

Science Review

2017

Sourcebook

An annual compilation of
research data uses enabled by



About the *Science Review Sourcebook 2017*

Each year, the GBIF *Science Review* highlights research uses of primary biodiversity data accessed through the GBIF network global infrastructure.

Citations of GBIF-mediated data continue to grow and now average more than one substantive example each day. In view of the corresponding growth in the number of pages of the *Science Review*, the narrative highlights remain separated from the full annual bibliographic table of citations, which includes more than 400 individual articles. This sourcebook is an electronic companion volume to the printed GBIF *Science Review 2017* ([also available electronically](#)) which includes summaries of selected examples of research using GBIF as a data source, as well as analysis of trends and geographic location of research teams.

Articles summarized in the *Science Review* are **marked in bold** in the following tables, and the symbol '**a**' indicates open-access articles that are available to all readers with or without a journal subscription.

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biodiversity and human health

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
a Alimi TO et al.	A multi-criteria decision analysis approach to assessing malaria risk in northern South America	BMC Public Health	https://doi.org/10.1186/s12889-016-2902-7	United States, Colombia
Baruah D & Neog B	Botanical , Phytochemical and Pharmacological Review of Flacourtia Jangomas (Lour.) Raeusch	International Journal of Current Medical and Pharmaceutical Research	http://bit.ly/2ugUnRE	India
Cao B et al.	Modeling habitat distribution of <i>Cornus officinalis</i> with Maxent modeling and fuzzy logics in China	Journal of Plant Ecology	https://doi.org/10.1093/jpe/rtw009	China
a Carlson CJ et al.	An Ecological Assessment of the Pandemic Threat of Zika Virus	PLoS Neglected Tropical Diseases 10(8)	https://doi.org/10.1371/journal.pntd.0004968	United States, South Africa
a Escobar LE et al.	Forecasting Chikungunya spread in the Americas via data-driven empirical approaches	Parasites & Vectors 9:112	https://doi.org/10.1186/s13071-016-1403-y	United States, China
a Estrada-Peña A & de la Fuente J	Species interactions in occurrence data for a community of tick-transmitted pathogens	Scientific Data 3:160056	https://doi.org/10.1038/sdata.2016.56	Spain, United States
Giovannini P et al.	Medicinal plants used in the traditional management of diabetes and its sequelae in Central America: A review	Journal of Ethnopharmacology 184: 58-71	https://doi.org/10.1016/j.jep.2016.02.034	United Kingdom
Hutter SE et al.	Rabies in Costa Rica: Documentation of the Surveillance Program and the Endemic Situation from 1985 to 2014	Vector-Borne and Zoonotic Diseases	https://doi.org/10.1089/vbz.2015.1906	Austria, Costa Rica
Ke Z et al.	Drug discovery of neurodegenerative disease through network pharmacology approach in herbs	Biomedicine & Pharmacotherapy 78: 272-279	https://doi.org/10.1016/j.biopha.2016.01.021	China
a Martin GA et al.	Climatic suitability influences species specific abundance patterns of Australian flying foxes and risk of Hendra virus spillover	One Health 2: 115-121	https://doi.org/10.1016/j.onehlt.2016.07.004	Australia, Mexico, United States
a Moyes CL et al.	Predicting the geographical distributions of the macaque hosts and mosquito vectors of Plasmodium knowlesi malaria in forested and non-forested areas	Parasites & Vectors	https://doi.org/10.1186/s13071-016-1527-0	United Kingdom, Malaysia, Canada, Thailand, Singapore, Japan, Kenya, Australia, United States, Indonesia
Pech-May A et al.	Assessing the importance of four sandfly species (Diptera: Psychodidae) as vectors of Leishmania mexicana in Campeche, Mexico	Medical and Veterinary Entomology	https://doi.org/10.1111/mve.12169	Argentina, Mexico
Piedrahita-Cortés J & Soler-Tovar D	Geographical distribution of the red howler monkey (<i>Alouatta seniculus</i>) and yellow fever in Colombia	Biomedica 36(0): 116-21	https://doi.org/10.7705/biomedica.v36i0.2929	Colombia
a Pigott DM et al.	Updates to the zoonotic niche map of Ebola virus disease in Africa	eLife 5:e16412	https://doi.org/10.7554/eLife.16412	United Kingdom, United States, Australia
a Redding DW et al.	Environmental-mechanistic modelling of the impact of global change on human zoonotic disease emergence: a case study of Lassa fever	Methods in Ecology and Evolution, 7: 646–655	https://doi.org/10.1111/2041-210X.12549	United Kingdom, United States
Rivera D et al.	Is there nothing new under the sun? The influence of herbals and pharmacopoeias on ethnobotanical traditions in Albacete [Spain]	Journal of Ethnopharmacology	https://doi.org/10.1016/j.jep.2016.11.040	Spain, Italy
a Samy AM et al.	Climate Change Influences on the Global Potential Distribution of the Mosquito <i>Culex quinquefasciatus</i>, Vector of West Nile Virus and Lymphatic Filariasis	PLoS ONE 11(10)	https://doi.org/10.1371/journal.pone.0163863	Sudan, Egypt, Brazil, United States
a Stephens CR et al.	Can You Judge a Disease Host by the Company It Keeps? Predicting Disease Hosts and Their Relative Importance: A Case Study for Leishmaniasis	PLoS Neglected Tropical Diseases 10(10): e0005004	https://doi.org/10.1371/journal.pntd.0005004	Mexico
Wansi JD et al.	Phytochemistry and pharmacology of the genus <i>Drypetes</i> : A review	Journal of Ethnopharmacology	https://doi.org/10.1016/j.jep.2016.06.060	Cameroon, United Kingdom, Germany
Yi Y-J et al.	Maxent modeling for predicting the potential distribution of endangered medicinal plant (<i>H. riparia</i> Lour) in Yunnan, China	Ecological Engineering 92: 260-269	https://doi.org/10.1016/j.ecoleng.2016.04.010	China
Zhang L et al.	Predicting suitable cultivation regions of medicinal plants with Maxent modeling and fuzzy logics: a case study of <i>Scutellaria baicalensis</i> in China	Environmental Earth Sciences 75:361	https://doi.org/10.1007/s12665-015-5133-9	China

data management & data papers

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
a Alexander NS et al.	The European Distribution of Sus Scrofa. Model Outputs from the Project Described within the Poster – Where are All the Boars? An Attempt to Gain a Continental Perspective	Journal of open health data 4	https://doi.org/10.5334/ohd.24	United Kingdom
Asase A & Peterson AT	Completeness of Digital Accessible Knowledge of the Plants of Ghana	Biodiversity Informatics	https://doi.org/10.17161/bi.v11i0.5860	Ghana, United States
Barve V & Otegui J	bdivis: visualizing biodiversity data in R	Bioinformatics	https://doi.org/10.1093/bioinformatics/btw333	United States
Becker D et al.	A Plugin to Interface Openmodeller from QGIS for Species' Potential Distribution Modelling	ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences 3(?)	https://doi.org/10.5194/isprs-annals-III-7-251-2016	Germany
a Dikow T & Agosti D	Utilizing online resources for taxonomy: a cybertcatalog of Afro-tropical apiocerid flies (Insecta: Diptera: Apioceridae)	Biodiversity Data Journal 3: e5707	https://doi.org/10.3897/BDJ.3.e5707	United States, Switzerland
a Droege G et al.	The Global Genome Biodiversity Network (GGBN) Data Standard specification	Database	https://doi.org/10.1093/database/baw125	Germany, United States, Denmark, United Kingdom, Australia, Italy
Franklin J et al.	Big data for forecasting the impacts of global change on plant communities	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12501	United States
a Gattoliat J-L et al.	Toward a comprehensive COI DNA barcode library for Swiss Stoneflies (Insecta: Plecoptera) with special emphasis on the genus Leuctra	Zoosymposia 11: 135–155	https://doi.org/10.11646/zookeys.11.1.15	Switzerland
a Gilles D et al.	RAINBIO: a mega-database of tropical African vascular plants distributions	PhytoKeys 74: 1-18	https://doi.org/10.3897/phytokeys.74.9723	France, Portugal, Denmark, Netherlands, Belgium, United Kingdom, United States, Germany
Ivanova NV & Shashkov MP	Biodiversity Databases in Russia: Towards a National Portal	Arctic Science	https://doi.org/10.1139/AS-2016-0050	Russian Federation
Kirchner AC & Aden C	HotSpotSDM - ein WPS-Prozess für die Modellierung ökologischer Artenfunde	AGIT - Journal für Angewandte Geoinformatik	https://doi.org/10.14627/537622077	Germany
Michonneau F et al.	rotl: an R package to interact with the Open Tree of Life data	Methods in Ecology and Evolution	https://doi.org/10.1111/2041-210X.12593	United States
Rambold G et al.	Geographic heat maps of lichen traits derived by combining LIAS light description and GBIF occurrence data, provided on a new platform	Biodiversity & Conservation	https://doi.org/10.1007/s10531-016-1199-2	Germany, United States
a Rekadowad BN & Khobragade CN	Digital data for quick response (QR) codes of alkalophilic <i>Bacillus pumilus</i> to identify and to compare bacilli isolated from Lonar Crater Lake, India	Data in Brief 7: 1306-1313	https://doi.org/10.1016/j.dib.2016.03.103	India
a Thessen AE et al.	Emerging semantics to link phenotype and environment	PeerJ 3:e1470	https://doi.org/10.7717/peerj.1470	United States, Germany, Argentina, Netherlands
a Ytow N	Taxonaut: an application software for comparative display of multiple taxonomies with a use case of GBIF Species API	Biodiversity Data Journal 4: e9787	https://doi.org/10.3897/BDJ.4.e9787	Japan

food & farming

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Bosch J et al.	A Cartographic Tool for Managing African Swine Fever in Eurasia: Mapping Wild Boar Distribution Based on the Quality of Available Habitats.	Transboundary and Emerging Diseases	https://doi.org/10.1111/tbed.12559	Spain
a Bunn C et al.	Multiclass Classification of Agro-Ecological Zones for Arabica Coffee: An Improved Understanding of the Impacts of Climate Change	PLoS ONE 10(10): e0140490	https://doi.org/10.1371/journal.pone.0140490	Colombia, Nicaragua, United States
Bush MB et al.	A 6900-year history of landscape modification by humans in lowland Amazonia	Quaternary Science Reviews 141: 52-64	https://doi.org/10.1016/j.quascirev.2016.03.022	United States, Mexico, Netherlands
Castañeda-Álvarez NP et al.	Global conservation priorities for crop wild relatives	Nature Plants 2	https://doi.org/10.1038/nplants.2016.22	Colombia, United Kingdom, Netherlands, Germany
da Silva RS et al.	Potential risk levels of invasive Neoleucinodes elegantalis [small tomato borer] in areas optimal for open field Solanum lycopersicum [tomato] cultivation in the present and under predicted climate change	Pest Management Science	https://doi.org/10.1002/ps.4344	Brazil, Australia
Delgado-Baquerizo M et al.	Biogeographic bases for a shift in crop C : N : P stoichiometries during domestication	Ecology Letters	https://doi.org/10.1111/ele.12593	Australia, United States, Spain
a Dunne JA et al.	The roles and impacts of human hunter-gatherers in North Pacific marine food webs	Scientific Reports 6: 21179	https://doi.org/10.1038/srep21179	United States, Canada
Dupin J et al.	Bayesian estimation of the global biogeographical history of the Solanaceae	Journal of Biogeography	https://doi.org/10.1111/jbi.12898	United States, Australia, United Kingdom
a Galluzzi G et al.	An Integrated Hypothesis on the Domestication of Bactris gasipaes	PLoS ONE 10(12): e0144644	https://doi.org/10.1371/journal.pone.0144644	Colombia, Costa Rica
Halouani G et al.	Modelling food web structure using an end-to-end approach in the coastal ecosystem of the Gulf of Gabes (Tunisia)	Ecological Modelling 45:57	https://doi.org/10.1016/j.ecolmodel.2016.08.008	Tunisia, France, South Africa, Peru
Kaur G & Sangha KS	Diversity of arthropod fauna associated with chilli (<i>Capsicum annuum L.</i>) in Punjab	Journal of Entomology and Zoology Studies 4(5): 390-396	http://bit.ly/2uh30M7	India
López-Martínez V et al.	Current and Potential Distribution of the Cactus Weevil, <i>Cactophagus spinolae</i> (Gyllenhal) (Coleoptera: Curculionidae), in Mexico	The Coleopterists Bulletin 70 (2): 327-334	https://doi.org/10.1649/0010-065X-70.2.327	Mexico
Osawa T et al.	Trade-off relationship between modern agriculture and biodiversity: Heavy consolidation work has a long-term negative impact on plant species diversity	Land Use Policy 54: 78-84	https://doi.org/10.1016/j.landusepol.2016.02.001	Japan
Plath M et al.	A novel bioenergy feedstock in Latin America? Cultivation potential of <i>Acrocomia aculeata</i> under current and future climate conditions	Biomass and Bioenergy 9: 186-195	https://doi.org/10.1016/j.biombioe.2016.04.009	Germany, United States, Kenya, Netherlands
a Samy AM & Peterson AT	Climate Change Influences on the Global Potential Distribution of Bluetongue Virus	PLoS ONE 11(3): e0150489	https://doi.org/10.1371/journal.pone.0150489	United States, Egypt
a Sanyal A & Decocq G	Adaptive evolution of seed oil content in angiosperms: accounting for the global patterns of seed oils	BMC Evolutionary Biology 16: 187	https://doi.org/10.1186/s12862-016-0752-7	France, Sweden
Shaik RS et al.	The biology and management of prickly paddy melon (<i>Cucumis myriocarpus L.</i>), an important summer annual weed in Australia	Crop Protection 92: 29-40	https://doi.org/10.1016/j.cropro.2016.10.005	Australia
a Syfert MM et al.	Crop wild relatives of the brinjal eggplant (<i>Solanum melongena</i>): Poorly represented in genebanks and many species at risk of extinction	American Journal of Botany 103 (10)	https://doi.org/10.3732/ajb.1500539	United Kingdom, Netherlands, Colombia, Spain, France
Thomas E et al.	An assessment of the conservation status of Mesoamerican crop species and their wild relatives in light of climate change	Chapter XX in Enhancing Crop Genepool Use: Capturing Wild Relative and Landrace Diversity for Crop Improvement	http://bit.ly/2uhvjdo	Colombia, Costa Rica

impacts of climate change

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Aljaryan R & Kumar L	Changing global risk of invading greenbug <i>Schizaphis graminum</i> under climate change	Crop Protection 88: 137-148	https://doi.org/10.1016/j.cropro.2016.06.008	Australia
a Biber-Freudenberger L et al.	Future Risks of Pest Species under Changing Climatic Conditions	PLoS ONE 11(4): e0153237	https://doi.org/10.1371/journal.pone.0153237	Germany, Kenya
de Oliveira IS et al.	Assessing future habitat availability for coastal lowland anurans in the Brazilian Atlantic rainforest	Studies on Neotropical Fauna and Environment 51(1): 45-55	https://doi.org/10.1080/01650521.2016.1160610	Brazil, Germany, Portugal, Iran
a Dotchamou FT et al.	Density and spatial distribution of <i>Parkia biglobosa</i> pattern in Benin under climate change	Journal of Agriculture and Environment for International Development 110 (1): 173-194	https://doi.org/10.12895/jaeid.2016.1447	Benin
Duffy GA & Chown SL	Urban warming favours C4 plants in temperate European cities	Journal of Ecology	https://doi.org/10.1111/1365-2745.12652	Australia
a Feldman RE et al.	Climate driven range divergence among host species affects range-wide patterns of parasitism	Global Ecology and Conservation 9: 1-10	https://doi.org/10.1016/j.gecco.2016.10.001	Mexico, United States, Canada
Frishkoff LO et al.	Climate change and habitat conversion favour the same species	Ecology Letters	https://doi.org/10.1111/ele.12645	United States, Canada, United Kingdom, Costa Rica, Sweden
García-Martínez YG et al.	Traditional Agroecosystems and Global Change Implications in Mexico	Bulgarian Journal of Agricultural Science 22(4): 548-565	http://bit.ly/2uhmT5w	Mexico
González-Santos R et al.	Prediction of the effects of climate change on <i>Sechium edule</i> [Jacq.] Swartz varietal groups in Mexico	Genetic Resources and Crop Evolution	https://doi.org/10.1007/s10722-016-0401-4	Mexico
a Graham CH et al.	Winter conditions influence biological responses of migrating hummingbirds	Ecosphere 7[10]	https://doi.org/10.1002/ecs2.1470	United States
a Hannah L et al.	Climate change influences on pollinator, forest, and farm interactions across a climate gradient	Climatic Change	https://doi.org/10.1007/s10584-016-1868-x	United States, Costa Rica
Hargrave MS et al.	The effects of warming on the ecophysiology of two co-existing kelp species with contrasting distributions	Oecologia	https://doi.org/10.1007/s00442-016-3776-1	United Kingdom
a Harsch MA & Hille RisLambers J	Climate Warming and Seasonal Precipitation Change Interact to Limit Species Distribution Shifts across Western North America	PLoS ONE 11(7): e0159184	https://doi.org/10.1371/journal.pone.0159184	United States
Hattab T et al.	Forecasting fine-scale changes in the food-web structure of coastal marine communities under climate change	Ecography	https://doi.org/10.1111/ecog.01937	France, Tunisia, Canada
Hof AR et al.	Vulnerability of subarctic and arctic breeding birds	Ecological Applications	https://doi.org/10.1002/eap.1434	Sweden, United States
Ikeda DH et al.	Genetically informed ecological niche models improve climate change predictions	Global Change Biology	https://doi.org/10.1111/gcb.13470	United States
a Illoh AC & Ogundipe OT	Using ecological niche models to plan conservation in a changing environment: A case for the plant <i>Chasmthera dependens</i> Hochst (Menispermaceae) in West Africa	Journal of Ecology and The Natural Environment 8(1): 1-8	https://doi.org/10.5897/JENE2015.0525	Nigeria
a Jiang H et al.	Predicting the Potential Distribution of <i>Polygala tenuifolia</i> Willd. under Climate Change in China	PLoS ONE 11(9): e0163718	https://doi.org/10.1371/journal.pone.0163718	China
a Moutouama JK et al.	Potential climate change favored expansion of a range limited species, <i>Haematostaphis barteri</i> Hook f.	Journal of Agriculture and Environment for International Development	https://doi.org/10.12895/jaeid.2016110.516	Benin
Müller L-LB et al.	"Are 3°C too much?" – Thermal niche breadth in Bromeliaceae and global warming	Journal of Ecology	https://doi.org/10.1111/1365-2745.12681	Germany, Panama
Munson SM & Long AL	Climate drives shifts in grass reproductive phenology across the western USA	New Phytologist	https://doi.org/10.1111/nph.14327	United States
a Pranovi F et al.	The Influence of the Spatial Scale on the Fishery Landings-SST Relationship	Frontiers in Marine Science 3:143	https://doi.org/10.3389/fmars.2016.00143	Italy
a Saeedi H et al.	Modelling present and future global distributions of razor clams (Bivalvia: Solenidae)	Helgoland Marine Research 70:23	https://doi.org/10.1186/s10152-016-0477-4	New Zealand
Sántiz EC et al.	Effect of climate change on the distribution of a critically threatened species	Therya	https://doi.org/10.12933/therya-16-358	Mexico

impacts of climate change

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Schleuning M et al.	Ecological networks are more sensitive to plant than to animal extinction under climate change	Nature Communications 7	https://doi.org/10.1038/ncomms13965	Germany, Canada, Poland, Switzerland, New Zealand, United Kingdom, Belgium, Serbia, Australia
Stuart-Smith J et al.	Southernmost records of two <i>Seriola</i> species in an Australian ocean-warming hotspot	Marine Biodiversity	https://doi.org/10.1007/s12526-016-0580-4	Australia, United States
Taylor S & Kumar L	Will climate change impact the potential distribution of a native vine (<i>Merremia peltata</i>) which is behaving invasively in the Pacific region?	Ecology and Evolution	https://doi.org/10.1002/ece3.1915	Australia
Wauchoppe HS et al.	Rapid climate-driven loss of breeding habitat for Arctic migratory birds	Global Change Biology	https://doi.org/10.1111/gcb.13404	Australia, Norway, Russian Federation, Denmark, United States
Zhang J et al.	Extinction risk of North American seed plants elevated by climate and land-use change	Journal of Applied Ecology	https://doi.org/10.1111/1365-2664.12701	Canada, France, Denmark

invasive alien species

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Geerts S et al.	Lack of human-assisted dispersal means <i>Pueraria montana</i> var. <i>lobata</i> (kudzu vine) could still be eradicated from South Africa	Biological Invasions	https://doi.org/10.1007/s10530-016-1226-y	South Africa
Silva DP et al.	Contextualized niche shifts upon independent invasions by the dung beetle <i>Onthophagus taurus</i>	Biological Invasions	https://doi.org/10.1007/s10530-016-1204-4	Brazil, Spain, Australia, United States
Acosta AL et al.	Worldwide Alien Invasion: A Methodological Approach to Forecast the Potential Spread of a Highly Invasive Pollinator	PLoS ONE 11(2): e0148295	https://doi.org/10.1371/journal.pone.0148295	Brazil
Allen JM & Bradley BA	Out of the weeds? Reduced plant invasion risk with climate change in the continental United States	Biological Conservation 203: 306-312	https://doi.org/10.1016/j.biocon.2016.09.015	United States
Attias N et al.	Acácas Australianas no Brasil: Histórico, Formas de Uso e Potencial de Invasão	Biodiversidade Brasileira 3(2): 74-96	http://bit.ly/2uh3i5F	Brazil
Barbosa FG	The future of invasive African grasses in South America under climate change	Ecological Informatics 36: 114-117	https://doi.org/10.1016/j.ecoinf.2016.10.006	Brazil
Bellard C et al.	Global patterns in threats to vertebrates by biological invasions	Proceedings of the Royal Society B 283 (1823)	https://doi.org/10.1098/rspb.2015.2454	France, Italy, Germany
Bellard C et al.	Major drivers of invasion risks throughout the world	Ecosphere 7(3):e01241	https://doi.org/10.1002/ecs2.1241	France, United Kingdom
Branquart E et al.	A prioritization process for invasive alien plant species incorporating the requirements of EU Regulation no. 1143/2014	EPPO Bulletin	https://doi.org/10.1111/epp.12336	Belgium, Italy, Switzerland, United Kingdom, France, Germany, Netherlands
Brown KA et al.	Modeling co-occurrence between toxic prey and naïve predators in an incipient invasion	Biodiversity and Conservation	https://doi.org/10.1007/s10531-016-1198-3	United Kingdom, United States, Madagascar, Canada
Canavan S et al.	The global distribution of bamboos: assessing correlates of introduction and invasion	AOB Plants	https://doi.org/10.1093/aobpla/plw078	South Africa, United Kingdom
Cardador L et al.	Combining trade data and niche modelling improves predictions of the origin and distribution of non-native European populations of a globally invasive species	Journal of Biogeography	https://doi.org/10.1111/jbi.12694	Spain
Chai S-L et al.	Using Risk Assessment and Habitat Suitability Models to Prioritise Invasive Species for Management in a Changing Climate	PLoS ONE 11(10)	https://doi.org/10.1371/journal.pone.0165292	Canada
Cheek MD & Semple JC	First official record of naturalised populations of <i>Solidago altissima</i> L. var. <i>pluricephala</i> M.C. Johnst. (Asteraceae: Astereae) in Africa	South African Journal of Botany 105: 333-336	https://doi.org/10.1016/j.sajb.2016.05.00	South Africa, Canada
Cindi DD & Jaca TP	First record of <i>Opuntia pubescens</i> H.L.Wendl. ex Pfeiffer, 1835 naturalised in South Africa	BiolInvasions Records 5(4): 213-219	https://doi.org/10.3391/bir.2016.5.4.04	South Africa
Creed JC et al.	The invasion of the azooxanthellate coral <i>Tubastraea</i> [Scleractinia: Dendrophylliidae] throughout the world: history, pathways and vectors	Biological Invasions	https://doi.org/10.1007/s10530-016-1279-y	Brazil, United States

invasive alien species

AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Čuda J et al.	Juvenile biological traits of <i>Impatiens</i> species are more strongly associated with naturalization in temperate climate than their adult traits	Perspectives in Plant Ecology, Evolution and Systematics 20: 1-10	https://doi.org/10.1016/j.ppees.2016.02.007	Czech Republic
da Silva RS et al.	Potential risk levels of invasive <i>Neoleucinodes elegantalis</i> (small tomato borer) in areas optimal for open-field <i>Solanum lycopersicum</i> (tomato) cultivation in the present and under predicted climate change	Pest Management Science	https://doi.org/10.1002/ps.4344	Brazil, Australia
a Di Febbraro M et al.	Modelling the effects of climate change on the risk of invasion by alien squirrels	Hystrix, the Italian Journal of Mammalogy 27 (1)	https://doi.org/10.4404/hystrix-27.1-11776	Italy
a Dullinger I et al.	Climate change will increase the naturalization risk from garden plants in Europe	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12512	Austria, Germany, United Kingdom, Czech Republic, France
a Escobar LE et al.	Realized niche shift associated with the Eurasian charophyte <i>Nitellopsis obtusa</i> becoming invasive in North America	Scientific Reports 6	https://doi.org/10.1038/srep29037	United States, China
Figueroa-Castro P et al.	First Report of <i>Peltophorus adustus</i> (Fall) [Coleoptera: Curculionidae: Baridinae] in Mexico, with Two New Host Associations	The Coleopterists Bulletin 70 (3): 667-670	https://doi.org/10.1649/0010-065X-70.3.667	Mexico
a Fltcher DH et al.	Predicting global invasion risks: a management tool to prevent future introductions	Scientific Reports 6	https://doi.org/10.1038/srep26316	United Kingdom, France
a Forsyth RG et al.	Distributional Status of an Introduced Land Snail <i>Discus rotundatus</i> (Rotund Disc, Mollusca: Discidae) in Canada	The Canadian Field-Naturalist 130(3): 236-247	https://doi.org/10.22621/cfn.v130i3.1887	Canada, Republic of Korea
Fried G et al.	MONOGRAPHHS ON INVASIVE PLANTS IN EUROPE NO. 1 Monographs on Invasive Plants in Europe: <i>Baccharis halimifolia</i> L.	Botany Letters	https://doi.org/10.1080/23818107.2016.1168315	France, Spain, Germany, Australia
a Gallien L et al.	Is There Any Evidence for Rapid, Genetically-Based, Climatic Niche Expansion in the Invasive Common Ragweed?	PLoS ONE 11(4): e0152867	https://doi.org/10.1371/journal.pone.0152867	France
Godefroid M et al.	Is phylogeography helpful for invasive species risk assessment? The case study of the bark beetle genus <i>Dendroctonus</i> ?	Ecography	https://doi.org/10.1111/ecog.01474	France
Harris RMB et al.	Unusual suspects in the usual places: a phyo-climatic framework to identify potential future invasive species	Biological Invasions	https://doi.org/10.1007/s10530-016-1334-8	Australia
Hernández-Lambráño RE et al.	Towards the top: niche expansion of <i>Taraxacum officinale</i> and <i>Ulex europaeus</i> in mountain regions of South America	Austral Ecology	https://doi.org/10.1111/aec.12476	Spain, United Kingdom
Horvitz N et al.	Pervasive human-mediated large-scale invasion: analysis of spread patterns and their underlying mechanisms in 17 of China's worst invasive plants	Journal of Ecology 105: 85–94	https://doi.org/10.1111/1365-2745.12692	China, Israel
Hrvnák R et al.	Alien wetland annual <i>Lindernia dubia</i> (Scrophulariaceae): the first recently mentioned localities in Slovakia and their central European context	Biologia 71 (3)	https://doi.org/10.1515/biolog-2016-0039	Slovakia, Czech Republic, Hungary
a Januario SM et al.	Combining environmental suitability and population abundances to evaluate the invasive potential of the tunicate <i>Ciona intestinalis</i> along the temperate South American coast	PeerJ 3:e1357	https://doi.org/10.7717/peerj.1357	Chile
Kanturski M et al.	Pine pest aphids of the genus <i>Eulachnus</i> (Hemiptera: Aphididae: Lachninae): how far can their range extend?	Agricultural and Forest Entomology	https://doi.org/10.1111/afe.12171	Poland
a Katsanevakis S et al.	Mapping the impact of alien species on marine ecosystems: the Mediterranean Sea case study	Diversity and Distributions	https://doi.org/10.1111/ddi.12429	Italy, Greece
Keet J-H et al.	Assessing the invasiveness of <i>Berberis aristata</i> and <i>B. julianae</i> (Berberidaceae) in South Africa: Management options and legal recommendations	South African Journal of Botany 105: 288-298	https://doi.org/10.1016/j.sajb.2016.04.012	South Africa
Kenis M et al.	Assessing the ecological risk posed by a recently established invasive alien predator: <i>Harmonia axyridis</i> as a case study	BioControl	https://doi.org/10.1007/s10526-016-9764-x	Switzerland, Belgium, United Kingdom, United States
a Laugen AT et al.	The Pacific Oyster (<i>Crassostrea gigas</i>) Invasion in Scandinavian Coastal Waters: Impact on Local Ecosystem Services	Biological Invasions in Changing Ecosystems Vectors, Ecological Impacts, Management and Predictions	https://doi.org/10.1515/9783110438666-015	Sweden
López-Martínez V et al.	Environmental suitability for <i>Agrilus auroguttatus</i> (Coleoptera: Buprestidae) in Mexico using MaxEnt and database records of four <i>Quercus</i> (Fagaceae) species	Agricultural and Forest Entomology	https://doi.org/10.1111/afe.12174	Mexico, United States
Luizza MW et al.	Integrating subsistence practice and species distribution modeling: assessing invasive elodea's potential impact on Native Alaskan subsistence of Chinook salmon and whitefish	Environmental Management 1:20	https://doi.org/10.1007/s00267-016-0692-4	United States
a Marchioro CA	Global Potential Distribution of <i>Bactrocera carambolae</i> and the Risks for Fruit Production in Brazil	PLoS ONE 11(11)	https://doi.org/10.1371/journal.pone.0166142	Brazil

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AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Medina AM	What Can an Invasive Dung Beetle Tell Us About Niche Conservatism?	Environmental Ecology	https://doi.org/10.1093/ee/nvw092	Brazil
Merow C et al.	Improving niche and range estimates with Maxent and point process models by integrating spatially explicit information	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12453	United States
a Nxumalo MM et al.	Hydrocleys nymphoides (Humb. & Bonpl. ex Willd.) Buchenau: first record of naturalisation in South Africa	BioInvasions Records 5	https://doi.org/10.3391/bir.2016.5.1.01	South Africa
a Párrau LG et al.	Rose-ringed Parakeet <i>Psittacula krameri</i> Populations and Numbers in Europe: A Complete Overview	The Open Ornithology Journal 9	https://doi.org/10.2174/1874453201609010001	Germany, Belgium, Italy, United Kingdom, Netherlands Spain, France, Turkey
Pertierra L et al.	Global thermal niche models of two European grasses show high invasion risks in Antarctica	Global Change Biology	https://doi.org/10.1111/gcb.13596	Spain, Australia
a Rekha Sarma R et al.	Effect of Climate Change on Invasion Risk of Giant African Snail [<i>Achatina fulica</i> Féussac, 1821: Achatinidae] in India	PLoS ONE 10(11): e0143724	https://doi.org/10.1371/journal.pone.0143724	India
Rodrigues JFM et al.	Invasion risk of the pond slider turtle is underestimated when niche expansion occurs	Freshwater Biology	https://doi.org/10.1111/fwb.12772	Brazil, Spain, Germany
Scott JK et al.	Methods to select areas to survey for biological control agents: An example based on growth in relation to temperature and distribution of the weed <i>Conyza bonariensis</i>	Biological Control 97: 21-30	https://doi.org/10.1016/j.biocontrol.2016.02.014	Australia
Su A et al.	Geographic range expansion of alien birds and environmental matching	IBIS	https://doi.org/10.1111/ibi.12418	United Kingdom, Australia, South Africa
Taucare-Ríos A et al.	Using Global and Regional Species Distribution Models (SDM) to Infer the Invasive Stage of <i>Latrodectus geometricus</i> [Araneae: Theridiidae] in the Americas	Environmental Entomology	https://doi.org/10.1093/ee/nvw118	Chile
Trumbo DR et al.	Mixed population genomics support for the central marginal hypothesis across the invasive range of the cane toad [<i>Rhinella marina</i>] in Australia	Molecular Ecology	https://doi.org/10.1111/mec.13754	United States, Australia
Vall-llosera M et al.	Improved surveillance for early detection of a potential invasive species: the alien Rose-ringed parakeet <i>Psittacula krameri</i> in Australia	Biological Invasions	https://doi.org/10.1007/s10530-016-1332-x	Australia, New Zealand
Visser V et al.	Much more give than take: South Africa as a major donor but infrequent recipient of invasive non-native grasses	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12445	South Africa, Australia
Wan J-Z et al.	Impacts of the spatial scale of climate data on the modeled distribution probabilities of invasive tree species throughout the world	Ecological Informatics 36: 42-49	https://doi.org/10.1016/j.ecoinf.2016.10.001	China, United Kingdom
Wan JZ et al.	Risk hotspots for terrestrial plant invaders under climate change at the global scale	Environmental Earth Sciences 75: 1012	https://doi.org/10.1007/s12665-016-5826-8	China
Wang Y & Xu Z	Where are the Alien Species? Predictions of Global Plant Species Invasions under Current Environmental Conditions and the Human Footprint	Polish Journal of Environmental Studies 25 (4): 1729-1738	https://doi.org/10.15244/pjoes/62094	China
Wang Z-Q et al.	Kalanchoe [Crassulaceae] as invasive aliens in China – new records, and actual and potential distribution	Nordic Journal of Botany	https://doi.org/10.1111/njb.01052	China, Spain
Weyl PSR & Martin GD	Have grass carp driven declines in macrophyte occurrence and diversity in the Vaal River, South Africa?	African Journal of Aquatic Science	https://doi.org/10.2989/16085914.2015.1137856	South Africa
Zeng Y et al.	Novel methods to select environmental variables in MaxEnt: A case study using invasive crayfish	Ecological Modelling 341: 5-13	https://doi.org/10.1016/j.ecolmodel.2016.09.019	Singapore
Zhu G et al.	Incorporating anthropogenic variables into ecological niche modeling to predict areas of invasion of <i>Popillia japonica</i>	Journal of Pest Science	https://doi.org/10.1007/s10340-016-0780-5	China

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AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Abdou L et al.	Modeling the Geographic Distribution of <i>Prosopis africana</i> (G. and Perr.) Taub. in Niger	Environment and Natural Resources Research 6 (2): 136-144	https://doi.org/10.5539/enrr.v6n2p136	Niger
a Aguilar-López JL et al.	Species Diversity, Distribution, and Conservation Status in a Mesoamerican Region, Amphibians of the Uxpanapa-Chimalapas Region, Mexico	Tropical Conservation Science 9(4)	https://doi.org/10.1177/1940082916670003	Mexico
a Albuquerque F & Beier P	Predicted rarity-weighted richness, a new tool to prioritize sites for species representation	Ecology and Evolution	https://doi.org/10.1002/ece3.2544	United States
Ayram CAC et al.	Anthropogenic impact on habitat connectivity: A multidimensional human footprint index evaluated in a highly biodiverse landscape of Mexico	Ecological Indicators 72: 895-909	https://doi.org/10.1016/j.ecolind.2016.09.007	Mexico, Colombia
a Boavida J et al.	Overlooked habitat of a vulnerable gorgonian revealed in the Mediterranean and Eastern Atlantic by ecological niche modelling	Scientific Reports 6: 36460	https://doi.org/10.1038/srep36460	Portugal
Brummitt N et al.	Where are threatened ferns found? Global conservation priorities for pteridophytes	Journal of Systematics and Evolution	https://doi.org/10.1111/jse.12224	United Kingdom
Butterfield BJ et al.	Prestoration: using species in restoration that will persist now and into the future	Restoration Ecology	https://doi.org/10.1111/rec.12381	United States
a Calderón L et al.	Genomic evidence of demographic fluctuations and lack of genetic structure across flyways in a long distance migrant, the European turtle dove	BMC Evolutionary Biology 16:237	https://doi.org/10.1186/s12862-016-0817-7	Germany, United States, France, United Kingdom, Spain, Bulgaria, Greece, Malta, Italy
a Carneiro LRda et al.	Limitations to the Use of Species-Distribution Models for Environmental-Impact Assessments in the Amazon	PLoS ONE 11(1): e0146543	https://doi.org/10.1371/journal.pone.0146543	Brazil
Castellanos-Morales G et al.	Use of molecular and environmental analyses for integrated in situ and ex situ conservation: The case of the Mexican prairie dog	Biological Conservation	https://doi.org/10.1016/j.biocon.2016.10.036	Mexico
Davis SL & Cipollini D	Range, genetic diversity and future of the threatened butterfly, <i>Pieris virginiensis</i>	Insect Conservation and Diversity	https://doi.org/10.1111/icad.12189	United States
Diesmos AC et al.	Amphibians of the Philippines, Part I: Checklist of the Species	Proceedings of the California Academy of Sciences 62(20): 457-539	http://bit.ly/2t9WQ06	Philippines, United States, Malaysia
a dos Santos CF et al.	Queens become workers: pesticides alter caste differentiation in bees	Scientific Reports 6	https://doi.org/10.1038/srep31605	Brazil
a Gray CL et al.	Local biodiversity is higher inside than outside terrestrial protected areas worldwide	Nature Communications 7: 12306	https://doi.org/10.1038/ncomms12306	United Kingdom, Australia
Hällfors MH et al.	Assessing the need and potential of assisted migration using species distribution models	Biological Conservation 196: 60-68	https://doi.org/10.1016/j.biocon.2016.01.031	Finland, United States
Huang D et al.	Conservation of reef corals in the South China Sea based on species and evolutionary diversity	Biodiversity and Conservation	https://doi.org/10.1007/s10531-016-1052-7	Singapore, Malaysia, China, Taiwan, Brunei Darussalam, Philippines, Cambodia, Vietnam, Thailand
Idohou R et al.	Spatio-temporal dynamic of suitable areas for species conservation in West Africa: eight economically important wild palms under present and future climates	Agroforestry Systems	https://doi.org/10.1007/s10457-016-9955-6	Benin, United States
a Jenkins CN et al.	Patterns of Vertebrate Diversity and Protection in Brazil	PLoS ONE 10(12): e0145064	https://doi.org/10.1371/journal.pone.0145064	Brazil
Lancaster LT	Widespread range expansions shape latitudinal variation in insect thermal limits	Nature Climate Change	https://doi.org/10.1038/nclimate2945	United Kingdom
Marshall CAM et al.	Bioquality Hotspots in the Tropical African Flora	Current Biology 26(23): 3214-3219	https://doi.org/10.1016/j.cub.2016.09.045	United Kingdom, Netherlands
Martínez-Calderas JM et al.	Potential distribution of margay (<i>Leopardus wiedii</i> , Schinz 1821) in Northeastern Mexico	HERPETOLOGY 7 (2): 241-255	https://doi.org/10.12933/herp-16-360	Mexico
McCoshum SM et al.	Species distribution models for natural enemies of monarch butterfly (<i>Danaus plexippus</i>) larvae and pupae: distribution patterns and implications for conservation	Journal of Insect Conservation	https://doi.org/10.1007/s10841-016-9856-z	United States
a Medina RG et al.	Environmental, land cover and land use constraints on the distributional patterns of anurans: Leptodactylus species (Anura, Leptodactylidae) from Dry Chaco	PeerJ 4	https://doi.org/10.7717/peerj.2605	Argentina

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AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Mendoza-González G et al.	Priority areas for conservation of beach and dune vegetation of the Mexican Atlantic coast	Journal for Nature Conservation	https://doi.org/10.1016/j.jnc.2016.04.007	Mexico, United States
Miller MH	Status Review Report of 3 Species of Angelsharks: <i>Squatina aculeata</i> , <i>S. oculata</i> , and <i>S. squatina</i>	Report to National Marine Fisheries Service, Office of Protected Resources	http://bit.ly/2uhmy2K	United States
Obregón R et al.	Effects of climate change on three species of <i>Cupido</i> (Lepidoptera, Lycaenidae) with different biogeographic distribution in Andalusia, southern Spain	Animal Biodiversity and Conservation, 39.1: 115-128	http://bit.ly/2uh1cCJ	Spain
Osipova L & Sangermano F	Surrogate species protection in Bolivia under climate and land cover change scenarios	Journal for Nature Conservation 34: 107-117	https://doi.org/10.1016/j.jnc.2016.10.002	United States
a	Potential Implications of Climate Change on Aegilops Species Distribution: Sympatry of These Crop Wild Relatives with the Major European Crop <i>Triticum aestivum</i> and Conservation Issues	PLoS ONE 11(4): e0153974	https://doi.org/10.1371/journal.pone.0153974	France
	Bird conservation and biodiversity research in Mexico: status and priorities	Journal of Field Ornithology	https://doi.org/10.1111/jfo.12146	United States, Mexico
Peterson MS et al.	Distribution, Abundance, and Habitat Characteristics of <i>Fundulus jenkinsi</i> (Evermann) [Saltmarsh Topminnow] in Coastal Mississippi Watersheds, with Comments on Range-Wide Occurrences Based on Non-Vouchered and Museum Records	Southeastern Naturalist 15(3):415-430	https://doi.org/10.1656/058.015.0304	United States
Phillips J et al.	In situ and ex situ diversity analysis of priority crop wild relatives in Norway	Diversity and Distributions	https://doi.org/10.1111/ddi.12470	United Kingdom, Norway
a	Predicting potential distribution of poorly known species with small database: the case of four-horned antelope <i>Tetracerus quadricornis</i> on the Indian subcontinent.	Ecology and Evolution	https://doi.org/10.1002/ece3.2037	Germany
	Genetic diversity in the locally declining <i>Laserpitium prutenicum</i> L. and the more common <i>Selinum carvifolia</i> (L.) L.: a "silent goodbye"?	Conservation Genetics	https://doi.org/10.1007/s10592-016-0827-4	Germany, France, Poland
a	Evidence for <i>Bombus occidentalis</i> (Hymenoptera: Apidae) Populations in the Olympic Peninsula, the Palouse Prairie, and Forests of Northern Idaho	Journal of Insect Science	https://doi.org/10.1093/jisesa/iev155	United States
	Solberg SØ & Chou YY	Conservation of Indigenous Vegetables from a Hotspot in Tropical Asia: What Did We Learn from Vavilov?	Frontiers in Plant Science	https://doi.org/10.3389/fpls.2016.01982
Speed JDM & Austrheim G	The importance of herbivore density and management as determinants of the distribution of rare plant species	Biological Conservation 205: 77-84	https://doi.org/10.1016/j.biocon.2016.11.030	Norway
Stratmann TSM et al.	Locating Suitable Habitat for a Rare Species: Evaluation of a Species Distribution Model for Bog Turtles (<i>Glyptemys muhlenbergii</i>) in the Southeastern United States	Herpetological Conservation and Biology 11(1):199–213	http://bit.ly/2ugZ65K	United States, Germany
Thompson DM et al.	Effects of life-history requirements on the distribution of a threatened reptile	Conservation Biology	https://doi.org/10.1111/cobi.12800	United States
Tolley KA et al.	Conservation status and threats for African reptiles	Biological Conservation	https://doi.org/10.1016/j.biocon.2016.04.006	South Africa, United States
Toranza C et al.	Threatened amphibians of Uruguay: Effectiveness of protected areas face of climate change	Ecología Austral 26(2):138-149	http://bit.ly/2uhbiDK	Uruguay
Trejo-Salazar R-E et al.	Save Our Bats, Save Our Tequila: Industry and Science Join Forces to Help Bats and Agaves	Natural Areas Journal 36(4):523-530	https://doi.org/10.3375/043.036.0417	Mexico, United States
Trowbridge CD et al.	Shallow subtidal octocorals in an Irish marine reserve	Marine Biodiversity	https://doi.org/10.1007/s12526-016-0450-0	United States, United Kingdom, Ireland
Vroh BTA et al.	Comparing Suitable Habitat Models to Predict Rare and Endemic Plant Species Distributions: What are the Limits of the Niche of <i>Cola litorougnonis</i> (Malvaceae) in Côte d'Ivoire?	Environment and Natural Resources Research 6(3)	https://doi.org/10.5539/enrr.v6n3p1	Ivory Coast
a	Identifying appropriate protected areas for endangered fern species under climate change	SpringerPlus 5: 904	https://doi.org/10.1186/s40064-016-2588-4	China
	The primary freshwater crabs of Guatemala (Decapoda: Brachyura: Pseudothelphusidae), with comments on their conservation status	Journal of Crustacean Biology	https://doi.org/10.1163/1937240X-00002478	Costa Rica, Brazil, Guatemala

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AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Zhu GP et al.	Mapping the ecological dimensions and potential distributions of endangered relic shrubs in western Ordos biodiversity center	Scientific Reports 6	https://doi.org/10.1038/srep26268	China

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AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Aagesen L et al.	Macro-Climatic Distribution Limits Show Both Niche Expansion and Niche Specialization among C4 Panicoids	PLoS ONE 11(3): e0151075	https://doi.org/10.1371/journal.pone.0151075	Argentina
Aguirre-Santoro J et al.	Molecular phylogenetics of the Ronnbergia Alliance (Bromeliaceae, Bromelioideae) and insights into their morphological evolution	Molecular Phylogenetics and Evolution 100: 1-20	https://doi.org/10.1016/j.ympev.2016.04.007	United States
Aliabadian M et al.	Phylogeny, biogeography, and diversification of barn owls (Aves: Strigiformes)	Biological Journal of the Linnean Society	https://doi.org/10.1111/bij.12824	Iran, United Kingdom, Switzerland
Almeida TE & Salino A	State of the art and perspectives on neotropical fern and lycophyte systematics	Journal of Systematics and Evolution	https://doi.org/10.1111/jse.12223	Brazil
André T et al.	Speciation dynamics and biogeography of Neotropical spiral gingers (Costaceae)	Molecular Phylogenetics and Evolution 103: 55-63	https://doi.org/10.1016/j.ympev.2016.07.008	United States, Brazil
Araújo RM et al.	Status, trends and drivers of kelp forests in Europe: an expert assessment	Biodiversity and Conservation 25 (?) : 1319-1348	https://doi.org/10.1007/s10531-016-1141-7	Portugal, Italy, Spain, Germany, Norway, France, United Kingdom, Australia
Arias-Alzate A et al.	Wild Felid Range Shift Due to Climatic Constraints in the Americas: a Bottleneck Explanation for Extinct Felids?	Journal of Mammalian Evolution	https://doi.org/10.1007/s10914-016-9350-0	Mexico, Colombia
Bacon CD et al.	Species limits, geographical distribution and genetic diversity in Johannesteijsmannia (Arecaceae)	The Linnean Society of London, Botanical Journal of the Linnean Society	https://doi.org/10.1111/boj.12470	Sweden, Colombia, Singapore, Malaysia, United Kingdom
Ballesteros-Mejía L et al.	Putting insects on the map: Near-global variation in sphingid moth richness along spatial and environmental gradients	Ecography	https://doi.org/10.1111/ecog.02438	Brazil, United Kingdom, United States, Switzerland
Batalha-Filho H & Miyaki C Y	Late Pleistocene divergence and postglacial expansion in the Brazilian Atlantic Forest: multilocus phylogeography of Rhopias gularis (Aves: Passeriformes)	Journal of Zoological Systematics and Evolutionary Research	https://doi.org/10.1111/jzs.12118	Brazil
Bateman BL et al.	Potential breeding distributions of U.S. birds predicted with both short-term variability and long-term average climate data	Ecological Applications	https://doi.org/10.1002/eap.1416	United States, Australia
Bean WT & Osborn SD	A Suitability Model for White-Footed Voles with Insights into Habitat Associations at the Southern Boundary of Their Range	Northwestern Naturalist 97(2):105-112	https://doi.org/10.1898/NWN15-28.1	United States
Beier P & Albuquerque F	Evaluating Diversity as a Surrogate for Species Representation at Fine Scale	PLoS ONE 11(3)	https://doi.org/10.1371/journal.pone.0151048	United States
Bellot S et al.	Assembled plastid and mitochondrial genomes, as well as nuclear genes, place the parasite family Cynomoriaceae in the Saxifragales	Genome Biology and Evolution	https://doi.org/10.1093/gbe/evw147	Germany, China, Iran, Austria
Benedict JC et al.	Species diversity driven by morphological and ecological disparity: a case study of seeds of Zingiberales (bananas, ginger, and relatives)	AoB PLANTS	https://doi.org/10.1093/aobpla/plw063	United States, United Kingdom, Singapore, Switzerland
Beukhof ED et al.	Records of five bryozoan species from offshore gas platforms rare for the Dutch North Sea	Marine Biodiversity Records 9:91	https://doi.org/10.1186/s41200-016-0086-6	Denmark, Netherlands, Belgium
Bocksberger G et al.	Climate and the distribution of grasses in West Africa	Journal of Vegetation Science	https://doi.org/10.1111/jvs.12360	Germany, Switzerland, France, Burkina Faso
Bocsi T et al.	Plants' native distributions do not reflect climatic tolerance	Diversity and Distributions	https://doi.org/10.1111/ddi.12432	United States
Boucher FC et al.	Evolution and biogeography of the cushion life form in angiosperms	Perspectives in Plant Ecology, Evolution and Systematics 20: 22-31	https://doi.org/10.1016/j.ppees.2016.03.002	France, Switzerland
Brandt LA et al.	Comparison of climate envelope models developed using expert-selected variables versus statistical selection	Ecological Modelling 345: 10-20	https://doi.org/10.1016/j.ecolmodel.2016.11.016	United States
Brewer MJ et al.	Plateau: a new method for ecologically plausible climate envelopes for species distribution modelling	Methods in Ecology and Evolution	https://doi.org/10.1111/2041-210X.12609	United Kingdom, Germany, New Zealand

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AUTHORS	TITLE	JOURNAL	DOI/URL	AUTHOR COUNTRIES
Brischoux F et al.	Oceanic circulation models help to predict global biogeography of pelagic yellow-bellied sea snake	Biology Letters	https://doi.org/10.1098/rsbl.2016.0436	France, United States, Australia
Brock JMR et al.	Tree fern ecology in New Zealand: A model for southern temperate rainforests	Forest Ecology and Management 375: 112-126	https://doi.org/10.1016/j.foreco.2016.05.030	New Zealand
Bush MB & McMichael CNH	Holocene Variability of an Amazonian Hyperdominant	Journal of Ecology	https://doi.org/10.1111/1365-2745.12600	United States, Netherlands
Butterfield BJ & Munson SM	Temperature is better than precipitation as a predictor of plant community assembly across a dryland region	Journal of Vegetation Science	https://doi.org/10.1111/jvs.12440	United States
a Cáceres NC et al.	Which Factors Determine Spatial Segregation in the South American Opossums (<i>Didelphis aurita</i> and <i>D. albiventris</i>)? An Ecological Niche Modelling and Geometric Morphometrics Approach	PLoS ONE 11(6): e0157723	https://doi.org/10.1371/journal.pone.0157723	Brazil, United Kingdom
	Climate, habitat associations and the potential distributions of Neotropical birds: Implications for diversification across the Andes	Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales	https://doi.org/10.18257/raccefyn.280	Colombia, United States
a Cai L et al.	Phylogeny of Elatinaceae and the Tropical Gondwanan Origin of the Centropiacaceae (Malpighiaceae, Elatinaceae) Clade	PLoS ONE 11(9)	https://doi.org/10.1371/journal.pone.0161881	United States
Calleja JA et al.	Epiphytic Bryophyte Communities of <i>Prunus lusitanica</i> Iberian Forests: Biogeographic Islands Shaped by Regional Climates	Cryptogamie, Bryologie 37(1):53-85	https://doi.org/10.7872/cryb/v37.iss1.2016.53	Spain
Caperta AD et al.	Biogeographical, ecological and ploidy variation in related asexual and sexual <i>Limonium</i> taxa (Plumbaginaceae)	Botanical Journal of the Linnean Society,	https://doi.org/10.1111/bj.12498	Portugal, Morocco
Cardinal-McTeague WM et al.	Biogeography and diversification of Brassicales: A 103 million year tale	Molecular Phylogenetics and Evolution	https://doi.org/10.1016/j.ympev.2016.02.021	United States, Canada
Cardoso AL et al.	Integrated Cytogenetic and Mitochondrial DNA Analyses Indicate That Two Different Phenotypes of <i>Hypancistrus</i> (L066 and L333) Belong to the Same Species	Zebrafish	https://doi.org/10.1089/zeb.2015.1213	Brazil
a Chakrabarty P et al.	Five Years Later: An Update on the Status of Collections of Endemic Gulf of Mexico Fishes Put at Risk by the 2010 Oil Spill	Biodiversity Data Journal 4: e8728	https://doi.org/10.3897/BDJ.4.e8728	United States
a Chandler M et al.	Contribution of citizen science towards international biodiversity monitoring	Biological Conservation	https://doi.org/10.1016/j.biocon.2016.09.004	United States, Austria, Denmark, Spain, Australia
Charles-Dominique T et al.	Spiny plants, mammal browsers, and the origin of African savannas	PNAS	https://doi.org/10.1073/pnas.1607493113	South Africa, Canada, United States
Cheddadi R & Khater C	Climate change since the last glacial period in Lebanon and the persistence of Mediterranean species	Quaternary Science Reviews 150: 146-157	https://doi.org/10.1016/j.quascirev.2016.08.010	France, Lebanon
a Chernomor O et al.	Split Diversity: Measuring and Optimizing Biodiversity Using Phylogenetic Split Networks	in Biodiversity Conservation and Phylogenetic Systematics 14: 173-195	https://doi.org/10.1007/978-3-319-22461-9_9	Austria, New Zealand
Congrains C et al.	Genetic and paleomodelling evidence of the population expansion of the cattle egret <i>Bubulcus ibis</i> in Africa during the climatic oscillations of the Late Pleistocene	Journal of Avian Biology	https://doi.org/10.1111/jav.00972	Brazil, South Africa, Australia, Nigeria, Guinea-Bissau, Ghana
Coro G et al.	Estimating absence locations of marine species from data of scientific surveys in OBIS	Ecological Modelling 323:61-76	https://doi.org/10.1016/j.ecolmodel.2015.12.008	Italy, Belgium, Greece, Philippines
Cramer MD & Verboom GA	Measures of biologically relevant environmental heterogeneity improve prediction of regional plant species richness	Journal of Biogeography	https://doi.org/10.1111/jbi.1291	South Africa
Cresson P et al.	Lost in the North: The first record of <i>Diretmichthys parini</i> [Post and Quéro, 1981] in the northern North Sea	Marine Pollution Bulletin	https://doi.org/10.1016/j.marpolbul.2016.10.074	France
a Crowl AA et al.	A global perspective on Campanulaceae: Biogeographic, genomic, and floral evolution	American Journal of Botany	https://doi.org/10.3732/ajb.1500450	United States
Cruz JA et al.	Reconstructing the paleoenvironment of Loltún Cave, Yucatán, Mexico, with Pleistocene amphibians and reptiles and their paleobiogeographic implications	Revista Mexicana de Ciencias Geológicas	http://bit.ly/2uhbRsh	Mexico
Cuéllar-Martínez M & Sosa V	Diversity patterns of monocotyledonous geophytes in Mexico	Botanical Sciences 94(4): 1-13	https://doi.org/10.17129/botscl.763	Mexico
a Curtis CA & Bradley BA	Plant Distribution Data Show Broader Climatic Limits than Expert-Based Climatic Tolerance Estimates	PLoS ONE 11(11): e0166407	https://doi.org/10.1371/journal.pone.0166407	United States
Dal Vecchio F et al.	Taxonomic Status and the Phylogenetic Placement of <i>Amphisbaena leucocephala</i> Peters, 1878 (Squamata, Amphisbaenidae)	South American Journal of Herpetology 11(3):157-175	https://doi.org/10.2994/SAJH-D-16-00027.1	Brazil

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Davies MR & Piontek S	The marine fishes of St. Eustatius, Dutch Caribbean	Marine Biodiversity	https://doi.org/10.1007/s12526-016-0575-1	Netherlands
a Davis TR	First records of three fishes, and southern records of a further four fishes, from New South Wales, Australia	Check List 12(6)	https://doi.org/10.15560/12.6.2008	Australia
de Almeida DAC et al.	Taxonomy and molecular phylogeny of Diatrypaceae (Ascomycota, Xylariales) species from the Brazilian semi-arid region, including four new species	Mycological Progress	https://doi.org/10.1007/s11557-016-1194-8	Brazil, United States
De La Cruz-Agüero J et al.	Unusual records of deepwater teleosteans trawled off the western coast of Mexico	Journal of Fish Biology	https://doi.org/10.1111/jfb.13087	Mexico
a de Melo WA et al.	Coalescent Simulation and Paleodistribution Modeling for <i>Tabebuia rosealba</i> Do Not Support South American Dry Forest Refugia Hypothesis	PLoS ONE 11(7): e0159314	https://doi.org/10.1371/journal.pone.0159314	Brazil
de Moura Bubadué J et al.	Character displacement under influence of Bergmann's rule in <i>Cerdcoyon thous</i> (Mammalia: Canidae)	Hystrix, teh Italian Journal of Mammalogy	https://doi.org/10.4404/hystrix-27.2-11433	Brazil, Italy
Deblauwe V et al.	Remotely sensed temperature and precipitation data improve species distribution modelling in the tropics	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12426	France, Belgium, Cameroon, United States, India, Denmark, Netherlands
Depa L et al.	Do ants drive speciation in aphids? A possible case of ant-driven speciation in the aphid genus <i>Stomaphis</i> Walker (Aphidoidea, Lachninae)	Zoological Journal of the Linnean Society	https://doi.org/10.1111/zoj.12437	Poland
DeVaney SC	Species Distribution Modeling of Deep Pelagic Eels	Integrative & Comparative Biology	https://doi.org/10.1093/icb/icw032	United States
a Devi KT et al.	Three new additions to the grass (Poaceae) flora of Manipur, India	Plant Science Today 3(3): 272-281	https://doi.org/10.14719/pst.2016.3.3.237	India
Dianat M et al.	Evolutionary history of the Persian Jird, <i>Meriones persicus</i> , based on genetics, species distribution modelling and morphometric data	Journal of Zoological Systematics and Evolutionary Research	https://doi.org/10.1111/jzs.12145	Iran, France
Domínguez MC et al.	Vicariance events shaping Southern South American insect distributions	Zoologica Scripta	https://doi.org/10.1111/zsc.12167	Argentina
Drees C et al.	Molecular analyses and species distribution models indicate cryptic northern mountain refugia for a forest-dwelling ground beetle	Journal of Biogeography	https://doi.org/10.1111/jbi.12828	Germany, Netherlands, Kenya
Dufresnes C et al.	Evolutionary melting pots: a biodiversity hotspot shaped by ring diversifications around the Black Sea in the Eastern tree frog (<i>Hyla orientalis</i>)	Molecular Ecology	https://doi.org/10.1111/mec.13706	Switzerland, Russian Federation, Ukraine, Germany
Dugdale TM et al.	The biology of Australian weeds 65. ' <i>Tradescantia fluminensis</i> ' Vell	Plant Protection Quarterly 30(4)	http://bit.ly/2uhukKe	Australia
Feng X et al.	Climatic Similarity of Extant and Extinct <i>Dasypus</i> Armadillos	Journal of Mammalian Evolution	https://doi.org/10.1007/s10914-016-9336-y	United States, Brazil
Ferreira GE et al.	Subtropical species of <i>Sinningia</i> (Gesneriaceae): Distribution patterns and limiting environmental factors	Flora - Morphology, Distribution, Functional Ecology of Plants 222: 86-95	https://doi.org/10.1016/j.flora.2016.04.002	Brazil, Switzerland
Ferrer-Paris JR et al.	Indicative response of <i>Oxysternon festivum</i> Linné (Coleoptera: Scarabaeidae) to vegetation condition in the basin of the Orinoco river, Venezuela	Journal of Insect Conservation 20 (3): 527-538	https://doi.org/10.1007/s10841-016-9886-6	Venezuela
Figueroa LL & Bergey EA	Bumble Bees (Hymenoptera: Apidae) of Oklahoma: Past and Present Biodiversity	Journal of the Kansas Entomological Society 88(4):418-429	https://doi.org/10.2317/0022-8567-88.4.418	United States
a Foody GM et al.	The Sensitivity of Mapping Methods to Reference Data Quality: Training Supervised Image Classifications with Imperfect Reference Data	ISPRS International Journal of Geo-Information 5(11)	https://doi.org/10.3390/ijgi5110199	United Kingdom, India, Italy, France
Fourcade Y	Comparing species distributions modelled from occurrence data and from expert-based range maps. Implication for predicting range shifts with climate change	Ecological Informatics 36: 8-14	https://doi.org/10.1016/j.ecoinf.2016.09.002	Sweden
Fournier AMV et al.	Combining citizen science species distribution models and stable isotopes reveals migratory connectivity in the secretive Virginia rail	Journal of Applied Ecology	https://doi.org/10.1111/1365-2664.12723	United States, Sweden, Canada
Fournier AMV et al.	Combining citizen science species distribution models and stable isotopes reveals migratory connectivity in the secretive Virginia rail	Journal of Applied Ecology	https://doi.org/10.1111/1365-2664.12723	United States, Sweden
Fuchs J et al.	Long-distance dispersal and inter-island colonization across the western Malagasy Region explain diversification in brush-warblers (Passeriformes: Nesillas)	Biological Journal of the Linnean Society,	https://doi.org/10.1111/bij.12825	France, Colombia, Madagascar, United Kingdom, Switzerland, United States

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Gaddis KD et al.	Dry-washes determine gene flow and genetic diversity in a common desert shrub	Landscape Ecology	https://doi.org/10.1007/s10980-016-0393-7	United States
García-Redondo V et al.	First Record of Sexual Structures in <i>Pterosiphonia Parasitica</i> (Rhodomelaceae, Rhodophyta) from the Iberian Peninsula	Thalassas: An International Journal of Marine Sciences	https://doi.org/10.1007/s41208-016-0012-z	Spain
Gherghel I et al.	A revision of the distribution of sea kraits (Reptilia, Laticauda) with an updated occurrence dataset for ecological and conservation research	ZooKeys 569: 135-148	https://doi.org/10.3897/zookeys.569.6975	United States, France, Romania
Gómez C et al.	Niche-tracking migrants and niche-switching residents: evolution of climatic niches in New World warblers (Parulidae)	Proceedings of the Royal Society B 283 (1823)	https://doi.org/10.1098/rspb.2015.2458	Colombia
Gómez-Ruiz EP & Lacher TE	Modelling the potential geographic distribution of an endangered pollination corridor in Mexico and the United States	Diversity and Distributions	https://doi.org/10.1111/ddi.12499	Mexico, United States
González JA	Brachyuran crabs (Crustacea: Decapoda) from the Canary Islands (eastern Atlantic): checklist, zoogeographic considerations and conservation	Scientia Marina 80(1)	https://doi.org/10.3989/scimar.04350.10A	Spain
González JA et al.	Spatio-temporal point process statistics: A review	Spatial Statistics	https://doi.org/10.1016/j.spasta.2016.10.002	Spain, Sweden
Gouveia SF & Correia I	Geographical clines of body size in terrestrial amphibians: water conservation hypothesis revisited	Journal of Biogeography	https://doi.org/10.1111/jbi.12842	Brazil
Greve M et al.	Realising the potential of herbarium records for conservation biology	South African Journal of Botany 105: 317-323	https://doi.org/10.1016/j.sajb.2016.03.017	Denmark, South Africa, Brazil, United States, United Kingdom, Belgium, Burundi
Griffiths HJ & Waller CL	The first comprehensive description of the biodiversity and biogeography of Antarctic and Sub-Antarctic intertidal communities	Journal of Biogeography	https://doi.org/10.1111/jbi.12708	United Kingdom
Grünwald CI et al.	A new species of <i>Ophryacus</i> (Serpentes: Viperidae: Crotalinae) from eastern Mexico with comments of the taxonomy of related pitvipers	Mesoamerican Herpetology 2: 388-416	http://bit.ly/2dkggr	Mexico, United States
Guan B-C et al.	Landscape connectivity of <i>Cercidiphyllum japonicum</i> , an endangered species and its implications for conservation	Ecological Informatics 33: 51-66	https://doi.org/10.1016/j.ecoinf.2016.04.002	China
Gueta T & Carmel Y	Quantifying the value of user-level data cleaning for: A case study using mammal distribution models	Ecological Informatics 34: 139-145	https://doi.org/10.1016/j.ecoinf.2016.06.001	Israel
Hantemirova EV et al.	A new Eurasian phylogeographical paradigm? Limited contribution of southern populations to the recolonization of high latitude populations in <i>Juniperus communis</i> L. (Cupressaceae)	Journal of Biogeography	https://doi.org/10.1111/jbi.12867	Russian Federation, Austria, Sweden
Hargrave CW & Gary KP	Historical Distribution of Bluehead Shiner (<i>Pteronotropis hubbsi</i>)	Southeastern Naturalist 15(sp9):110-116	https://doi.org/10.1656/058.015.0sp913	United States
Henriques Antão L et al.	Prevalence of multimodal species abundance distributions is linked to spatial and taxonomic breadth	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12532	United Kingdom, Australia, Portugal
Henrot A-J et al.	Middle Miocene climate and vegetation models and their validation with proxy data	Palaeogeography, Palaeoclimatology, Palaeoecology	https://doi.org/10.1016/j.palaeo.2016.05.026	Belgium, Germany, Hungary, Australia, United States
Hernández-Baz F et al.	Notes on the Behavior and Distribution of the Day-Flying Moth, <i>Heterusia atalantata</i> [Guenée, [1858]] (Lepidoptera, Geometridae, Larentiinae), with Special Reference to Mexico	Journal of the Lepidopterists' Society 70(4):283-288	https://doi.org/10.18473/lepi.70i4.a6	United States, Mexico
Hernández-Velasco A et al.	Occurrence of <i>Holacanthus clarionensis</i> (Pomacanthidae), <i>Stegastes leucorus</i> , and <i>Stegastes acapulcoensis</i> (Pomacentridae) at Magdalena Bay, B.C.S., Mexico	Marine Biodiversity Records 9:49	https://doi.org/10.1186/s41200-016-0062-1	Mexico
Hultine KR et al.	Stable isotope physiology of stem succulents across a broad range of volume-to-surface area ratio	Oecologia	https://doi.org/10.1007/s00442-016-3690-6	United States
Ivory SJ et al.	Niche expansion and temperature sensitivity of tropical African montane forests	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12446	United States, United Kingdom
Jaffé R et al.	Beekeeping practices and geographic distance, not land use, drive gene flow across tropical bees	Molecular Ecology	https://doi.org/10.1111/mec.13852	Brazil, United States, Spain, Portugal
Janssens SB et al.	Evolutionary dynamics and biogeography of Musaceae reveal a correlation between the diversification of the banana family and the geological and climatic history of Southeast Asia	New Phytologist	https://doi.org/10.1111/nph.13856	Belgium, Netherlands, Tanzania
JC Ganglo & SB Kakpo	Completeness of Digital Accessible Knowledge of Plants of Benin and Priorities for Future Inventory and Data Discovery	Biodiversity Informatics 11: 23-39	https://doi.org/10.17161/bi.v11i0.5053	Benin

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Jia S-W et al.	Evolutionary history of <i>Gymnocarpos</i> [Caryophyllaceae] in the arid regions from North Africa to Central Asia	The Linnean Society of London, Biological Journal of the Linnean Society,	https://doi.org/10.1111/bij.12834	China, Germany, Sweden
a Jiménez RA & Ornelas JF	Historical and current introgression in a Mesoamerican hummingbird species complex: a biogeographic perspective	PeerJ 4:e1556	https://doi.org/10.7717/peerj.1556	Mexico
Jiménez-Alfaro B et al.	Anticipating extinctions of glacial relict populations in mountain refugia	Biological Conservation 201: 243-251	https://doi.org/10.1016/j.biocon.2016.07.015	Czech Republic, Spain
Jung J-M et al.	Insect distribution in response to climate change based on a model: Review of function and use of CLIMEX	Entomological Research	https://doi.org/10.1111/1748-5967.12171	Korea
a Keller B et al.	Both morph- and species-dependent asymmetries affect reproductive barriers between heterostylous species	Ecology and Evolution	https://doi.org/10.1002/ece3.2293	Switzerland, United States, Australia, Canada
Kennedy MP et al.	Niche-breadth of freshwater macrophytes occurring in tropical southern African rivers predicts species global latitudinal range	Aquatic Botany 136: 21-30	https://doi.org/10.1016/j.aquabot.2016.09.003	United Kingdom, Zambia, South Africa, Argentina, Brazil
Keppel G et al.	Habitat diversity predicts orchid diversity in the tropical south-west Pacific	Journal of Biogeography	https://doi.org/10.1111/jbi.12805	Australia, United States
a Kissling WD et al.	Historical colonization and dispersal limitation supplement climate and topography in shaping species richness of African lizards (Reptilia: Agaminae)	Scientific Reports 6	https://doi.org/10.1038/srep34014	Netherlands, Denmark, Germany, United States
Koch JB et al.	Range Extension of Two Bumble Bee Species (Hymenoptera: Apidae) into Olympic National Park	Northwest Science 90(2):228-234	https://doi.org/10.3955/046.090.0212	United States
Koski et al.	Reproductive character displacement and environmental filtering shape floral variation between sympatric sister taxa	Evolution	https://doi.org/10.1111/evo.13042	United States
Koski MH & Ashman T-L	Macroevolutionary patterns of ultraviolet floral pigmentation explained by geography and associated bioclimatic factors	New Phytologist	https://doi.org/10.1111/nph.13921	United States
Kramer-Schadt S et al.	The Borneo carnivore database and the application of predictive distribution modelling	Raffles Bulletin of Zoology 33: 18-41	http://bit.ly/2ugZIIA	Germany
a Kratochwil A	Review of the Icelandic bee fauna (Hymenoptera: Apoidea: Anthophila)	Stuttgarter Beiträge zur Naturkunde A 9(1):217-227	https://doi.org/10.18476/sbna.v9.a14	Germany
a Krehenwinkel H et al.	Rapid genetic and ecological differentiation during the northern range expansion of the venomous yellow sac spider <i>Cheiracanthium punctum</i> in Europe	Evolutionary Applications	https://doi.org/10.1111/eva.12392	Germany, United States, Romania, Slovenia
Krehenwinkel H et al.	A phylogeographical survey of a highly dispersive spider reveals eastern Asia as a major glacial refugium for Palaearctic fauna	Journal of Biogeography	https://doi.org/10.1111/jbi.12742	Germany, United States, Japan
a Krishnan A & Tammar K	Divergent morphological and acoustic traits in sympatric communities of Asian barbets	Royal Society Open Science	https://doi.org/10.1098/rsos.160117	United States, India
Kübler D et al.	Assessing the importance of topographic variables for the spatial distribution of tree species in a tropical mountain forest	Erdkunde 70 (1): 19-47	https://doi.org/10.3112/erdkunde.2016.01.03	Germany, Ecuador
a La Salle J, Williams KJ & Moritz C	Biodiversity analysis in the digital era	Philosophical Transactions B 371 (1702)	https://doi.org/10.1098/rstb.2015.0337	Australia
a Lagomarsino LP et al.	The abiotic and biotic drivers of rapid diversification in Andean bellflowers (Campanulaceae)	New Phytologist	https://doi.org/10.1111/nph.13920	United States, Sweden, Germany
Langejans GHJ et al.	Pleistocene molluscs from Klasies River (South Africa): Reconstructing the local coastal environment	Quaternary International	https://doi.org/10.1016/j.quaint.2016.01.013	Netherlands, South Africa
Leach K et al.	Modelling the influence of biotic factors on species distribution patterns	Ecological Modelling 337: 96-106	https://doi.org/10.1016/j.ecolmodel.2016.06.008	United Kingdom
Lee-Yaw JA et al.	A synthesis of transplant experiments and ecological niche models suggests that range limits are often niche limits	Ecology Letters	https://doi.org/10.1111/ele.12604	Canada, Switzerland, United States, Ireland
Leite YLR et al.	Neotropical forest expansion during the last glacial period challenges refuge hypothesis	PNAS, Proceedings of the National Academy of Sciences of the United States of America	https://doi.org/10.1073/pnas.1513062113	Brazil, Portugal
a Lens F et al.	Scalariform-to-simple transition in vessel perforation plates triggered by differences in climate during the evolution of Adoxaceae	Annals of Botany	https://doi.org/10.1093/aob/mcw151	Netherlands, France, South Africa, Belgium
a Lessmann J et al.	Freshwater vertebrate and invertebrate diversity patterns in an Andean-Amazon basin: implications for conservation efforts	Neotropical Biodiversity 2(1)	https://doi.org/10.1080/23766808.2016.1222189	United States, Ecuador, Portugal

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Li G et al.	Mapping the climatic suitable habitat of oriental arborvitae [<i>Platycladus orientalis</i>] for introduction and cultivation at a global scale	Scientific Reports 6: 30009	https://doi.org/10.1038/srep30009	China
Liu LH & Wiens JJ	Comparing macroecological patterns across continents: evolution of climatic niche breadth in varanid lizards	Ecography	https://doi.org/10.1111/ecog.02343	China, United States
Liu H-M et al.	Exploring the pteridophyte flora of the Eastern Afrotropical biodiversity hotspot	<i>Journal of Systematics and Evolution</i> 54: 691–705	https://doi.org/10.1111/jse.12232	China, Kenya, United Kingdom, Germany
Liu W et al.	Morphological and Genetic Variation along a North-to-South Transect in <i>Stipa purpurea</i> , a Dominant Grass on the Qinghai-Tibetan Plateau: Implications for Response to Climate Change	PLoS ONE 11(8): e0161972	https://doi.org/10.1371/journal.pone.0161972	China
Londei T	Piapiacs (<i>Ptilostomus afer</i> Linnaeus, 1766) and yellow-billed oxpeckers (<i>Buphagus africanus</i> Linnaeus, 1766) avoid proximity when on African buffaloes (<i>Syncerus caffer</i> Sparrman, 1779)	African Journal of Ecology	https://doi.org/10.1111/aje.12319	Italy
López-Aguirre C et al.	Extinction of South American sparassodontans (Metatheria): environmental fluctuations or complex ecological processes?	Palaeontology	https://doi.org/10.1111/pala.12272	Australia
López-Pujol J et al.	Speciation and genetic diversity in <i>Centaurea</i> subsect. <i>Phalolepis</i> in Anatolia	Scientific Reports 6	https://doi.org/10.1038/srep37818	Spain, Turkey, Saudi Arabia
Lundgren MR & Christin P-A	Despite phylogenetic effects, C3–C4 lineages bridge the ecological gap to C4 photosynthesis	<i>Journal of Experimental Botany</i>	https://doi.org/10.1093/jxb/erw451	United Kingdom
Lv X et al.	Continental Refugium in the Mongolian Plateau during Quaternary Glacial Oscillations: Phylogeography and Niche Modelling of the Endemic Desert Hamster, <i>Phodopus roborovskii</i>	PLoS ONE 11(2)	https://doi.org/10.1371/journal.pone.0148182	China
Lv X et al.	Climatic niche conservatism and ecological opportunity in the explosive radiation of arvicoline rodents (Arvicolinae, Cricetidae)	Evolution	https://doi.org/10.1111/evo.12919	China
Ma H et al.	Hypsodonty of Dipodidae (Rodentia) in Correlation with Diet Preferences and Habitats	Journal of Mammalian Evolution	https://doi.org/10.1007/s10914-016-9352-y	China, Israel, Belgium
Ma KCK et al.	Richness and zoogeography of ascidians (Tunicata: Ascidiacea) in eastern Canada	Canadian Journal of Zoology	https://doi.org/10.1139/cjz-2016-0087	Canada
Macfarlane CBA et al.	Population genetic isolation and limited connectivity in the purple finch (<i>Haemorhous purpureus</i>)	Ecology and Evolution	https://doi.org/10.1002/ece3.2524	Canada
Mahabal A et al.	Distribution records and extended range of the Sri Lanka Frogmouth <i>Batrachostomus moniliger</i> (Aves: Caprimulgiformes: Podargidae) in the Western Ghats: a review from 1862 to 2015	Journal of Threatened Taxa 8 [1]: 9289-9305	https://doi.org/10.11609/jott.2775.8.11.9289-9305	India
Mai P et al.	Taxonomic revision of <i>Peperomia</i> (Piperaceae) from Uruguay	PhytoTaxa 244[2]: 125-144	https://doi.org/10.11646/phytotaxa.244.2.2	Uruguay, Brazil
Mandáková T et al.	How diploidization turned a tetraploid into a pseudotriploid	American Journal of Botany	https://doi.org/10.3732/ajb.1500452	Czech Republic, United States
Marchant B et al.	Patterns of abiotic niche shifts in allopolyploids relative to their progenitors	New Phytologist	https://doi.org/10.1111/nph.14069	United States
Marques I et al.	Past climate changes facilitated homoploid speciation in three mountain spiny fescues (<i>Festuca</i> , Poaceae)	Scientific Reports 6	https://doi.org/10.1038/srep36283	Spain, Portugal, Russian Federation
Márquez-Borrás F et al.	First record of <i>Ophiura ljungmani</i> (Echinodermata: Ophiouroidea) from an anchialine cave in the Mexican Caribbean	Revista Mexicana de Biodiversidad 1127-1130	https://doi.org/10.1016/j.rmb.2016.07.006	Mexico, Australia
Marta S et al.	Deciphering range dynamics: effects of niche stability areas and post-glacial colonization on alpine species distribution	Journal of Biogeography	https://doi.org/10.1111/jbi.12771	Italy, United States, Germany
Martínez-Méndez N et al.	Modelado de nicho ecológico de las especies del género <i>Abies</i> (Pinaceae) en México: Algunas implicaciones taxonómicas y para la conservación	Botanical Sciences 94 [1]: 5-24	https://doi.org/10.17129/botsci.508	Mexico
Martínez-Vilalta J et al.	Dynamics of non-structural carbohydrates in terrestrial plants: a global synthesis	Ecological Monographs	https://doi.org/10.1002/ecm.1231	Spain, United States, Switzerland, Germany, Chile
Matuszak S et al.	Key innovations and climatic niche divergence as drivers of diversification in subtropical Gentianinae in southeastern and eastern Asia	American Journal of Botany	https://doi.org/10.3732/ajb.1500352	Germany
Maurin O et al.	Diversification into novel habitats in the Africa clade of <i>Dioscorea</i> (Dioscoreaceae): erect habit and elephant's foot tubers	BMC Evolutionary Biology 16:238	https://doi.org/10.1186/s12862-016-0812-z	South Africa, United Kingdom, Spain, Russian Federation, France

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Medinal & Langmore NE	The evolution of host specialisation in avian brood parasites	Ecology Letters	https://doi.org/10.1111/ele.12649	Australia
Meiri S	Small, rare and trendy: traits and biogeography of lizards described in the 21st century	Journal of Zoology	https://doi.org/10.1111/jzo.12356	Israel
Mena-Portales J et al.	Taxonomy, distribution and conservation status of some interesting hyphomycetes (Anamorphic Fungi) from La Palma Biosphere Reserve, Canary Islands	Boletín de la Sociedad Micológica de Madrid 39	http://bit.ly/2uhp0eA	Spain
Merow C et al.	Integrating occurrence data and expert maps for improved species range predictions	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12539	United States, United Kingdom
Meyer C et al.	Range geometry and socio-economics dominate species-level biases in occurrence information	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12483	Germany, United Kingdom, United States
Mikula O et al.	Evolutionary history and species diversity of African pouched mice (Rodentia: Nesomyidae: Saccostomus)	Zoologica Scripta	https://doi.org/10.1111/zsc.12179	Czech Republic, Kenya, Tanzania
Molina-Henao YF et al.	Ecological and Geographic Dimensions of Diversification in <i>Piper</i> subgenus <i>Ottonia</i> : A Lineage of Neotropical Rainforest Shrubs	Systematic Botany 41(2):253-262	https://doi.org/10.1600/036364416X691777	Colombia, United States
Morales A et al.	Environmental niche drives genetic and morphometric structure in a widespread bat.	Journal of Biogeography	https://doi.org/10.1111/jbi.12666	Mexico, United States, Brazil
Müller CM et al.	Geropogon hybridus (L.) Sch.Bip. (Asteraceae) exhibits micro-geographic genetic divergence at ecological range limits along a steep precipitation gradient	Plant Systematics and Evolution	https://doi.org/10.1007/s00606-016-1354-y	Germany
Multimäki S et al.	Comparison of Temporally Classified and Unclassified Map Animations	Cartographic Perspectives	https://doi.org/10.14714/CP82.1296	Finland
Nava-Bolaños A et al.	Isolation barriers and genetic divergence in non-territorial <i>Argia</i> damselflies	Biological Journal of the Linnean Society	https://doi.org/10.1111/bij.12916	Mexico, Sweden
Newbold T et al.	Global patterns of terrestrial assemblage turnover within and among land uses	Ecography	https://doi.org/10.1111/ecog.01932	United Kingdom, Norway
Nicolas V et al.	Molecular data and ecological niche modelling reveal the evolutionary history of the common and Iberian blind moles (Talpidae) in Europe	Zoologica Scripta	https://doi.org/10.1111/zsc.12189	France, Spain
Nogué S et al.	Pollination service delivery for European crops: Challenges and opportunities	Ecological Economics 128: 1-7	https://doi.org/10.1016/j.ecolecon.2016.03.023	United Kingdom, Norway, Spain
Nordén B & Jordal JB	Some interesting lichenized fungi from old <i>Fraxinus excelsior</i> and <i>Ulmus glabra</i> in Norway, including four new country records	Graphis Scripta 28 (1-2): 17-21	http://bit.ly/2uh4BRZ	Norway
Nylinder S et al.	From the Namib around the world: biogeography of the Inuleae–Plucheinae (Asteraceae)	Journal of Biogeography	https://doi.org/10.1111/jbi.12764	Sweden
Oberlander KC et al.	Species-rich and polyploid-poor: Insights into the evolutionary role of whole-genome duplication from the Cape flora biodiversity hotspot	American Journal of Botany	https://doi.org/10.3732/ajb.1500474	Czech Republic, South Africa, United States, Switzerland
Oliveira U et al.	The strong influence of collection bias on biodiversity knowledge shortfalls of Brazilian terrestrial biodiversity	Diversity and Distributions	https://doi.org/10.1111/ddi.12489	Brazil, Singapore
Onstein RE & Linder HP	Beyond climate: convergence in fast evolving sclerophylls in Cape and Australian Rhamnaceae predates the mediterranean climate	Journal of Ecology	https://doi.org/10.1111/1365-2745.12538	France, Switzerland
Onstein RE et al.	Evolutionary radiations of Proteaceae are triggered by the interaction between traits and climates in open habitats	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12481	Switzerland, France, Australia
Ornelas JF et al.	A mistletoe tale: postglacial invasion of <i>Psittacanthus schiedeanus</i> (Loranthaceae) to Mesoamerican cloud forests revealed by molecular data and species distribution modeling	BMC Evolutionary Biology	https://doi.org/10.1186/s12862-016-0648-6	Mexico, United States
Ornelas JF et al.	Molecular and iridescent feather reflectance data reveal recent genetic diversification and phenotypic differentiation in a cloud forest hummingbird	Ecology and Evolution	https://doi.org/10.1002/ece3.1950	Mexico, Netherlands
Pérez-De la O B et al.	Model Simulation of Potential Distribution of <i>Lobesia botrana</i> (Denis & Schiffermüller) in Grape, <i>Vitis vinifera</i> (L.) Vineyard Regions of Mexico	Southwestern Entomologist 41(3):693-704	https://doi.org/10.3958/059.041.0312	Mexico, United States
Pérez-Moreno H et al.	Climatic patterns in the establishment of wintering areas by North American migratory birds	Ecology and Evolution	https://doi.org/10.1002/ece3.1973	Mexico, United States
Perktaş U et al.	Integrating morphology, phylogeography, and ecological niche modeling to explore population differentiation in North African Common Chaffinches	Journal of Ornithology	https://doi.org/10.1007/s10336-016-1361-3	Turkey, United States
Peterson AT & Anamza T	Reexamining <i>Phylloscopus trochiloides</i> complex as a ring species: A refugial counter-hypothesis	Journal of Avian Biology	https://doi.org/10.1111/jav.01167	United States

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Peterson AT et al.	Assumption- versus data-based approaches to summarizing species' ranges	Conservation Biology	https://doi.org/10.1111/cobi.12801	United States, Mexico
Peterson AT et al.	Digital Accessible Knowledge and well-inventoried sites for birds in Mexico: baseline sites for measuring faunistic change	PeerJ 4	https://doi.org/10.7717/peerj.2362	United States, Mexico
Pierce S et al.	A global method for calculating plant CSR ecological strategies applied across biomes worldwide	Functional Ecology	https://doi.org/10.1111/1365-2435.12722	Italy, Brazil, Germany, Argentina, Canada, Panama, Netherlands, United States, Russian Federation, United Kingdom, Tanzania, Australia, China, France, Belgium, Spain
Pires THS et al.	Traits of a lineage with extraordinary geographical range: ecology, behavior and life-history of the sailfin tetra <i>Crenuchus spilurus</i>	Environmental Biology of Fishes	https://doi.org/10.1007/s10641-016-0534-5	Brazil
Pirie MD et al.	The biodiversity hotspot as evolutionary hot-bed: spectacular radiation of <i>Erica</i> in the Cape Floristic Region	BMC Evolutionary Biology 16: 190	https://doi.org/10.1186/s12862-016-0764-3	Germany, South Africa
Posso-Terranova et al.	Complex niche divergence underlies lineage diversification in <i>Oophaga</i> poison frogs	Journal of Biogeography	https://doi.org/10.1111/jbi.12799	Canada, Colombia
Poveda-Martínez D et al.	Historical Biogeography of Five Characidium Fish Species: Dispersal from the Amazon Paleobasin to Southeastern South America	PLoS ONE 11(10): e0164902	https://doi.org/10.1371/journal.pone.0164902	Colombia
Prieto-Torres DA & Rojas-Soto OR	Reconstructing the Mexican Tropical Dry Forests via an Autoecological Niche Approach: Reconsidering the Ecosystem Boundaries	PLoS ONE 11(3): e015093	https://doi.org/10.1371/journal.pone.0150932	Mexico
Pyle RL et al.	A comprehensive investigation of mesophotic coral ecosystems in the Hawaiian Archipelago	PeerJ 4:e2475	https://doi.org/10.7717/peerj.2475	United States
Quintero-Díaz GE et al.	The Great Plains Ratsnake, <i>Pantherophis emoryi</i> Baird & Girard, 1853, (Squamata: Colubridae), a new state record from Aguascalientes, México	Checklist 12(3)	https://doi.org/10.15560/12.3.1903	Mexico
Rabosky ARD et al.	Coral snakes predict the evolution of mimicry across New World snakes	Nature Communications	https://doi.org/10.1038/ncomms11484	United States, Israel
Ranc N et al.	Performance tradeoffs in target-group bias correction for species distribution models	Ecography	https://doi.org/10.1111/ecog.02414	United States, Italy, France, Sweden
Ratnam J et al.	Savannahs of Asia: antiquity, biogeography, and an uncertain future	Philosophical Transactions of the Royal Society B 371 (1703)	https://doi.org/10.1098/rstb.2015.0305	India, China, United Kingdom
Ray D et al.	Improving spatial transferability of ecological niche model of <i>Hevea brasiliensis</i> using pooled occurrences of introduced ranges in two biogeographic regions of India	Ecological Informatics 34:153-163	https://doi.org/10.1016/j.ecoinf.2016.06.003	India
Razanajatovo M et al.	Plants capable of selfing are more likely to become naturalized	Nature Communications 7	https://doi.org/10.1038/ncomms13313	Germany, United Kingdom, Austria, South Africa, Czech Republic
Reginato M & Michelangeli FA	Diversity and constraints in the floral morphological evolution of <i>Leandra</i> s.str. (Melastomataceae)	Annals of Botany	https://doi.org/10.1093/aob/mcw116	United States
Ribeiro V et al.	Ecological and historical views of the diversification of <i>Geositta</i> miners (Aves: Furnariidae: Sclerurinae)	Journal of Ornithology	https://doi.org/10.1007/s10336-016-1398-3	Brazil, United States
Ribeiro V et al.	Distribution dynamics of South American savanna birds in response to Quaternary climate change	Austral Ecology	https://doi.org/10.1111/aec.12363	Brazil
Ribeiro-Júnior MA & da Silva MB et al.	A New Species of <i>Bachia</i> Gray 1845 (Squamata: Gymnophthalmidae) from the Eastern Guiana Shield	Herpetologica 72 (2):148-156	https://doi.org/10.1655/HERPETOLOGICA-D-15-00030	Brazil
Rivkin LR et al.	Why is gynodioecy a rare but widely distributed sexual system? Lessons from the Lamiaceae	New Phytologist	https://doi.org/10.1111/nph.13926	Canada, United States
Rodrigues A & Stefanović S	Present-Day Genetic Structure of the Holoparasite <i>Conopholis americana</i> (Orobanchaceae) in Eastern North America and the Location of Its Refugia during the Last Glacial Cycle	International Journal of Plant Sciences	https://doi.org/10.1086/684180	Canada
Rodríguez-San Pedro A et al.	Update on the distribution of <i>Myotis atacamensis</i> (Chiroptera: Vespertilionidae): first record from central Chile and description of echolocation calls	Chiroptera Neotropical 21(2): 1342-1346	http://bit.ly/2dkiwRI	Chile
Roger N et al.	Impact of pollen resources drift on common bumble bees in NW Europe	Global Change Biology	https://doi.org/10.1111/gcb.13373	Belgium, Brazil, Portugal, Netherlands
Saeedi H et al.	Bimodal latitudinal species richness and high endemicity of razor clams (Mollusca)	Journal of Biogeography	https://doi.org/10.1111/jbi.12903	New Zealand

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Salas-Lopez A et al.	The discovery of devil's gardens: an ant–plant mutualism in the cloud forests of the Eastern Amazon	Journal of Tropical Ecology 32 (3): 264–268	https://doi.org/10.1017/S0266467416000195	France
a Sanchez A	Fidelity and Promiscuity in an Ant-Plant Mutualism: A Case Study of <i>Triplaris</i> and <i>Pseudomyrmex</i>	PLoS ONE 10(12): e0143535	https://doi.org/10.1371/journal.pone.0143535	Colombia
Sanín MJ et al.	The Neogene rise of the tropical Andes facilitated diversification of wax palms [<i>Ceroxylon</i> : Arecaceae] through geographical colonization and climatic niche separation	Botanical Journal of the Linnean Society	https://doi.org/10.1111/boj.12419	Colombia, Netherlands, Sweden, Denmark, Peru, France
a Santana-Moreno LD et al.	First record of <i>Ambidexter symmetricus</i> (Decapoda: Caridea: Processidae) from the Yucatán Peninsula	Revista Mexicana de Biodiversidad	https://doi.org/10.1016/j.rmb.2016.07.008	Mexico
Santos Ferreira da Cruz RH et al.	Distribution Data of Bird's Nest Fungi in Japan: <i>Nidula niveotomentosa</i> and <i>Crucibulum laeve</i>	Bulletin of the National Museum of Nature and Science. Series B, Botany 42 (2): 49–55	http://bit.ly/2uh0g0J	Brazil, Japan
Sarkar SK et al.	On the Mimela Kirby, 1823 [Rutelinae: Scarabaeidae] of Buxa Tiger Reserve [a forest under biodiversity hot spot zone], Dooars, West Bengal, India	World Scientific News 50: 95–105	http://bit.ly/2tWWxX1	India
Schiffer PH & Herbig H-G	Endorsing Darwin: global biogeography of the epipelagic goose barnacles <i>Lepas</i> spp. (Cirripedia, Lepadomorpha) proves cryptic speciation	Zoological Journal of the Linnean Society	https://doi.org/10.1111/zoj.12373	Germany, United Kingdom, Italy
Schneider JV et al.	Water supply and demand remain coordinated during breakdown of the global scaling relationship between leaf size and major vein density	New Phytologist	https://doi.org/10.1111/nph.14382	Germany
Scoffoni C et al.	Hydraulic basis for the evolution of photosynthetic productivity	Nature Plants 2	https://doi.org/10.1038/nplants.2016.72	United States
a Sebasky ME et al.	Investigating past range dynamics for a weed of cultivation, <i>Silene vulgaris</i>	Ecology and Evolution	https://doi.org/10.1002/ece3.2250	United States
a Shabani F et al.	A comparison of absolute performance of different correlative and mechanistic species distribution models in an independent area	Ecology and Evolution	https://doi.org/10.1002/ece3.2332	Australia, Iran
Shabani F et al.	Variances in the projections, resulting from CLIMEX, Boosted Regression Trees and Random Forests techniques	Theoretical and Applied Climatology	https://doi.org/10.1007/s00704-016-1812-z	Australia, Iran
a Shabani F et al.	A comparison of absolute performance of different correlative and mechanistic species distribution models in an independent area	Ecology and Evolution	https://doi.org/10.1002/ece3.2332	Australia, Iran
Shang H et al.	Likely allopatric origins of <i>Adiantum × meishanianum</i> (Pteridaceae) through multiple hybridizations	Journal of Systematics and Evolution	https://doi.org/10.1111/jse.12205	China
Shelton K et al.	New Records of Entocytherid Ostracods from New York and New Jersey	Northeastern Naturalist 23(4):525–531	https://doi.org/10.1656/045.023.0401	United States
Shrestha N & Zhang X-C	Is <i>Huperzia hamiltonii</i> (Spreng.) Trevis. A Himalayan Endemic? An Empirical Evaluation using Species Distribution Modeling	Indian Fern J. 31: 154–161	http://bit.ly/2tjxWON	China
a Sikes DS et al.	Cryptic diversity in the New World burying beetle fauna: <i>Nicrophorus hebes</i> Kirby; new status as a resurrected name [Coleoptera: Silphidae: Nicrophorinae]	Arthropod Systematics & Phylogeny 74(3): 299–309	http://bit.ly/2rytn1P	United States, Canada
Silva DP et al.	Assessing the distribution and conservation status of a long-horned beetle with species distribution models	Journal of Insect Conservation	https://doi.org/10.1007/s10841-016-9892-8	Brazil
a Smith BE et al.	From GenBank to GBIF: Phylogeny-Based Predictive Niche Modeling Tests Accuracy of Taxonomic Identifications in Large Occurrence Data Repositories	PLoS ONE 11(3): e0151232	https://doi.org/10.1371/journal.pone.0151232	United States, Germany
Smith DM & Finch DM	Riparian trees and aridland streams of the southwestern United States: An assessment of the past, present, and future	Journal of Arid Environments 135:120–131	https://doi.org/10.1016/j.jaridenv.2016.08.016	United States
a Sniderman JMK et al.	Pliocene reversal of late Neogene aridification	PNAS, Proceedings of the National Academy of Sciences	https://doi.org/10.1073/pnas.1520188113	Australia, France
a Sosa V et al.	Historical reconstruction of climatic and elevation preferences and the evolution of cloud forest-adapted tree ferns in Mesoamerica	PeerJ 4	https://doi.org/10.7717/peerj.2696	Mexico
Sosa-Pivatto M et al.	Do 120,000 years of plant–pollinator interactions predict floral phenotype divergence in <i>Calceolaria polyrhiza</i> ? A reconstruction using species distribution models	Arthropod-Plant Interactions	https://doi.org/10.1007/s11829-016-9490-4	Argentina, United States
Sotka EE et al.	A molecular phylogeny of marine amphipods in the herbivorous family Ampithoidae	Zoologica Scripta	https://doi.org/10.1111/zsc.12190	United States, Australia
Spalink D et al.	Biogeography of the cosmopolitan sedges [Cyperaceae] and the area-richness correlation in plants	Journal of Biogeography	https://doi.org/10.1111/jbi.12802	United States, Canada

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a Stropp J et al.	Mapping ignorance: 300 years of collecting flowering plants in Africa	Global Ecology and Biogeography	https://doi.org/10.1111/geb.12468	Italy, Brazil, United Kingdom, Spain, Luxembourg, Belgium
Sungani H et al.	Multiple colonisations of the Lake Malawi catchment by the genus <i>Opsaridium</i> (Teleostei: Cyprinidae)	Molecular Phylogenetics and Evolution	https://doi.org/10.1016/j.ympev.2016.09.027	United Kingdom, Malawi, Tanzania, Austria, South Africa
a Tassia MG et al.	The Global Diversity of Hemichordata.	PLoS ONE 11(10): e0162564	https://doi.org/10.1371/journal.pone.0162564	United States, Sweden, Israel
a ter Steege H et al.	The discovery of the Amazonian tree flora with an updated checklist of all known tree taxa	Scientific Reports 6: 29549	https://doi.org/10.1038/srep29549	Netherlands, Colombia, France, Sweden, United States, Brazil
Thiede J	A Review of <i>Agave mitis</i> (Asparagaceae/Agavaceae)	Bradleya 34	http://bit.ly/2ugXWr9	Germany
Thomas E et al.	Genetic diversity of <i>Enterolobium cyclocarpum</i> in Colombian seasonally dry tropical forest: implications for conservation and restoration	Biodiversity and Conservation	https://doi.org/10.1007/s10531-016-1274-8	Peru, Colombia, Italy
a Tirira DG et al.	Genus <i>Glyphonycteris</i> Thomas, 1896 (Mammalia: Chiroptera) in Ecuador: first confirmed record of <i>G. sylvestris</i> Thomas, 1896 and a geographical review to <i>G. daviesi</i> (Hill, 1965)	Check List 12(5)	https://doi.org/10.15560/12.5.1965	Ecuador
Tran LAP	Interaction between Digestive Strategy and Niche Specialization Predicts Speciation Rates across Herbivorous Mammals	The American Naturalist	https://doi.org/10.1086/685094	United States
Triponez Y et al.	Genome fingerprinting confirms the species status of the Loosestrifes <i>Lysimachia punctata</i> and <i>L. verticillata</i> (Primulaceae)	Plant Ecology and Evolution 149 (3): 335–338	https://doi.org/10.5091/plecevo.2016.1126	Switzerland, Turkey
Turchetto-Zolet AC et al.	Phylogeography and ecological niche modelling in <i>Eugenia uniflora</i> (Myrtaceae) suggest distinct vegetational responses to climate change between the southern and the northern Atlantic Forest	Botanical Journal of the Linnean Society	https://doi.org/10.1111/bj.12473	Brazil
Ullah Z et al.	Phytogeographic analysis and Diversity of grasses and sedges (poales) of Northern Pakistan	Pakistan Journal of Botany 47(SI): 93-104	http://bit.ly/2ugZXM	Pakistan
Varela-Hernández F et al.	New Records of Ants from Oaxaca, Southern Mexico	Southwestern Entomologist 41(3):705-714	https://doi.org/10.3958/059.041.0313	Mexico
Vasconcelos TS & Doro JLP	Assessing how habitat loss restricts the geographic range of Neotropical anurans	Ecological Research	https://doi.org/10.1007/s11284-016-1401-8	Brazil
a Vitorino LC et al.	Demographical history and palaeodistribution modelling show range shift towards Amazon Basin for a Neotropical tree species in the LGM	BMC Evolutionary Biology 16: 213	https://doi.org/10.1186/s12862-016-0779-9	Brazil
Wan J-Z et al.	Climate change may alter genetic diversity of <i>Duchesnea indica</i> , a clonal plant species	Biochemical Systematics and Ecology 66: 114-122	https://doi.org/10.1016/j.bse.2016.03.002	China
Wang HB et al.	Lignified woods of <i>Pinus</i> (Pinaceae) from the late Miocene of central Yunnan, China, and their biogeographic and paleoclimatic implications	Palaeoworld	https://doi.org/10.1016/j.palwor.2016.06.003	China, South Africa, Russian Federation
a Wang J-C et al.	Evolution of morphological and climatic adaptations in <i>Veronica</i> L. (Plantaginaceae)	PeerJ 4:e2333	https://doi.org/10.7717/peerj.2333	China, Germany
a Wang S-H et al.	Contrasting genetic patterns between two coexisting <i>Eleutherococcus</i> species in northern China	Ecology and Evolution	https://doi.org/10.1002/ece3.2118	China
Wepfer PH et al.	Influences of climate and historical land connectivity on ant beta diversity in East Asia	Journal of Biogeography	https://doi.org/10.1111/jbi.12762	Japan, China
Wicaksono CY et al.	Contracting montane cloud forests: a case study of the Andean alder (<i>Alnus acuminata</i>) and associated fungi in the Yungas	Biotropica	https://doi.org/10.1111/btp.12394	Netherlands, Argentina
Willis CG & Donohue K	The evolution of intrinsic reproductive isolation in the genus <i>Cakile</i> (Brassicaceae)	Journal of Evolutionary Biology	https://doi.org/10.1111/jeb.13011	United States
Wilson CA & Calvin CL	Metadata provide insights on patterns of epiparasitism in mistletoes [Santalales], an overlooked topic in forest biology	Botany	https://doi.org/10.1139/cjb-2016-0264	United States
Winterstein M et al.	A Range Extension for <i>Carex sartwellii</i> in Interior Alaska	The Canadian Field-Naturalist 130(3): 191-198	https://doi.org/10.22621/cfn.v130i3.1878	United States
Wyse SV & Dickie JB	Predicting the global incidence of seed desiccation sensitivity	Journal of Ecology	https://doi.org/10.1111/1365-2745.12725	United Kingdom
Yang J et al.	Phylogeography and evolution of two closely related oak species [<i>Quercus</i>] from north and northeast China	Tree Genetics & Genomes 12:89	https://doi.org/10.1007/s11295-016-1044-5	China

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Yang L-Q et al.	Molecular phylogeny, biogeography and ecological niche modelling of <i>Cardiocrinum</i> (Liliaceae): insights into the evolutionary history of endemic genera distributed across the Sino-Japanese floristic region	Annals of Botany	https://doi.org/10.1093/aob/mcw210	China
Zhang D et al. a	Pleistocene sea level fluctuation and host plant habitat requirement influenced the historical phylogeography of the invasive species <i>Amphicreus obscuriceps</i> (Hemiptera: Anthocoridae) in its native range	BMC Evolutionary Biology 16: 174	https://doi.org/10.1186/s12862-016-0748-3	China, Japan
Zhang L et al.	Using DEM to predict <i>Abies faxoniana</i> and <i>Quercus aquifolioides</i> distributions in the upstream catchment basin of the Min River in southwest China	Ecological Indicators 69: 91-99	https://doi.org/10.1016/j.ecolind.2016.04.008	China, Canada
Zhao J-L et al.	Ecological divergence of two closely related <i>Roscoea</i> species associated with late Quaternary climate change	Journal of Biogeography	https://doi.org/10.1111/jbi.12809	China, United States
Zhao M et al.	Phylogenetic relationships, song and distribution of the endangered Rufous-headed Robin <i>Larvivora ruficeps</i>	IBIS	https://doi.org/10.1111/ibi.12426	China, Sweden
Zizka A et al. a	Finding needles in the haystack: Where to look for rare species in the American tropics	Ecography	https://doi.org/10.1111/ecog.02192	Sweden, Netherlands, Brazil

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