.4	2.667	46	8.7	56	39.123	-66.641	0.000	Count	NA	NEFSC Benthic Database (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	78	0.070	68.6	14.400	62	19.4	10	56.730	18.236	0.000	Count	NA	IOW Macrozoobenthos monitoring Baltic Sea (1980-2005) (EuroBIS)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	169	0.071	13.9	10.267	50	16.4	791	34.858	-121.615	0.900	Count	NA	CalCOFI and NMFS Seabird and Marine Mammal Observation Data. 1987-2006 (SEAMAP)	http://www.iobis.org/mapper/?dataset=2
Marine: Body Length	99	0.078	56.6	3.012	87	9.7	256	-25.598	134.025	0.000	NA	Weight	CSIRO Marine Data Warehouse (OBIS Australia)	http://www.iobis.org/mapper/?dataset=5
Marine: Body Length	232	0.081	15.1	5.615	61	12.8	13	-56.815	93.884	0.000	Count	Weight	Pelagic Fish Observations 1968-1999	http://gcmd.nasa.gov/KeywordSearch/M00038
Marine: Body Length	85	0.090	51.5	9.906	45	9.4	53	53.605	4.248	0.000	Density	NA	North Sea observations of Crustacea. Polychaeta. Echinodermata. Mollusca and some other groups between 1986 and 2003	http://www.emodnet-biology.eu/data-catalog?module=dataset&dasid=1037
Marine: Body Length	143	0.099	67.0	6.000	72	7.0	1	-28.494	-71.860	0.000	Count	NA	COPPODA-ESPOBIS Data Base IMO-UdeC	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	45	0.112	337.0	6.000	93	5.0	1	-17.500	-149.000	2.000	Count	Size	MCR LTER Coral Reef Long-term Population and Community Dynamics Fishes	http://mcr.lternet.edu/cgi-bin/showDataset.cgi?docid=knblter-mcr.6
Marine: Body Length	112	0.119	14.6	9.882	97	14.6	907	24.981	-51.374	0.000	Count	NA	NOAA Southeast Fishery Science Center (SEFSC) Commercial Pelagic Observer Program (POP) Data (SEFSC_POP)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	365	0.133	34.7	6.000	88	5.0	3	-37.256	176.325	0.025	Count	NA	Hahei marine dataset (1997-2002)	None
Marine: Body Length	451	0.155	20.0	4.000	71	7.0	1	64.000	-178.000	0.000	NA	Weight	Composition (%) and biomass (thous. tons) of fish species in Gulf of Anadyr in 2005-2012	http://www.natural-sciences.ru/ru/article/view?id=33118
Marine: Body Length	211	0.178	60.2	6.750	94	7.0	4	32.901	-78.686	0.000	Count	Weight	MARMAP Fly Net 1990-2009	http://www.usgs.gov/obis-usa/search/?datasetid=MARMAP_FlyNe

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Marine: Body Length	349	0.195	78.0	3.000	49	14.0	1	34.918	-123.026	0.000	Count	Weight	St. M polychaete species time-series	None
Marine: Body Length	176	0.195	42.0	3.429	43	7.4	107	45.073	-60.564	0.000	Count	Weight	Atlantic Zone Monitoring Program Maritimes Region (AZMP) plankton datasets. In Fisheries and Oceans Canada - BioChem archive (OBIS Canada)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	287	0.222	13.0	5.000	58	6.0	2	43.856	-68.984	0.000	Count	NA	Maine Department of Marine Resources Inshore Trawl Survey 2000?2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	297	0.226	11.3	11.000	74	10.0	3	-17.525	-149.837	0.000	Count	NA	MCR LTERCoral Reef Long-term Population and Community Dynamics Other Benthic Invertebrates. ongoing since 2005	http://mcr.lternet.edu/cgi-bin/showDataset.cgi?docid=knblter-mcr.7
Marine: Body Length	171	0.226	13.3	11.167	83	11.3	6	24.896	-76.292	0.000	Count	NA	Bahamas Marine Mammal Research Organisation Opportunistic Sightings (SEAMAP)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	183	0.229	10.8	4.617	48	9.4	68	43.777	-63.751	0.000	Count	NA	DFO Maritimes Research Vessel Trawl Surveys Invertebrate Observations (OBIS Canada)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	450	0.242	26.0	4.000	77	7.0	1	60.233	168.350	0.000	NA	Weight	Composition (%) and biomass (thous. tons) of fish species in Olyutorsky-Navarin area in 2005-2012	http://www.natural-sciences.ru/ru/article/view?id=33118
Marine: Body Length	292	0.294	23.0	2.000	93	5.0	3	-25.212	135.825	0.000	Count	NA	CSIRO Marine Data Warehouse (OBIS Australia)	http://www.iobis.org/mapper/?dataset=1
Marine: Body Length	452	0.309	13.0	8.000	84	8.0	1	47.000	160.000	0.000	NA	Weight	Year-to-year dynamics of total nekton biomass (thous. tons) in the upper epipelagic of the North-West Pacific in June-July of 2000s	http://cyberleninka.ru/article/n/vidovaya-struktura-i-mezhgodovaya-dinamika-biomassy-nektona-v-verhney-epipelagial-prikurilskih-vod-tihogo-okeana-v-letnie-periody-2000-h
Marine: Body Length	67	0.333	10.0	6.000	41	5.0	4	-28.954	24.951	0.000	Count	NA	Animal Demography Unit - Coordinated Waterbird Counts (CWAC) (AfrOBIS)	http://www.iobis.org/mapper/?dataset=1
Plants: Maximum Height	394	-0.460	10.0	3.000	100	37.0	1	49.655	15.991	0.175	Count	Weight	Zakova hora	http://naturalforests.cz/research
Plants: Maximum Height	398	-0.457	16.0	2.000	55	22.0	1	49.790	15.752	0.193	Count	Weight	Polom	http://naturalforests.cz/research
Plants: Maximum Height	384	-0.448	14.0	3.000	92	33.0	1	48.655	16.941	0.173	Count	Weight	Cahnov-Soutok	http://naturalforests.cz/research

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Plants: Maximum Height	392	-0.400	10.0	3.000	93	39.0	1	48.880	13.836	0.162	Count	Weight	Stozec	http://naturalforests.cz/research
Plants: Maximum Height	487	-0.368	19.0	2.000	52	17.0	1	78.954	-77.141	0.000	NA	Cover	ITEX Dataset 9 - Alexford (Levdolomite, Levgranite) and Sverdrup	none
Plants: Maximum Height	235	-0.231	18.0	4.000	72	17.0	1	43.953	-71.735	0.001	Count	Weight	Forest Inventory of a Northern Hardwood Forest Watershed 5?	http://www.hubbardbrook.org/data/data
Plants: Maximum Height	224	-0.188	50.0	3.000	67	10.0	1	45.400	-93.200	0.000	Count	NA	Experiment 133 - Effect of Burning Patterns on Vegetation in the Fish Lake Burn Compartments - Shrub Survey	http://www.cedarcreek.umn.edu/research
Plants: Maximum Height	483	-0.147	54.0	24.000	49	23.0	1	43.270	41.410	0.000	NA	Cover	ITEX Dataset 5 - Teberda (Malaya Alpine-Snowbed and Geranium Hedysarum Meadow)	none
Plants: Maximum Height	492	-0.130	30.0	13.000	42	24.0	1	68.629	-149.578	0.000	NA	Cover	ITEX Dataset 14 - Toolik (LTER Heath, LTER Moist acidic tussock, LTER non-acidic tussock, LTER wet sedge, SAG wet sedge2, Tussock 1981 plots)	none
Plants: Maximum Height	401	-0.085	11.0	2.000	86	20.0	1	49.922	13.772	0.253	Count	NA	Kohoutov	http://naturalforests.cz/research
Plants: Maximum Height	214	-0.068	12.4	19.583	93	51.3	12	45.343	-122.799	0.010	Count	NA	Long-term growth mortality and regeneration of trees in permanent vegetation plots in the Pacific Northwest 1910 to present	http://andrewsforest.oregonstate.edu/dat
Plants: Maximum Height	486	-0.055	47.0	3.000	81	15.0	1	46.476	9.584	0.000	NA	Cover	ITEX Dataset 8 - Valbercla (Alpine)	none
Plants: Maximum Height	502	-0.045	12.0	7.000	82	47.0	1	46.920	-88.026	0.001	Count	Size	Long-term tree demography in old-growth forests of Huron Mts, MI from permanent-plot censuses, 1962-2009	https://knb.ecoinformatics.org/#view/k
Plants: Maximum Height	389	-0.042	20.0	3.000	98	33.0	1	48.679	16.948	0.222	Count	Weight	Ranspuk	http://naturalforests.cz/research
Plants: Maximum Height	18	-0.042	98.0	29.000	54	50.0	1	44.330	-112.330	0.000	Count	NA	Mapped quadrats in sagebrush steppe long-term data for analyzing demographic rates and plant to plant interactions	http://esapubs.org/archive/ecol/E091/24
Plants: Maximum Height	465	-0.037	31.0	6.000	84	5.0	5	49.581	13.310	0.000	Count	NA	Plants from the Bavarian Forest	None
Plants: Maximum Height	241	-0.035	271.0	4.000	64	13.0	1	9.364	-79.955	0.060	Count	NA	Sherman Forest Dynamics Plot Panama	http://www.ctfs.si.edu/site/Sherman/

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Plants: Maximum Height	396	-0.020	22.0	2.000	95	10.0	1	49.955	14.153	0.668	Count	Weight	Doutnac	http://naturalforests.cz/research
Plants: Maximum Height	495	-0.019	77.0	4.000	50	9.0	1	62.183	1.335	0.000	NA	Cover	ITEX Dataset 17 - Dovre (Kunthoe) and Faroe (Sornfelli)	none
Plants: Maximum Height	234	-0.015	16.0	7.000	74	37.0	1	43.953	-71.740	0.001	Count	Weight	Forest Inventory of a Northern Hardwood Forest Watershed 6	http://www.hubbardbrook.org/data/data
Plants: Maximum Height	355	-0.004	324.0	33.000	60	32.0	1	39.083	-96.583	0.000	NA	Cover	Plant Species Composition on Selected Watersheds at Konza Prairie	https://portal.lternet.edu/nis/mapbrowse/lter-knz.69.9
Plants: Maximum Height	242	0.000	12.0	7.000	72	8.0	1	45.993	-74.002	0.000	Count	NA	Lac Croche understory vegetation data set (1998 to 2006)	http://esapubs.org/archive/ecol/E088/19
Plants: Maximum Height	334	0.015	40.0	6.000	44	18.0	1	68.630	-149.576	0.000	NA	Weight	Above ground plant biomass in a mesic acidic tussock tundra experimental site from 1982 to 2000 Toolik lake Alaska	http://arc-lter.ecosystems.mbl.edu/19822000gs81tus
Plants: Maximum Height	307	0.017	83.0	3.000	72	9.0	1	42.409	-85.383	0.000	Count	NA	Kellogg LTER seed bank	http://lter.kbs.msu.edu/datatables/23
Plants: Maximum Height	60	0.075	323.0	8.000	90	33.0	1	9.152	-79.847	0.500	Count	NA	Forest Census Plot on Barro Colorado Island	http://ctfs.si.edu/
Plants: Maximum Height	364	0.094	14.0	14.000	95	17.0	1	38.901	-77.069	0.000	NA	Cover	Long-term reductions in anthropogenic nutrients link to improvements in Chesapeake Bay habitat	http://www.pnas.org/content/107/38/165
Plants: Maximum Height	512	0.098	71.9	2.571	87	30.0	7	51.314	11.758	0.000	NA	Cover	The Hundt 2001 data - Rudolf Hundt	None
Plants: Maximum Height	480	0.106	33.0	3.000	47	10.0	1	61.560	-135.130	0.000	NA	Cover	ITEX Dataset 2 - Wolfcreek	none
Plants: Maximum Height	496	0.118	222.0	2.000	85	8.0	1	46.432	8.673	0.000	NA	Cover	ITEX Dataset 18 - Alpine plots (Sonja Wipf)	none
Plants: Maximum Height	489	0.143	55.0	3.000	56	8.0	1	60.370	7.320	0.025	NA	Cover	ITEX Dataset 11 - Finse (Ridge)	none
Plants: Maximum Height	255	0.164	22.0	10.000	76	18.0	1	46.367	-87.133	0.000	Count	NA	Multi-decade, spatially explicit population studies of canopy dynamics in Michigan old-growth forests	http://www.esapubs.org/archive/ecol/E088/16
Plants: Maximum Height	248	0.191	95.0	13.000	68	12.0	1	43.833	-102.167	0.000	Count	NA	Evidence for long-term shift in plant community composition under decadal experimental warming	http://datadryad.org/resource/doi:10.506
Plants: Maximum Height	481	0.195	23.0	3.000	62	7.0	1	73.154	-79.944	0.000	NA	Cover	ITEX Dataset 3 - Bylot (Mesprairie and Mespolygon)	none
Plants: Maximum Height	298	0.203	146.0	56.000	46	69.0	1	38.800	-99.300	0.000	NA	Cover	Long-term mapped quadrats from Kansas prairie demographic information for herbaceous plants	http://esapubs.org/archive/ecol/E088/19

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Plants: Maximum Height	10	0.206	25.0	3.000	69	12.0	1	47.400	-95.120	0.000	Count	NA	Windstorm disturbance without patch dynamics twelve years of change in a Minnesota forest	http://esapubs.org/archive/ecol/E082/01
Plants: Maximum Height	497	0.207	59.0	29.000	47	28.0	1	43.270	41.420	0.000	NA	Cover	ITEX Dataset 19 - Teberda (Festuca Varia Grassland, Malaya Alpine Lichen-Heath)	none
Plants: Maximum Height	479	0.213	75.0	9.000	56	9.0	1	68.121	-3.822	0.000	NA	Cover	ITEX Dataset 1 - Abisko (Wet, Dry, Peatland), Kanger (Bashful, Dopey, Sneezy) and Kilpisjarvi	none
Plants: Maximum Height	485	0.260	128.0	3.000	85	8.0	1	64.854	-19.676	0.000	NA	Cover	ITEX Dataset 7 - Akureyri (GA66, MD72, SB63, SY59), Blönduós (SD33, SD34), Dalsmýnni (AG4, KD24, KD25), Hjardarland (LH92, SH90), Holtavörðuhéidi (AH37, AH38, VH49), Modruvellir (LH69, MV51, MV52), Oxnadalsheiði (SA16, SA17, SA19) and Thykkvibær (HH100, RT81, VE82)	none
Plants: Maximum Height	393	0.296	15.0	3.000	100	37.0	1	49.990	13.803	0.104	Count	Weight	Velka Ples	http://naturalforests.cz/research
Plants: Maximum Height	243	0.314	51.0	22.000	44	22.0	1	37.447	-75.667	0.000	Count	Cover	Long-term N-fertilized vegetation plots on Hog Island Virginia Coastal Barrier Islands 1992 to 2014	http://www.vcrler.virginia.edu/cgi-bin/showDataset.cgi?docid=knblter-vcr.106
Fish: Maximum Length	284	-0.333	14.8	2.190	52	5.2	23	-11.206	-43.617	0.000	Count	Weight	Previous_fisheries_REVIZE	http://www.iobis.org/mapper/?dataset=2
Fish: Maximum Length	428	-0.223	46.0	65.737	67	70.6	38	58.959	9.768	0.000	Count	NA	Long term monitoring of fish abundances from coastal SKagerrak	None
Fish: Maximum Length	119	-0.204	20.5	6.017	96	23.7	1896	43.987	-63.670	0.000	Count	Weight	DFO Maritimes Research Vessel Trawl Surveys Fish Observations (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Fish: Maximum Length	271	-0.140	42.5	14.500	46	13.5	8	34.306	-119.875	0.000	Count	NA	Santa Barbara Coastal LTER	http://sbc.lternet.edu//index.html
Fish: Maximum Length	191	-0.106	33.5	2.000	44	11.0	2	39.123	-66.641	0.000	Count	NA	NEFSC Benthic Database (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	126	-0.095	52.7	4.143	47	5.3	7	31.251	-78.752	0.000	Count	NA	MARMAP Neuston Nets 1990-2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	507	-0.083	24.9	17.500	50	26.6	32	31.912	34.392	445.000	NA	Weight	Trawl fisheries in Israeli Mediterranean	none
Fish: Maximum Length	180	-0.081	19.4	5.252	96	14.4	6328	37.771	-50.793	0.333	Count	NA	ECNASAP - East Coast North America Strategic Assessment (OBIS Canada)	http://www.iobis.org/mapper/?dataset=3
Fish: Maximum Length	466	-0.076	26.7	9.410	91	15.9	156	56.991	-9.073	5.000	Count	NA	Trawl Survey Data from Rockall Scotland (1986 - 2008)	http://www.gov.scot/Topics/marine/scien

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Fish: Maximum Length	123	-0.071	48.6	6.885	66	7.7	130	43.891	-68.941	0.000	Count	Weight	Maine Department of Marine Resources Inshore Trawl Survey 2000?2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	359	-0.060	44.8	12.400	45	11.4	6	34.309	-119.874	0.000	Count	NA	SBC LTER Reef Kelp Forest Community Dynamics Fish abundance	https://portal.lternet.edu/nis/mapbrowser/lter-sbc.17.27
Fish: Maximum Length	288	-0.057	13.6	5.262	92	15.3	511	43.977	-63.682	0.000	Count	NA	DFO Maritimes Research Vessel Trawl Surveys Fish Observations (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Fish: Maximum Length	505	-0.057	122.1	8.133	45	20.3	19	32.133	34.668	445.000	Count	NA	Fish and marine invertebrates from the Israeli Eastern Mediterranean sea 1990-4, 2000, 2008-2012	none
Fish: Maximum Length	213	-0.056	39.6	9.802	83	33.4	2996	36.625	-72.636	0.000	Count	Weight	Northeast Fisheries Science Center Bottom Trawl Survey Data (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	190	-0.051	151.3	8.667	54	7.7	3	17.757	-64.604	0.000	Count	NA	St. Croix, USVI Fish Assessment and Monitoring Data (2002 - Present) (NOAA-CCMA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	148	-0.051	18.2	3.500	43	5.5	132	-42.407	172.260	0.000	NA	Weight	South Western Pacific Regional OBIS Data provider for the NIWA Marine Biodata Information System (South Western Pacific OBIS)	http://www.gbif.org/dataset/83b58bb2-f762-11e1-a439-00145eb45e9a
Fish: Maximum Length	127	-0.048	14.7	6.421	96	6.8	19	32.335	-78.992	0.000	Count	Weight	MARMAP Florida Antillean Trap Survey 1990-2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	212	-0.047	44.6	4.162	94	5.6	37	31.941	-78.825	0.000	Count	Weight	MARMAP Yankee Trawl 1990-2009	http://www.usgs.gov/obis-usa/search/?datasetid=MARMAP_Yankee
Fish: Maximum Length	182	-0.035	16.8	14.956	51	17.4	292	47.481	-62.762	0.006	Count	NA	Snow crab research trawl survey database (Southern Gulf of St. Lawrence, Gulf region, Canada) from 1988 to 2010 (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Fish: Maximum Length	467	-0.035	38.6	4.000	76	12.0	7	40.676	-8.685	0.000	Count	Weight	Spatial and temporal organisation of a coastal lagoon fish community	None
Fish: Maximum Length	501	-0.026	79.8	7.917	51	6.9	12	51.530	2.730	0.000	Count	NA	Epibenthos and demersal fish monitoring at long-term monitoring stations in the Belgian part of the North Sea	none
Fish: Maximum Length	189	-0.026	175.0	9.750	52	8.8	4	18.309	-64.749	0.000	Count	NA	St. John, USVI Fish Assessment and Monitoring Data (2002 - Present) (NOAA-CCMA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	163	0.013	62.1	8.346	53	9.7	1015	56.500	-168.150	0.000	Count	Weight	North Pacific Groundfish Observer (North Pacific Research Board)	http://www.iobis.org/mapper/?dataset=6
Fish: Maximum Length	135	0.033	18.0	3.500	48	5.0	3	-13.022	-45.166	0.000	NA	Weight	Previous_fisheries_REVIZER	http://www.iobis.org/mapper/?dataset=2

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Fish: Maximum Length	125	0.036	19.7	7.707	93	10.1	41	31.442	-78.849	0.000	Count	Weight	MARMAP Chevron Trap Survey 1990-2009 (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	252	0.095	15.8	8.308	96	9.1	13	32.454	-78.968	0.000	Count	Weight	MARMAP Blackfish Trap Survey 1990-2009	http://www2.usgs.gov/obis-usa/search/?datasetid=MARMAP_Bla
Fish: Maximum Length	511	0.121	67.5	6.000	48	10.0	2	-22.821	-43.149	0.000	Count	Weight	Demersal fish hauls from Guanabara Bay Brazil 2005-2015	None
Fish: Maximum Length	99	0.143	14.0	2.000	57	10.0	3	-25.598	134.025	0.000	NA	Weight	CSIRO Marine Data Warehouse (OBIS Australia)	http://www.iobis.org/mapper/?dataset=5
Fish: Maximum Length	211	0.182	60.2	6.750	95	7.0	4	32.901	-78.686	0.000	Count	Weight	MARMAP Fly Net 1990-2009	http://www.usgs.gov/obis-usa/search/?datasetid=MARMAP_FlyNe
Fish: Maximum Length	112	0.210	14.6	9.881	58	14.6	907	24.981	-51.374	0.000	Count	NA	NOAA Southeast Fishery Science Center (SEFSC) Commercial Pelagic Observer Program (POP) Data (SEFSC_POP)	http://www.iobis.org/mapper/?dataset=1
Fish: Maximum Length	451	0.350	20.0	4.000	81	7.0	1	64.000	-178.000	0.000	NA	Weight	Composition (%) and biomass (thous. tons) of fish species in Gulf of Anadyr in 2005-2012	http://www.natural-sciences.ru/ru/article/view?id=33118
Fish: Maximum Length	450	0.371	26.0	4.000	81	7.0	1	60.233	168.350	0.000	NA	Weight	Composition (%) and biomass (thous. tons) of fish species in Olyutorsky-Navarin area in 2005-2012	http://www.natural-sciences.ru/ru/article/view?id=33118
Fish: Maximum Length	452	0.429	13.0	8.000	54	8.0	1	47.000	160.000	0.000	NA	Weight	Year-to-year dynamics of total nekton biomass (thous. tons) in the upper epipelagic of the North-West Pacific in June-July of 2000s	http://cyberleninka.ru/article/n/vidovaya-struktura-i-mezhgodovaya-dinamika-biomassy-nektona-v-verhney-epipelagial-prikurilskih-vod-tihogo-okeana-v-letnie-periody-2000-h
Plants: Seed Mass	394	-0.511	10.0	3.000	100	37.0	1	49.655	15.991	0.175	Count	Weight	Zakova hora	http://naturalforests.cz/research
Plants: Seed Mass	502	-0.303	12.0	7.000	100	47.0	1	46.920	-88.026	0.001	Count	Size	Long-term tree demography in old-growth forests of Huron Mts, MI from permanent-plot censuses, 1962-2009	https://knb.ecoinformatics.org/#view/k
Plants: Seed Mass	486	-0.262	47.0	3.000	50	15.0	1	46.476	9.584	0.000	NA	Cover	ITEX Dataset 8 - Valbercla (Alpine)	none
Plants: Seed Mass	480	-0.230	33.0	3.000	46	10.0	1	61.560	-135.130	0.000	NA	Cover	ITEX Dataset 2 - Wolfcreek	none
Plants: Seed Mass	473	-0.227	95.0	14.000	54	13.0	1	46.317	-105.800	0.000	Count	NA	Fourteen years of mapped permanent quadrats in northern mixed prairie	http://esapubs.org/archive/ecol/E092/14
Plants: Seed Mass	401	-0.214	11.0	2.000	76	20.0	1	49.922	13.772	0.253	Count	NA	Kohoutov	http://naturalforests.cz/research
Plants: Seed Mass	340	-0.214	93.0	15.000	49	14.0	1	34.296	-106.927	0.000	Count	NA	Small Mammal Exclosure Study (SMES) Vegetation Data from the Chihuahuan Desert	http://sev.lternet.edu/content/small-mammal-exclosure-study-smes-0
Plants: Seed Mass	389	-0.199	20.0	3.000	98	33.0	1	48.679	16.948	0.222	Count	Weight	Ranspuk	http://naturalforests.cz/research

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Plants: Seed Mass	234	-0.162	16.0	7.000	95	37.0	1	43.953	-71.740	0.001	Count	Weight	Forest Inventory of a Northern Hardwood Forest Watershed 6	http://www.hubbardbrook.org/data/data/
Plants: Seed Mass	224	-0.139	50.0	3.000	72	10.0	1	45.400	-93.200	0.000	Count	NA	Experiment 133 - Effect of Burning Patterns on Vegetation in the Fish Lake Burn Compartments - Shrub Survey	http://www.cedarcreek.umn.edu/research
Plants: Seed Mass	202	-0.127	75.0	3.000	51	12.0	1	11.599	76.534	0.500	Count	NA	Mudumalai Forest Dynamics Plot. India - Smithsonian Tropical Research Institute	http://www.ctfs.si.edu/site/Mudumalai/
Plants: Seed Mass	235	-0.067	18.0	4.000	92	17.0	1	43.953	-71.735	0.001	Count	Weight	Forest Inventory of a Northern Hardwood Forest Watershed 5?	http://www.hubbardbrook.org/data/data/
Plants: Seed Mass	242	-0.055	12.0	7.000	91	8.0	1	45.993	-74.002	0.000	Count	NA	Lac Croche understory vegetation data set (1998 to 2006)	http://esapubs.org/archive/ecol/E088/19
Plants: Seed Mass	298	-0.040	146.0	56.000	63	69.0	1	38.800	-99.300	0.000	NA	Cover	Long-term mapped quadrats from Kansas prairie demographic information for herbaceous plants	http://esapubs.org/archive/ecol/E088/16
Plants: Seed Mass	512	-0.034	71.9	2.571	85	30.0	7	51.314	11.758	0.000	NA	Cover	The Hundt 2001 data - Rudolf Hundt	None
Plants: Seed Mass	496	-0.034	222.0	2.000	62	8.0	1	46.432	8.673	0.000	NA	Cover	ITEX Dataset 18 - Alpine plots (Songa Wipf)	none
Plants: Seed Mass	307	-0.029	83.0	3.000	73	9.0	1	42.409	-85.383	0.000	Count	NA	Kellogg LTER seed bank	http://lter.kbs.msu.edu/datatables/23
Plants: Seed Mass	241	-0.018	271.0	4.000	59	13.0	1	9.364	-79.955	0.060	Count	NA	Sherman Forest Dynamics Plot Panama	http://www.ctfs.si.edu/site/Sherman/
Plants: Seed Mass	60	-0.015	323.0	8.000	70	33.0	1	9.152	-79.847	0.500	Count	NA	Forest Census Plot on Barro Colorado Island	http://ctfs.si.edu/
Plants: Seed Mass	214	-0.008	12.4	19.583	92	51.3	12	45.343	-122.799	0.010	Count	NA	Long-term growth mortality and regeneration of trees in permanent vegetation plots in the Pacific Northwest 1910 to present	http://andrewsforest.oregonstate.edu/data
Plants: Seed Mass	495	-0.004	77.0	4.000	44	9.0	1	62.183	1.335	0.000	NA	Cover	ITEX Dataset 17 - Dovre (Kunsthoe) and Faroe (Sornfelli)	none
Plants: Seed Mass	392	0.000	10.0	3.000	93	39.0	1	48.880	13.836	0.162	Count	Weight	Stozec	http://naturalforests.cz/research
Plants: Seed Mass	398	0.022	16.0	2.000	61	22.0	1	49.790	15.752	0.193	Count	Weight	Polom	http://naturalforests.cz/research
Plants: Seed Mass	471	0.039	162.0	10.000	47	9.0	1	34.350	-106.880	0.000	Count	NA	Prescribed Burn Effect on Chihuahuan Desert Grasses and Shrubs at the Sevilleta National Wildlife Refuge	http://sev.lternet.edu/data/sev-166
Plants: Seed Mass	255	0.042	22.0	10.000	90	18.0	1	46.367	-87.133	0.000	Count	NA	Multi-decade, spatially explicit population studies of canopy dynamics in Michigan old-growth forests	http://www.esapubs.org/archive/ecol/E00
Plants: Seed Mass	364	0.048	14.0	14.000	57	17.0	1	38.901	-77.069	0.000	NA	Cover	Long-term reductions in anthropogenic nutrients link to improvements in Chesapeake Bay habitat	http://www.pnas.org/content/107/38/165

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Plants: Seed Mass	483	0.051	54.0	24.000	47	23.0	1	43.270	41.410	0.000	NA	Cover	ITEX Dataset 5 - Teberda (Malaya Alpine-Snowbed and Geranium Hedyssarum Meadow)	none
Plants: Seed Mass	355	0.053	324.0	33.000	80	32.0	1	39.083	-96.583	0.000	NA	Cover	Plant Species Composition on Selected Watersheds at Konza Prairie	https://portal.lternet.edu/nis/mapbrowser/lter-knz.69.9
Plants: Seed Mass	18	0.092	98.0	29.000	61	50.0	1	44.330	-112.330	0.000	Count	NA	Mapped quadrats in sagebrush steppe long-term data for analyzing demographic rates and plant to plant interactions	http://esapubs.org/archive/ecol/E091/248
Plants: Seed Mass	248	0.092	95.0	13.000	74	12.0	1	43.833	-102.167	0.000	Count	NA	Evidence for long-term shift in plant community composition under decadal experimental warming	http://datadryad.org/resource/doi:10.506
Plants: Seed Mass	356	0.106	66.9	12.667	50	36.6	9	-17.038	145.561	0.005	Count	NA	Long-term stem inventory data from tropical rain forest plots in Australia	http://esapubs.org/archive/ecol/E095/200
Plants: Seed Mass	497	0.110	59.0	29.000	45	28.0	1	43.270	41.420	0.000	NA	Cover	ITEX Dataset 19 - Teberda (Festuca Varia Grassland, Malaya Alpine Lichen-Heath)	none
Plants: Seed Mass	465	0.115	31.0	6.000	79	5.0	5	49.581	13.310	0.000	Count	NA	Plants from the Bavarian Forest	None
Plants: Seed Mass	243	0.123	51.0	22.000	49	22.0	1	37.447	-75.667	0.000	Count	Cover	Long-term N-fertilized vegetation plots on Hog Island Virginia Coastal Barrier Islands 1992 to 2014	http://www.vcrlter.virginia.edu/cgi-bin/showDataset.cgi?docid=knblter-vcr.106
Plants: Seed Mass	485	0.142	128.0	3.000	67	8.0	1	64.854	-19.676	0.000	NA	Cover	ITEX Dataset 7 - Akureyri (GA66, MD72, SB63, SY59), Blonduos (SD33, SD34), Dalsmynni (AG4, KD24, KD25), Hjardarland (LH92, SH90), Holtavorduhedi (AH37, AH38, VH49), Modruvellir (LH69, MV51, MV52), Oxnadalsheidi (SA16, SA17, SA19) and Thyrkvibaer (HH100, RT81, VE82)	none
Plants: Seed Mass	336	0.157	100.0	14.000	52	13.0	1	31.939	-109.080	0.000	Count	NA	Long term monitoring and experimental manipulation of a Chihuahuan Desert ecosystem near Portal Arizona	http://esapubs.org/archive/ecol/E090/116
Plants: Seed Mass	240	0.203	167.0	13.000	56	12.0	1	34.350	-106.880	0.000	Count	Cover	Pinon-Juniper (Core Site) Quadrat Data for the Net Primary Production Study at the Sevilleta National Wildlife Refuge New Mexico (2003-present)	http://sev.lternet.edu/node/1718

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Trait tested	ID	tau	N. Sp.	N. Years	Trait %	Year Span	N. Cells	Latitude	Longitude	Grain	Abundance	Biomass	Study Title	Data Source
Plants: Seed Mass	489	0.208	55.0	3.000	46	8.0	1	60.370	7.320	0.025	NA	Cover	ITEX Dataset 11 - Finse (Ridge)	none
Plants: Seed Mass	393	0.219	15.0	3.000	100	37.0	1	49.990	13.803	0.104	Count	Weight	Velka Ples	http://naturalforests.cz/research
Plants: Seed Mass	384	0.231	14.0	3.000	92	33.0	1	48.655	16.941	0.173	Count	Weight	Cahnov-Soutok	http://naturalforests.cz/research
Plants: Seed Mass	481	0.257	23.0	3.000	47	7.0	1	73.154	-79.944	0.000	NA	Cover	ITEX Dataset 3 - Bylot (Mesprairie and Mespolygon)	none
Plants: Seed Mass	396	0.292	22.0	2.000	91	10.0	1	49.955	14.153	0.668	Count	Weight	Doutnac	http://naturalforests.cz/research
Plants: Seed Mass	10	0.380	25.0	3.000	79	12.0	1	47.400	-95.120	0.000	Count	NA	Windstorm disturbance without patch dynamics twelve years of change in a Minnesota forest	http://esapubs.org/archive/ecol/E082/01
Marine: Qualitative Body Size	367	-0.135	137.0	6.000	40	5.0	2	34.058	134.978	0.000	Count	NA	Monitoring site 1000 Coastal zone research - Tidal flat survey	http://www.biodic.go.jp/moni1000/findin
Marine: Qualitative Body Size	457	-0.074	226.0	8.000	93	11.0	1	21.945	120.769	0.000	MeanCount	NA	Dynamics of a coral reef community	None
Marine: Qualitative Body Size	330	-0.051	80.9	4.737	57	43.1	40	-23.831	136.449	0.000	Density	NA	Over 75 years of zooplankton data from Australia	http://esapubs.org/archive/ecol/E095/27
Marine: Qualitative Body Size	97	-0.049	28.8	2.500	52	17.3	6	72.739	10.694	0.000	Count	NA	Archives of the Arctic Seas Zooplankton (ARC)	http://www.iobis.org/mapper/?dataset=4
Marine: Qualitative Body Size	191	0.044	53.5	3.529	47	11.6	226	39.123	-66.641	0.000	Count	NA	NEFSC Benthic Database (OBIS-USA)	http://www.iobis.org/mapper/?dataset=1
Marine: Qualitative Body Size	176	0.055	45.0	4.650	52	8.0	140	45.073	-60.564	0.000	Count	Weight	Atlantic Zone Monitoring Program Maritimes Region (AZMP) plankton datasets. In Fisheries and Oceans Canada - BioChem archive (OBIS Canada)	http://www.iobis.org/mapper/?dataset=2
Marine: Qualitative Body Size	133	0.086	28.0	2.000	81	6.0	1	-14.617	-42.219	0.000	Count	NA	Copepods (Tropical and Subtropical Western South Atlantic OBIS)	http://www.iobis.org/mapper/?dataset=5
Marine: Qualitative Body Size	143	0.133	67.0	6.000	73	7.0	1	-28.494	-71.860	0.000	Count	NA	COPEPODA-ESPOBIS Data Base IMO-UdeC	http://www.iobis.org/mapper/?dataset=1
Marine: Qualitative Body Size	72	0.156	35.0	2.000	46	5.0	1	65.890	36.806	0.000	Count	NA	White Sea Plankton	http://www.iobis.org/mapper/?dataset=4