Bauman, D. et al. 2018. Disentangling good from bad practices in the selection of spatial or phylogenetic eigenvectors. – Ecography

Appendix A4: List of the 301 references used for the review of methods using Moran's eigenvector maps (MEM) and Spatial eigenvector mapping (SEVM)

Abrego, N. and Salcedo, I. 2014. Response of wood-inhabiting fungal community to fragmentation in a beech forest landscape. Fungal Ecol. 8: 18–27.

Alahuhta, J. and Aroviita, J. 2016. Quantifying the relative importance of natural variables, human disturbance and spatial processes in ecological status indicators of boreal lakes. – Ecol. Indic. 63: 240–248.

Alahuhta, J. et al. 2014. Species sorting determines variation in the community composition of common and rare macrophytes at various spatial extents. – Ecol. Complex. 20: 61–68.

Albuquerque, F. S. et al. 2011. Environmental determinants of woody and herb plant species richness patterns in Great Britain. – Ecoscience 18: 394-401.

Ali, G. A. et al. 2010. Spatial relationships between soil moisture patterns and topographic variables at multiple scales in a humid temperate forested catchment. – Water Resour. Res. 46: W10526.

Alignier, A. and Petit, S. 2012. Factors shaping the spatial variation of weed communities across a landscape mosaic. – Weed Res. 52: 402–410.

Alvarado-Serrano, D. et al. 2013. Localized versus generalist phenotypes in a broadly distributed tropical mammal: how is intraspecific variation distributed across disparate environments? – BMC Evol. Biol. https://doi.org/10.1186/1471-2148-13-160.

Ameli, S. H. et al. 2015. Do Better Urban Design Qualities Lead to More Walking in Salt Lake City, Utah? – J. Urban Design: http://dx.doi.org/10.1080/13574809.2015.1041894.

Andersen, R. et al. 2011. Environmental control and spatial structures in peatland vegetation. – J. Veg. Sci. 22: 878–890.

Andersen, R. et al. 2011. Environmental control and spatial structures in peatland vegetation. – J. Veg. Sci. 22: 878–890.

Andrew, C. et al. 2016. Climate impacts on fungal community and trait dynamics. – Fungal Ecol. 22: 17–25.

Angeler, D. G. 2016. Viewing biodiversity through the lens of science… and art! – SpringerPlus 5: 1174.

Angeler, D. G. et al. 2013. Measuring the relative resilience of subarctic lakes to global change: redundancies of functions within and across temporal scales. – J. Appl. Ecol. 50: 572–584.

Angeler, D. G. et al. 2015. Spatial patterns and functional redundancies in a changing boreal lake landscape. – Ecosystems 18: 889–902.

Antón-Pardo, M. et al. 2016. Zooplankton biodiversity and community structure vary along spatiotemporal environmental gradients in restored peridunal ponds. – J. Limnol. 75: 193–203.

Asensio, N. et al. 2012. Spider monkeys use high-quality core areas in a tropical dry forest. – J. Zool. 287: 250–258.

Astor, T. et al. 2017. Importance of environmental and spatial components for species and trait composition in terrestrial snail communities. – J. Biogeogr. 44: 1362–1372.

Baho, D. L. et al. 2015. Assessing temporal scales and patterns in time series: Comparing methods based on redundancy analysis. – Ecol. Complex. 22: 162–168.

Bahram, M. et al. 2012. Regional and local patterns of ectomycorrhizal fungal diversity and community structure along an altitudinal gradient in the Hyrcanian forests of northern Iran. – New Phytol. 193: 465–473.

Bailly, D. et al. 2016. Diversity gradients of Neotropical freshwater fish: evidence of multiple underlying factors in human-modified systems. – J. Biogeogr. DOI: 10.1111/jbi.12749

Barrientos, R. and de Dios Miranda, J. 2012. Can we explain regional abundance and road-kill patterns with variables derived from local-scale road-kill models? Evaluating transferability with the European polecat. – Divers. Distr. 18: 635–647.

Bauman, D. et al. 2016. Multiscale assemblage of an ectomycorrhizal fungal community: the influence of host functional traits and soil properties in a 10–ha miombo forest. – FEMS Microbiol. Ecol. 92: fiw151.

Benedetti–Cecchi, L. et al. 2010. Spatial relationships between polychaete assemblages and environmental variables over broad geographical scales. – PLoS One 5: e12946

Benestan, L. et al. 2016. Seascape genomics provides evidence for thermal adaptation and current–mediated population structure in American lobster (*Homarus americanus*). – Mol. Ecol. 25: 5073–5092.

Bernal, V. et al. 2014. Craniofacial variation, body size and ecological factors in aboriginal populations from central Patagonia (2000–200 years B.P.). – Homo 65: 101–114.

Berthouly–Salazar, C. et al. 2012. Spatial Sorting Drives Morphological Variation in the Invasive Bird, *Acridotheris tristis*. – PLoS One 7: e38145.

Bertolo, A. et al. 2012. Inferring Processes from Spatial Patterns: The Role of Directional and Non–Directional Forces in Shaping Fish Larvae Distribution in a Freshwater Lake System. – PLoS One 7: e50239.

Besnard, A. G. 2016. Measuring difference in edge avoidance in grassland birds: the Corncrake is less sensitive to hedgerow proximity than passerines. – J. Ornithol. 157: 515–523.

Besnard, A. G. and Secondi, J. 2014. Hedgerows diminish the value of meadows for grassland birds: Potential conflicts for agri-environment schemes. – Agric., Ecosyst. Environ. 189: 21-27.

Besnard, A. G. et al. 2013. Topographic wetness index predicts the occurrence of bird species in floodplains. – Divers. Distrib. 19: 955–963.

Bini, L. M. et al. 2009. Coefficient shifts in geographical ecology: an empirical evaluation of spatial and non-spatial regression. – Ecography 32: 193–204.

Biswas, S. R. et al. 2016. A conceptual framework for the spatial analysis of functional trait diversity. – Oikos 125: 192–200.

Björklund, H. et al. 2013. Evaluation of artificial nests as a conservation tool for three forest-dwelling raptors. – Anim. Conserv. 16: 546–555.

Blach-Overgaard, A. et al. 2010. Determinants of palm species distributions across Africa: the relative roles of climate, non-climatic environmental factors, and spatial constraints. – Ecography 33: 380–391.

Blamires, D. et al. 2008. Habitat use and deconstruction of richness patterns in Cerrado birds. – Acta Oecol. 33: 97–104.

Boieiro, M. et al. 2013. Spatial Factors Play a Major Role as Determinants of Endemic Ground Beetle Beta Diversity of Madeira Island Laurisilva. – PLoS One 8: 214–221.

Borza, P. et al. 2016. Current velocity shapes co–existence patterns among invasive Dikerogammarus species. – Freshwater Biol. 62: 317–328.

Both, C. et al. 2014. Amphibian richness patterns in Atlantic Forest areas invaded by American bullfrogs. – Austral Ecol. 39: 864–874.

Bourgeois, B. et al. 2016. Spatial processes structuring riparian plant communities in agroecosystems: implications for restoration. – Ecol. Appl. 26: 2103–2115.

Braaker, S. et al. 2014. Habitat connectivity shapes urban arthropod communities: the key role of green roofs. – Ecology 95: 1010–1021.

Bregović, P. and Zagmajster, M. 2016. Understanding hotspots within a global hotspot – identifying the drivers of regional species richness patterns in terrestrial subterranean habitats. – Insect Conserv. Diver. 9: 268–281.

Breyne, P. et al. 2014. Roe deer population structure in a highly fragmented landscape. – European J. Wildlife Res. 60: 909–917.

Brice, M.-H. et al. 2016. Environmental filtering and spatial processes in urban riparian forests. – J. Veg. Sci. 27: 1023–1035.

Bueno, C.G. et al. 2017. Plant mycorrhizal status, but not type, shifts with latitude and elevation in Europe. – Global Ecol. Biogeogr. 2017: 690–699.

Buschke, F. T. et al. 2015. Partitioning the variation in African vertebrate distributions into environmental and spatial components–exploring the link between ecology and biogeography. – Ecography 38: 450–461.

Campos, J. A. et al. 2016. Climate and Human Pressure Constraints Co–Explain Regional Plant Invasion at Different Spatial Scales. – PLoS One 11: e0164629.

Cardador, L. et al. 2014. Incorporating spatial constraints in different periods of the annual cycle improves species distribution model performance for a highly mobile bird species. – Divers. Distrib. 20: 515–528.

Cardillo, M. 2011. Exploring latitudinal patterns of lithic technology variation in continental coastal Patagonia, Argentina. – J. Archaeol. Sci. 38: 2675–2682.

Cardillo, M. 2016. Environment, space, history, and technological evolution: the case of the patagonian coast. Darwin's Legacy: The Status of Evolutionary Archaeology in Argentina. Cardillo M. & Muscio H. Eds. – Archaeopress Publishing LTD.

Caruso, T. et al. 2012. Relative role of deterministic and stochastic determinants of soil animal community: a spatially explicit analysis of oribatid mites. – J. Anim. Ecol. 81: 214–221.

Castillo–Escrivà, A. et al. 2016a. Spatial and environmental analysis of an ostracod metacommunity from endorheic lakes. – Aquat. Sci. 78: 707–716.

Castillo–Escrivà, A. et al. 2016b. The role of watercourse versus overland dispersal and niche effects on ostracod distribution in Mediterranean streams (eastern Iberian Peninsula). – Acta Oecologica 73: doi:10.1016/j.actao.2016.02.001.

Castillo–Escrivà, A. et al. 2017. Disentangling environmental, spatial, and historical effects on ostracod communities in shallow lakes. – Hydrobiologia 787: 61–72.

Chalmandrier, L. et al. 2015. Effects of species' similarity and dominance on the functional and phylogenetic structure of a plant meta-community. – Ecology 96: 143–153

Chang, L.-W. et al. 2013. Better environmental data may reverse conclusions about niche-and dispersal-based processes in community assembly. – Ecology 94: 2145–2151.

Charles-Dominique, T. et al. 2015. Using intra-individual variation in shrub architecture to explain population cover. – Oikos 124: 707–716.

Chudomelová, M. et al. 2017. Contrasting patterns of fine-scale herb layer species composition in temperate forests. – Acta Oecol. 80: 24–31.

Cielo–Filho, R. and Martins, F. R. 2015. Detection of fine scale niche assembly in a tropical forest through analysis of indirect environmental variables. – Flora 215: 60–66.

Colzani, E. et al. 2013. Responses of aquatic insect functional diversity to landscape changes in Atlantic Forest. – Biotropica 45: 343–350.

Comte, J. et al. 2016. Microbial biogeography of permafrost thaw ponds across the changing northern landscape. – Ecography 39: 609–618.

Corkeron, P. J. et al. 2011. Spatial models of sparse data to inform cetacean conservation planning: an example from Oman. – Endang. Species Res. 15: 39–52.

Cormon, X. et al. 2014. Spatial interactions between saithe (*Pollachius virens*) and hake (*Merluccius merluccius*) in the North Sea. – ICES J. Mar. Sci. 71: 1342–1355.

Correa, D. F. et al. 2015. Plant dispersal systems in Neotropical forests: availability of dispersal agents or availability of resources for constructing zoochorous fruits? – Global Ecol. Biogeogr. 24: 203–214.

Costa, G. C. et al. 2007. Squamate richness in the Brazilian Cerrado and its environmental–climatic associations. – Divers. Distrib. 13: 714–724.

Costion, C. M. et al. 2014. Using phylogenetic diversity to identify ancient rain forest refugia and diversification zones in a biodiversity hotspot. – Divers. Distrib. 21: 279–289.

Cronin, J. T. 2011. Spatial ecology of the palm-leaf skeletonizer, *Homaledra sabelella* (Lepidoptera: Coleophoridae). – PLoS One 6:e22331.

da Silva Menezes, L. et al. 2016. Scale-specific processes shape plant community patterns in subtropical coastal grasslands. – Austral Ecol. 41: 65–73.

Daehyun, K. 2013. Incorporation of multi-scale spatial autocorrelation in soil moisture–landscape modelling. – Phys. Geogr. 34: 441–455.

Dainese, M. and Poldini, L. 2012. Does residence time affect responses of alien species richness to environmental and spatial processes? – NeoBiota 14: 47–66.

Dainese, M. and Sitzia, T. 2013. Assessing the influence of environmental gradients on seed mass variation in mountain grasslands using a spatial phylogenetic filtering approach. – Perspect. Plant Ecol. 15: 12–19.

Dalsgaard, B. et al. 2013. Historical climate-change influences modularity and nestedness of pollination networks. – Ecography 36: 1331–1340.

Dalsgaard, B. et al. 2016. Speciose opportunistic nectar-feeding avifauna in Cuba and its association to hummingbird island biogeography. – J. Ornithol. 157: 627–634.

Dambros, C. S. et al. 2016. Isolation by distance, not rivers, control the distribution of termite species in the Amazonian rain forest. – Ecography doi:10.1111/ecog.02663.

Das, A. A. et al. 2016. Does Structural Connectivity Influence Tree Species Distributions and Abundance in a Naturally Discontinuous Tropical Forest Formation? – J. Veg. Sci. doi: 10.1111/jvs.12474

de Albuquerque, F. S. et al. 2011. Relationships of climate, residence time, and biogeographical origin with the range sizes and species richness patterns of exotic plants in Great Britain. – Plant Ecol. 212: 1901–1911.

De Bie, T. et al. 2012. Body size and dispersal mode as key traits determining metacommunity structure of aquatic organisms. – Ecol. Lett. 15: 740–747.

De Caceres, M. et al. 2012. The variation of tree beta diversity across a global network of forest plots. – Global Ecol. Biogeogr. 21: 1191–1202.

de Knegt, H. J. et al. 2010. Spatial autocorrelation and the scaling of species–environment relationships. – Ecology 91: 2455–2465.

de Maçaneiro, J. P. et al. 2016. More than environmental control at local scales: do spatial processes play an important role in floristic variation in subtropical forests? – Acta Bot. Bras. 30: 183–192.

De Marco, P. et al. 2008. Spatial analysis improves species distribution modelling during range expansion. – Biol. Lett. 4: 577–580.

de Mendoza, G. et al. 2015. Environmental factors prevail over dispersal constraints in determining the distribution and assembly of Trichoptera species in mountain lakes. – Ecol. and Evol. 5: 2518–2532.

de Oliveira Marcionilio, S. M. L. et al. 2016. Environmental factors affecting chlorophyll-a concentration in tropical floodplain lakes, Central Brazil. – Environ. Monit. Ass. 188: 611.

de Oliveira, G. and Diniz-Filho, J. A. 2011. Evaluating environmental and geometrical constraints on endemic vertebrates of the semiarid Caatinga (Brazil). – Basic Appl. Ecol. 8: 664–673.

de Oliveira, G. and Diniz-Filho, J. A. F. 2010. Spatial patterns of terrestrial vertebrates richness in Brazilian semiarid, Northeastern Brazil: Selecting hypotheses and revealing constraints. – J. Arid Environ. 74: 1418–1426.

de Oliveira, G. et al. 2012. Conserving the Brazilian semiarid (Caatinga) biome under climate change. – Biodivers. Conserv. 21: 2913–2926.

de Souza Moraes, L. E. et al. 2012. Brazilian sardine (*Sardinella brasiliensis* Steindachner, 1879) spawning and nursery habitats: spatial–scale partitioning and multiscale relationships with thermohaline descriptors. – ICES J. Mar. Sci. fss061.

de Souza Nogueira, I. et al. 2010. Determinants of beta diversity: the relative importance of environmental and spatial processes in structuring phytoplankton communities in an Amazonian. – Acta Limnol. Bras. 22: 247–256.

Declerck, S. A. J. et al. 2011. Scale dependency of processes structuring metacommunities of cladocerans in temporary pools of High-Andes wetlands. – Ecography 34: 296–305.

Delatorre, M. et al. 2015. Evidence of stochasticity driving anuran metacommunity structure in the Pantanal wetlands. – Freshwater Biol. 60: 2197–2207.

Denoel, M. et al. 2009. A multi–scale approach to facultative paedomorphosis of European newts (Salamandridae) in the Montenegrin karst: distribution pattern, environmental variables, and conservation. – Biol. Conserv. 142: 509–517.

Diehl, E. et al. 2015. Absence of Relationship Among Termite (Insecta: Isoptera) Richness, Functional Groups and Environmental Variables in Southern Brazil. – EntomoBrasilis 8: 168–173.

Diniz-Filho, J. A. F. et al. 2008. Spatial patterns of terrestrial vertebrate species richness in the Brazilian Cerrado. – Zool. Stud. 47: 146–157.

Diniz-Filho, J. A. F. et al. 2009. A review of techniques for spatial modeling in geographical, conservation and landscape genetics. – Genet. Mol. Biol. 32: 203–211.

Diniz–Filho, J. A. F. et al. 2009. Agriculture, habitat loss and spatial patterns. – Sci. Agric. (Piracicaba, Braz.) 66: 764–771.

Diniz-Filho, J. A. F. et al. 2013. Geographical patterns of Triatominae (Heteroptera: Reduviidae) richness and distribution in the Western Hemisphere. – Insect. Conserv. Divers. 6: 704–714.

Dinkins, J. B. et al. 2012. Greater Sage-Grouse (*Centrocercus urophasianus*) select nest sites and brood sites away from avian predators. – The Auk 129: 600–610.

Distler, T. et al. 2009. Determinants and prediction of broad-scale plant richness across the western neotropics. – Ann. Mo. Bot. Gard. 96(3): 470–491.

Divíšek, J. et al. 2014. Natural habitats matter: Determinants of spatial pattern in the composition of animal assemblages of the Czech Republic. – Acta Oecol. 59: 7–17.

Donati, D. et al. 2017. Biogeography and ecology of the genus Turbinicarpus (Cactaceae): environmental controls of taxa richness and morphology. – Syst. Biodiv. http://dx.doi.org/10.1080/14772000.2016.1251504

dos Santos, A. J. et al. 2016. Effects of vegetation structure on the diversity of bats in remnants of Brazilian Cerrado savanna. – Basic Appl. Ecol. doi:10.1016/j.baae.2016.09.004.

Dray, S. et al. 2012. Community ecology in the age of multivariate multiscale spatial analysis. – Ecol. Monogr. 82: 257–275.

Edmunds, M. and Reader, T. 2014. Evidence for Batesian mimicry in a polymorphic hoverfly. – Evolution 68: 827–839.

Eisenlohr, P. V. 2014. Persisting challenges in multiple models: a note on commonly unnoticed issues regarding collinearity and spatial structure of ecological data. – Braz. J. Bot. 37: 365–371.

Eisenlohr, P. V. and Teixeira de Oliveira–Filho, A. 2015. Revisiting patterns of tree species composition and their driving forces in the Atlantic Forests of Southeastern Brazil. – Biotropica 47: 689–701.

Espírito-Santo, M. M. et al. 2016. Understanding patterns of land–cover change in the Brazilian Cerrado from 2000 to 2015. – Phil. Trans. R. Soc. B 371: 20150435.

Essl, F. et al. 2011. Imprints of glacial history and current environment on correlations between endemic plant and invertebrate species richness. – Journal of Biogeography 38: 604–614.

Feiner, Z. S. et al. 2016. Environmental influences on fish assemblage variation among ecologically similar glacial lakes. – Environ. Biol. Fish 99: 829–843.

Ferenc, M. et al. 2014. Are cities different? Patterns of species richness and beta diversity of urban bird communities and regional species assemblages in Europe. – Global Ecol. Biogeogr. 23: 479–489.

Fernandes, I. M. et al. 2014. Spatiotemporal dynamics in a seasonal metacommunity structure is predictable: the case of floodplain-fish communities. – Ecography 37: 464–475.

Feßel, C. et al. 2016. Relationship between species diversity, biomass and light transmittance in temperate semi-natural grasslands: is productivity enhanced by complementary light capture? – J. Veg. Sci. 27: 144–155.

Ficetola, G. F. and Padoa-Schioppa, E. 2009. Human activities alter biogeographical patterns of reptiles on Mediterranean islands. – Global Ecol. Biogeogr. 18: 214–222.

Ficetola, G. F. et al. 2011. Early assessment of the impact of alien species: differential consequences of an invasive crayfish on adult and larval amphibians. – Divers. Distrib. 17: 1141–1151.

Ficetola, G. F. et al. 2012. Can patterns of spatial autocorrelation reveal population processes? An analysis with the fire salamander. – Ecography 35: 693–703.

Ficetola, G. F. et al. 2013. Estimating patterns of reptile biodiversity in remote regions. – J. Biogeogr. 40: 1202–1211.

Ficetola, G. F. et al. 2014. Sampling bias inverts ecogeographical relationships in island reptiles. – Global Ecol. Biogeogr. 23: 1303–1313.

Fiorentino, D. 2012. Spatial autocorrelation in the response of soft–bottom marine benthos to gas extraction activities: The case of amphipods in the Ionian Sea. – Mar. Environ. Res. 79: 79–85.

Flanagan, N. E. et al. 2015. Connecting differential responses of native and invasive riparian plants to climate change and environmental alteration. – Ecol. Appl. 25: 753–767.

Florencio, M. et al. 2014. Biodiversity patterns in a macroinvertebrate community of a temporary pond network. – Insect Conserv. Diver. 7: 4–21.

Fontúrbel F. E. et al. 2015. Scale-dependent responses of pollination and seed dispersal mutualisms in a habitat transformation scenario. – J. Ecol. 103: 1334–1343.

Forester, B. R. et al. 2016. Detecting spatial genetic signatures of local adaptation in heterogeneous landscapes. – Mol. Ecol. 25: 104–120.

Fortuny, X. et al. 2014. Land use legacies and site variables control the understorey plant communities in Mediterranean broadleaved forests. – Agr. Ecosyst. Envir. 189: 53–59.

Fortuny, X. et al. 2017. Confounding legacies of land uses and land-form pattern on the regional vegetation structure and diversity of Mediterranean montane forests. – Forest Ecol. Manag. 384: 268–278.

Fourcade, Y. et al. 2016. Corncrake conservation genetics at a European scale: The impact of biogeographical and anthropological processes. – Biol. Conserv. 198: 210–219.

Gabriel, D. et al. 2009. The spatial aggregation of organic farming in England and its underlying environmental correlates. – J. Appl. Ecol. 46: 323–333.

Gallego, I. et al. 2014. Disturbance from pond management obscures local and regional drivers of assemblages of primary producers. – Freshwater Biol. 59: 1406–1422.

Galpern, P. et al. 2014. MEMGENE: Spatial pattern detection in genetic distance data. – Methods Ecol. Evol. 5: 1116–1120.

Gao, M. et al. 2014. Relative roles of spatial factors, environmental filtering and biotic interactions in fine–scale structuring of a soil mite community. – Soil Biol. Biochem. 79: 68–77.

García-Baquero, G. et al. 2016. Dissecting the hydrological niche: soil moisture, space and lifespan. – J. Veg. Sci. 27: 219–226.

Garroway, C. J. et al. 2013. Fine-scale genetic structure in a wild bird population: the role of limited dispersal and environmentally based selection as causal factors. – Evolution 67: 3488–3500.

Gascón, S. et al. 2012. Spatial characteristics and species niche attributes modulate the response by aquatic passive dispersers to habitat degradation. – Mar. Freshwater Res. 63: 232–245.

Gascón, S. et al. 2016. Environmental filtering determines metacommunity structure in wetland microcrustaceans. Oecologia 181: 193–205.

Gazol, A. and Ibáñez, R. 2010. Plant species composition in a temperate forest: Multi–scale patterns and determinants. – Acta Oecologica 36: 634–644.

Gilbert, B. & Bennett, J. R. 2010. Partitioning variation in ecological communities: do the numbers add up? – J. Appl. Ecol. 47: 1071–1082.

Gonçalves-Souza, T. et al. 2014. Metacommunity versus Biogeography: A Case Study of Two Groups of Neotropical Vegetation-Dwelling Arthropods. – PLoS One 9: e115137.

Gonçalvez–Sousa, T. et al. 2014. Metacommunity versus biogeography: a case study of two groups of Neotropical vegetation–dwelling arthropods. – PLoS One 9: e115137.

Gorospe, K. D. and Karl, S. K. 2011. Small-scale spatial analysis of in situ sea temperature throughout a single coral patch reef. – J. Mar. Biol. 2011: ID 719580.

Gouveia, S. F. et al. 2013. Nonstationary effects of productivity, seasonality, and historical climate changes on global amphibian diversity. – Ecography 36: 104–113.

Gouveia, S. F. et al. 2014. Forest structure drives global diversity of primates. – J. Anim. Ecol. 83: 1523–1530.

Grimaldo, J. T. et al. 2016. Spatial and environmental drivers of macrophyte diversity and community composition in temperate and tropical calcareous rivers. – Aquat. Bot. 132: 49–61.

Gronroos, M. et al. 2013. Metacommunity structuring in stream networks: roles of dispersal mode, distance type, and regional environmental context. – Ecol. Evol. 3: 4473–4487.

Grundel, R. et al. 2015. Opposing responses to ecological gradients structure amphibian and reptile communities across a temperate grassland–savanna–forest landscape. – Biodiv. Conserv. 5: 1089–1108.

Guénard, G. et al. 2010. Multiscale codependence analysis: an integrated approach to analyze relationships across scales. – Ecology 91: 2952–2964.

Gustafson, K. D. and Newman, R. A. 2016. Multiscale Occupancy Patterns of Anurans in Prairie Wetlands. – Herpetologica 72: 293–302.

Gutzwiller, K. J. 2013. Increasing the chance that landscape-and regional-level hypotheses will reflect important spatial patterns. – Landscape Ecol. 28: 1849–1858.

Haileselasie, T. H. et al. 2016. Environment not dispersal limitation drives clonal composition of Arctic Daphnia in a recently deglaciated area. – Mol. Ecol. 25: 5830–5842.

Hassall, C. and Sherratt, T. N. 2011. Statistical inference and spatial patterns in correlates of IQ. – Intelligence 39: 303–310.

Heino, J. and Alahuhta, J. 2014. Elements of regional beetle faunas: faunal variation and compositional breakpoints along climate, land cover and geographical gradients. – J. Anim. Ecol. 84: 427–441.

Heino, J. and de Mendoza, G. 2016. Predictability of stream insect distributions is dependent on niche position, but not on biological traits or taxonomic relatedness of species. – Ecography 39: 1216–1226.

Heino, J. et al. 2015a. A comparative analysis reveals weak relationships between ecological factors and beta diversity of stream insect metacommunities at two spatial levels. – Ecol. Evol. 5: 1235–1248.

Heino, J. et al. 2015b. Phylogenetic diversity of regional beetle faunas at high latitudes: patterns, drivers and chance along ecological gradients. – Biodivers. Conserv. 24: 2751–2767.

Heino, J. et al. 2017. Metacommunity ecology meets biogeography: effects of geographical region, spatial dynamics and environmental filtering on community structure in aquatic organisms. – Oecologia 183: 121–137.

Henriques–Silva, R. et al. 2013. A community of metacommunities: exploring patterns in species distributions across large geographical areas. – Ecology 94: 627–639.

Henry, D. A. W. and Cumming G. S. 2016. Spatial and environmental processes show temporal variation in the structuring of waterbird metacommunities. – Ecosphere 7: e01451.

Henry, L.-A. et al. 2013. Multi-scale interactions between local hydrography, seabed topography, and community assembly on cold–water coral reefs. – Biogeosciences 10: 2737–2746.

Hernández-Stefanoni, J. L. et al. 2011. Influence of landscape structure and stand age on species density and biomass of a tropical dry forest across spatial scales. – Landscape Ecol. 26: 355–370.

Hollants, J. et al. 2013. Permanent residents or temporary lodgers: characterizing intracellular bacterial communities in the siphonous green alga Bryopsis. – Proc. R. Soc. B 280: 20122659.

Horn, S. et al. 2015. Plant community assembly at small scales: Spatial vs. environmental factors in a European grassland. – Acta Oecol. 63: 56–62.

Huang, Y. et al. 2011. Lizard species richness patterns in China and its environmental associations. – Biodivers. Conserv. 20: 1399–1414.

Hufford, K. M. et al. 2014. Soil heterogeneity and the distribution of native grasses in California: Can soil properties inform restoration plans? – Ecosphere 5: 46.

Ingimarsdóttir, M. et al. 2012. Primary assembly of soil communities: disentangling the effect of dispersal and local environment. – Oecologia 170: 745–754.

Jacob, B. G. et al. 2008. Decomposing malaria mosquito aquatic habitat data into spatial autocorrelation eigenvectors in a SAS/GIS® module. – T. GIS 12: 341–364

Jacob, B. G. et al. 2013. A Bayesian Poisson specification with a conditionally autoregressive prior and a residual Moran's coefficient minimization criterion for quantitating leptokurtic distributions in regression-based multi-drug resistant tuberculosis treatment protocols. – J. Public Health: 122–143.

Jepsen, J. U. et al. 2013. Ecosystem impacts of a range expanding forest defoliator at the forest-tundra ecotone. – Ecosystems 16: 561–575.

Jiménez, I. et al. 2009. Estimated plant richness pattern across northwest South America provides similar support for the species-energy and spatial heterogeneity hypotheses. – Ecography 32: 433–448.

Junqueira, L. K. et al. 2015. Termite Communities in Sugarcane Plantations in Southeastern Brazil: an Ecological Approach. – EntomoBrasilis 8: 105–116.

Kaschner, K. et al. 2011. Current and future patterns of global marine mammal biodiversity. – PLoS One 6: e19653.

Katovai, E. et al. 2016. Factors influencing tree diversity and compositional change across logged forests in the Solomon Islands. – Forest Ecol. Manag. 372: 5 –63.

Kavanagh, P. H. et al. 2012. Mistletoe macroecology: spatial patterns in species diversity and host use across Australia. – Biol. J. Linn. Soc. 106: 459–468.

Kim, D. and Shin, Y. H. 2016. Spatial autocorrelation potentially indicates the degree of changes in the predictive power of environmental factors for plant diversity. – Ecol. Indic. 60: 1130–1141.

Kissling, W. D. et al. 2012. Quaternary and pre-Quaternary historical legacies in the global distribution of a major tropical plant lineage. – Global Ecol. Biogeogr. 21: 909–921.

Kobayashi, T. and Sota, T. 2016. Distance decay of similarity in fungivorous insect communities: assessing dispersal limitation using genetic data. – Ecosphere 7: e01358.

Komac, B. et al. 2016. Modelization of the current and future habitat suitability of *Rhododendron ferrugineum* using potential snow accumulation. – PLoS One 11: e0147324.

König, S. et al. 2010. – TaqMan real-time PCR assays to assess arbuscular mycorrhizal responses to field manipulation of grassland biodiversity: effects of soil characteristics, plant species richness, and functional traits. – Appl. Environ. Microbiol. 76: 3765–75.

Kühn, I. et al. 2009. Combining spatial and phylogenetic eigenvector filtering in trait analysis. – Global Ecol. Biogeogr. 18: 745–758.

Layeghifard, M. et al. 2015. Spatial and species compositional networks for inferring connectivity patterns in ecological communities. – Global Ecol. Biogeogr. 24: 718–727.

Legendre, P. and Gauthier, O. 2014. Statistical methods for temporal and space–time analysis of community composition data. – Proc. R. Soc. B. 281: 20132728.

Legendre, P. et al. 2010. Community surveys through space and time: testing the space–time interaction in the absence of replication. – Ecology 91: 262–272.

Legendre, P. et al. 2012. Variation partitioning involving orthogonal spatial eigenfunction submodels – Ecology 93: 1234–1240.

Legendre, P. et al. 2015. Should the Mantel test be used in spatial analysis? – Methods Ecol. Evol. 6: 1239–1247.

Lewis, S. L. et al. 2013. Above-ground biomass and structure of 260 African tropical forests. – Phil. Trans. R. Soc. B 368: 20120295.

Lezama-Ochoa, A. et al. 2015. Biological characteristics of the hydrological landscapes in the Bay of Biscay in spring 2009. – Fish. Oceanogr. 24: 26–41.

Li, Q. et al. 2011. Relative importance of spatial processes and environmental factors in shaping alpine meadow communities. – J. Plant Ecol. 4: 249–258.

Li, Y. and Jiao, Y. 2015. Modeling spatial patterns of rare species using eigenfunction–based spatial filters: An example of modified delta model for zero–inflated data. – Ecol. Model. 299: 51–63.

Lin, G. et al. 2013. Separating the effects of environment and space on tree species distribution: from population to community. – PLoS One 8: e56171.

Liu, J. et al. 2013. Effects of connectivity, dispersal directionality and functional traits on the metacommunity structure of river benthic diatoms. – J. Biogeogr. 40: 2238–2248.

Luiz, A. M. et al. 2016. Geomorphology Drives Amphibian Beta Diversity in Atlantic Forest Lowlands of Southeastern Brazil. – PLoS One 11: e0153977.

Magrach, A. et al. 2013. Forest edges show contrasting effects on an austral mistletoe due to differences in pollination and seed dispersal. – J. Ecol. 101: 713–721.

Mäkeläinen, S. et al. 2015. Factors explaining the occurrence of the Siberian flying squirrel in urban forest landscape. – Urban Ecosyst. 18: 223–238.

Malhotra, A. et al. 2016. Ecohydrological feedbacks in peatlands: an empirical test of the relationship among vegetation, microtopography and water table. – Ecohydrology 9: 1346–1357.

Maloufi, S. et al. 2016. Environmental heterogeneity among lakes promotes hyper b–diversity across phytoplankton communities. – Freshwater Biol. 61: 633–645.

Manel, S. et al. 2010. Common factors drive adaptive genetic variation at different spatial scales in *Arabis alpine*. – Mol. Ecol. 19: 3824–3825.

Manel, S. et al. 2012. Broad-scale adaptive genetic variation in alpine plants is driven by temperature and precipitation. – Mol. Ecol. 21: 3729–3738.

Márquez, A. L. et al. 2012. Geographical Gradients in Argentinean Terrestrial Mammal Species Richness and Their Environmental Correlates. – The Scientific World Journal 2012: Article ID 819328.

Marrot, P. et al. 2015. Spatial autocorrelation in fitness affects the estimation of natural selection in the wild. – Methods Ecol. Evol. 6: 1474–1483.

Martínez, D. and García, D. 2015. Changes in the fruiting landscape relax restrictions on endozoochorous tree dispersal into deforested lands. – Appl. Veg. Sci., 18: 197–208.

Martínez, J. J. et al. 2014. Ecological preference between generalist and specialist rodents: spatial and environmental correlates of phenotypic variation. – Biol J. Linn. Soc. 112: 180–203.

Matabos, M. et al. 2012. A Year in Hypoxia: Epibenthic Community Responses to Severe Oxygen Deficit at a Subsea Observatory in a Coastal Inlet. – PLoS One 7: e45626.

Mattucci, F. et al. 2013. Genetic structure of wildcat (*Felis silvestris*) populations in Italy. – Ecol. Evol. 3: 2443–2458.

McClain, C. R. et al. 2012. Energetics of life on the deep seafloor. – PNAS 109: 15366–15371.

Mendes, M. R. A. et al. 2014. Temporal change in species and functional plant traits in the moist grassland on the Sete Cidades National Park, Piauí, Brazil. – Braz. J. Biol. 74: 111–123.

Mews, H. A. et al. 2016. No evidence of intrinsic spatial processes driving Neotropical savanna vegetation on different substrates. – Biotropica 48: 433–442.

Michel, M. J. and Knouft, J. H. 2013. The effects of environmental change on the spatial and environmental determinants of community-level traits. – Landscape Ecol. 29: 467–477.

Mikulyuk, A. et al. 2011. The relative role of environmental, spatial, and land–use patterns in explaining aquatic macrophyte community composition. – Can J. Fish. Aquat. Sci. 68: 1778–1789.

Miller, E. T. et al. 2013. Niche conservatism constrains Australian honeyeater assemblages in stressful environments. – Ecol. Lett. 16: 1186–1194.

Montaño–Centellas, F. A. and Garitano-Zavala, Á. 2015. Andean bird responses to human disturbances along an elevational gradient. – Acta Oecol. 65: 51–60.

Monteiro, V. F. et al. 2017. A quantitative framework to estimate the relative importance of environment, spatial variation and patch connectivity in driving community composition. – J. Anim. Ecol. 86: 316–326.

Moreno, C. et al. 2016. Plant species richness as the main driver of moth metacommunities. – Ecol. Entomol. 41: 707–715.

Mori, A. S. et al. 2015. Functional redundancy of multiple forest taxa along an elevational gradient: predicting the consequences of non-random species loss. – J. Biogeogr. 42: 1383–1396.

Moriguchi, S. et al. 2013. Creating a Potential Distribution Map for Greater White-Fronted Geese Wintering in Japan. – Ornithol. Sci. 12: 117–125.

Moriguchi, S. et al. 2013. Potential risk map for avian influenza A virus invading Japan. – Divers. Distrib. 19: 78–85.

Moriguchi, S. et al. 2015. Estimating colonization and invasion risk maps for *Linepithema humile*, in Japan. – J. Asia-Pac. Entomol. 18: 343–350.

Moriguchi, S. et al. 2015. Predicting the potential distribution of the amphibian pathogen *Batrachochytrium dendrobatidis* in East and Southeast Asia. – Dis. Aquat. Organ. 113: 177–185.

Moura, M. R. et al. 2016. Disentangling the Role of Climate, Topography and Vegetation in Species Richness Gradients. – PLoS One 11: e0152468.

Muster C. et al. 2014. Spatial arrangement overrules environmental factors to structure native and non–native assemblages of synanthropic harvestmen. – PLoS One 9: e90474.

Nascimbene, J. and Marini, L. 2015. Epiphytic lichen diversity along elevational gradients: biological traits reveal a complex response to water and energy. – J. Biogeogr. 42: 1222–1232.

Neves, D. M. et al. 2015. Environmental and historical controls of floristic composition across the South American Dry Diagonal. – J. Biogeogr. 42: 1566–1576.

Obertegger, U. et al. 2014. Cryptic diversity within the rotifer *Polyarthra dolichoptera* along an altitudinal gradient. – Freshwater Biol. 59: 2413–2427.

Odriozola, I. et al. 2017. Grazing exclusion unleashes competitive plant responses in Iberian Atlantic mountain grasslands. – Appl. Veg. Sci. 20: 50–61.

Orsini, L. et al. 2012. The role of selection in driving landscape genomic structure of the waterflea *Daphnia magna*. – Mol. Ecol. 22: 583–601.

Padial, A. A. et al. 2014. Dispersal Ability Determines the Role of Environmental, Spatial and Temporal Drivers of Metacommunity Structure. – PLoS One 9: e111227.

Pelletier, J. et al. 2012. Traditional shifting agriculture: tracking forest carbon stock and biodiversity through time in western Panama. – Global Change Biol. 18: 3581–3595.

Peres–Neto, P. R. and Legendre P. 2010. Estimating and controlling for spatial structure in the study of ecological communities. – Global Ecol. Biogeogr. 19: 174–184.

Peres–Neto, P. R. et al. 2012. Assessing the effects of spatial contingency and environmental filtering on metacommunity phylogenetics. – Ecology 93: S14–S30.

Perez, S. I. et al. 2010. Spatial regression techniques for inter-population data: studying the relationships between morphological and environmental variation. – J. Evol. Biol. 23: 237–248.

Pottier, J. et al. 2009. Analysing the spatial heterogeneity of emergent groups to assess ecological restoration. – J. Appl. Ecol. 46: 1248–1257.

Powney, G. D. et al. 2010. Hot, dry and different: Australian lizard richness is unlike that of mammals, amphibians and birds. – Global Ecol. Biogeogr. 19: 386–396.

Punchi-Manage, R. et al. 2014. Effect of spatial processes and topography on structuring species assemblages in a Sri Lankan dipterocarp forest. – Ecology 95: 376–386.

Quesada, C. A. et al. 2012. Basin-wide variations in Amazon forest structure and function are mediated by both soils and climate. – Biogeosciences 9: 2203–2246.

Quillien, N. et al. 2015. Large-scale effects of green tides on macrotidal sandy beaches: Habitat–specific responses of zoobenthos. – Estuar. Coast. Shelf S. 164: 379–391.

Rádková, V. et al. 2014. The role of dispersal mode and habitat specialisation in metacommunity structuring of aquatic macroinvertebrates in isolated spring fens. – Freshwater Biol. 59: 2256–2267.

Reshetnikov, A. N. and Francesco, G. F. 2011. Potential range of the invasive fish rotan (*Perccottus glenii*) in the Holarctic. – Biol. Invasions 13: 2967–2980.

Ribeiro-Silva, S. et al. 2016. Patterns of cactaceae species distribution in a protected area in the semiarid Caatinga biome of North-Eastern Brazil. – Edimburgh J. Bot. 73: 157–170.

Rocha, C. R. et al. 2011. Microhabitat use by rodent species in a central Brazilian cerrado. – Mamm. Biol. 76: 651–653.

Rodrigues, J. F. M. and Diniz-Filho, J. A. F. 2017. Dispersal is more important than climate in structuring turtle communities across different biogeographical realms. – J. Biogeogr. 44: 2109–2120.

Rodrigues, J. F. M. et al. 2017. Time and environment explain the current richness distribution of non-marine turtles worldwide. – Ecography. doi:10.1111/ecog.02649

Roffler, G. H.et al. 2016. Identification of landscape features influencing gene flow: How useful are habitat selection models? – Evol. Appl. 9: 805–817.

Roque, F. D. O. et al. 2016. Deconstructing richness patterns by commonness and rarity reveals bioclimatic and spatial effects in black fly metacommunities. – Freshwater Biol. 61: 923–932.

Roque, F. O. et al. 2014. The taxonomic distinctness of macroinvertebrate communities of Atlantic Forest streams cannot be predicted by landscape and climate variables, but traditional biodiversity indices can. – Braz. J. Biol 74: 991–999.

Safi, K. et al. 2011. Understanding global patterns of mammalian functional and phylogenetic diversity. – Philos. T. R. Soc. B 366: 2536–2544.

Saiter, F. Z. et al. 2015. Floristic units and their predictors unveiled in part of the Atlantic Forest hotspot: implications for conservation planning. – An. Acad. Bras. Ciênc. 87: 2031–2046.

Santos, R. M. et al. 2012. Identity and relationships of the Arboreal Caatinga among other floristic units of seasonally dry tropical forests (SDTFs) of north-eastern and Central Brazil. – Ecol. Evol. 2: 409–428.

Santos, S. M. et al. 2009. Factors influencing large-scale distribution of two sister species of pine voles (*Microtus lusitanicus* and *Microtus duodecimcostatus*): the importance of spatial autocorrelation. – Can. J. Zool. 87: 1227–1240.

Santos, S. M. et al. 2013. Relative Effects of Road Risk, Habitat Suitability, and Connectivity on Wildlife Roadkills: The Case of Tawny Owls (*Strix aluco*). – PLoS One 8: e79967.

Sattler, T. et al. 2010. Spider, bee, and bird communities in cities are shaped by environmental control and high stochasticity. – Ecology 91: 3343–3353.

Schiaffini, M. I. 2016. A test of the Resource's and Bergmann's rules in a widely distributed small carnivore from southern South America, *Conepatus chinga* (Molina, 1782)(Carnivora: Mephitidae). – Mamm. Biol. 81: 73–81.

Schleider, A. et al. 2011. Dispersal traits determine plant response to habitat connectivity in an urban landscape. – Landscape Ecol. 26:529–540.

Sebastián-González, E. et al. 2015. Macroecological trends in nestedness and modularity of seed-dispersal networks: human impact matters. – Global Ecol. Biogeogr. 24: 293–303.

Sevegnani, L. et al. 2016. Climate affects the structure of mixed rain forest in southern sector of Atlantic domain in Brazil. – Acta Oecol. 77: 109–117.

Seymour, M. et al. 2016. Scale and scope matter when explaining varying patterns of community diversity in riverine metacommunities. – Basic Appl. Ecol. 17: 134–144.

Sharma, S. and Magnuson, J. J. 2014. Oscillatory dynamics do not mask linear trends in the timing of ice breakup for Northern Hemisphere lakes from 1855 to 2004. – Climatic Change 124: 835–847.

Sharma, S. et al. 2011. The role of environmental and spatial processes in structuring native and non–native fish communities across thousands of lakes. – Ecography 34: 762–771.

Sharma, S. et al. 2013. Influences of local weather, large-scale climatic drivers, and the ca. 11 year solar cycle on lake ice breakup dates; 1905–2004. – Climatic Change 118: 857–870.

Siesa, M. E. et al. 2011. Spatial autocorrelation and the analysis of invasion processes from distribution data: a study with the crayfish *Procambarus clarkia*. – Biol. Invasions 13: 2147–2160.

Siesa, M. E. et al. 2014. Assessing the consequences of biological invasions on species with complex life cycles: impact of the alien crayfish *Procambarus clarkii* on Odonata. – Ecol. Indic. 46: 70–77.

Siqueira, T. et al. 2012. Common and rare species respond to similar niche processes in macroinvertebrate metacommunities. – Ecography 35: 183–192.

Smith, A. C. et al. 2011. Landscape size affects the relative importance of habitat amount, habitat fragmentation, and matrix quality on forest birds. – Ecography 34: 103–113.

Smith, R. J. and Stark, L. R. 2014. Habitat vs. dispersal constraints on bryophyte diversity in the Mojave Desert, USA. – J. Arid Environ. 102: 76–81.

Souffreau, C. et al. 2015. Environmental rather than spatial factors structure bacterioplankton communities in shallow lakes along a > 6000 km latitudinal gradient in South America. – Environ. Microbiol. 17: 2336–2351.

Stoch, F. et al. 2016. The role of spatial environmental factors as determinants of large branchiopod distribution in Tunisian temporary ponds. – Hydrobiologia 782: 37–51.

Strecker, A. L. et al. 2008. Dispersal limitation and climate–related environmental gradients structure microcrustacean composition in freshwater lakes, Ellesmere Island, Canada. – Can. J. Fish. Aquat. Sci. 65: 1905–1918.

Svenning, J.-C. et al. 2010. Geography, topography, and history affect realized-to-potential tree species richness patterns in Europe. – Ecography 33: 1070–1080.

Swaegers, J. et al. 2014. Unravelling the effects of contemporary and historical range expansion on the distribution of genetic diversity in the damselfly *Coenagrion scitulum*. – J. Evol. Biol. 27: 748–759.

Symons, C. C. et al. 2014. Spatial, Environmental, and Biotic Determinants of Zooplankton Community Composition in Subarctic Lakes and Ponds in Wapusk National Park, Canada. – Arct. Antarct. Alp. Res. 46: 159–190.

Takemoto, K. and Kajihara, K. 2016. Human Impacts and Climate Change Influence Nestedness and Modularity in Food-Web and Mutualistic Networks. – PLoS One 11: e0157929.

Tang, T. et al. 2013. Disentangling the roles of spatial and environmental variables in shaping benthic algal assemblages in rivers of central and northern China. – Aquat. Ecol. 47: 453–466.

Terribile, L. C. et al. 2009. Ecological and evolutionary components of body size: geographic variation of venomous snakes at the global scale. – Biol. J. Linn. Soc. 98: 94–109.

Terribile, L. C. et al. 2012. Integrating phylogeny, environment and space to explore variation in macroecological traits of Viperidae and Elapidae (Squamata: Serpentes). – J. Zool. Syst. Evol. Res. 50: 202–209.

Tetetla-Rangel, E. et al. 2017. Patterns and correlates of plant diversity differ between common and rare species in a neotropical dry forest. – Biodiv. Conserv. 26: 1705–1721.

Tevie, J. et al. 2014. Examination of the geographical variation in human West Nile virus: a spatial filtering approach. – Epidemiol. Infect. 142: 2522–2529.

Tonkin, J. D. et al. 2016. Contrasting metacommunity structure and beta diversity in an aquatic-floodplain system. – Oikos 125: 686–697.

Tonsor, S. J. 2012. Population genomics and the causes of local differentiation. – Mol. Ecol. 21: 5393–5395.

Torres-Romero, E. J. and Olalla-Tárraga, M. Á. 2015. Untangling human and environmental effects on geographical gradients of mammal species richness: a global and regional evaluation. – J. Anim. Ecol. 84: 851–860.

Torres-Romero, E. J. et al. 2016. Bergmann's rule in the oceans? Temperature strongly correlates with global interspecific patterns of body size in marine mammals. – Global Ecol. Biogeogr. 25: 1206–1215.

Treml, V. and Chuman, T. 2015. Ecotonal dynamics of the altitudinal forest limit are affected by terrain and vegetation structure variables: an example from the Sudetes Mountains in Central Europe. – Arct. Antarct. Alp. Res. 47: 133–146.

Ulrich, W. et al. 2016. Species interactions and random dispersal rather than habitat filtering drive community assembly during early plant succession. – Oikos, 125: 698–707.

Václavík, T. et al. 2012. Accounting for multi-scale spatial autocorrelation improves performance of invasive species distribution modelling (iSDM). – J. Biogeogr. 39: 42–55.

Vallès, H. and Oxenford, H. A. 2015. The utility of simple fish community metrics for evaluating the relative influence of fishing vs. other environmental drivers on Caribbean reef fish communities. – Fish Fish. 16: 649–667.

Vandam, R. et al. 2013. Disentangling the Spatio–Environmental Drivers of Human Settlement: An Eigenvector Based Variation Decomposition. – PLoS One 8: e67726.

Vandamme, S. G. et al. 2014. Regional environmental pressure influences population differentiation in turbot (*Scophthalmus maximus*). – Mol. Ecol. 23: 618–636.

Ventura, M. et al. 2014. Local and regional founder effects in lake zooplankton persist after thousands of years despite high dispersal potential. – Mol. Ecol. 23: 1014–1027.

Venugopal, P. D. et al. 2016. Contrasting Role of Temperature in Structuring Regional Patterns of Invasive and Native Pestilential Stink Bugs. – PLoS One 11: e0150649.

Viana, D. S. et al. 2016. Assembly mechanisms determining high species turnover in aquatic communities over regional and continental scales. – Ecography 39: 281–288.

Villén-Pérez, S. et al. 2014. Wintering forest birds roost in areas of higher sun radiation. – Eur. J. Wildlife Res. 60: 59–67.

Vleminckx, J. et al. 2016. The influence of spatially structured soil properties on tree community assemblages at a landscape scale in the tropical forests of southern Cameroon. – J. Ecol. 105: 354–366.

Wagner, H. H. & Dray, S. 2015. Generating spatially constrained null models for irregularly spaced data using Moran spectral randomization methods. – Methods Ecol. Evol. 6: 1169–1178.

Wan, Y. et al. 2014. The Role of Environmental and Spatial Processes in Structuring Stream Macroinvertebrates Communities in a Large River Basin. – Clean (Weinh) 43: 1633–1639.

Wan, Y. et al. 2016. Scale-Related Contribution of Environmental and Spatial Processes to Structuring Phytoplankton Assemblages. – Clean (Weihn) 43: 1559–1692.

Wang Q. et al. 2014. Disentangling the effects of topography and space on the distributions of dominant species in a subtropical forest. – Chin. Sci. Bull. 59: 5113–5122.

Wang, I. J. and Bradburd, G. S. 2014. Isolation by environment. – Mol. Ecol. 23: 5649–5662.

Wang, X. et al. 2017. The ectomycorrhizal fungal communities associated with *Quercus liaotungensis* in different habitats across northern China. – Myccorhiza 27: 44 –449.

Widenfalk, L. A. et al. 2016. Small-scale Collembola community composition in a pine forest soil – Overdispersion in functional traits indicates the importance of species interactions. – Soil Biol. Biochem. 103: 52–62.

Wilmers, C. C. et al. 2013. Scale dependent behavioral responses to human development by a large predator, the puma. – PLoS One 8: e60590.

Winegardner, A. K. et al. 2015. Are the landscape–level drivers of water column and surface sediment diatoms different? – Freshwater Biol. 60: 267–281.

Yang, W. et al. 2014. Environmental and socio-economic factors shaping the geography of floristic collections in China. – Global Ecol. Biogeogr. 23: 1284–1292.

Yang, Y. et al. 2016. Abiotic controls on macroscale variations of humid tropical forest height. – Remote Sens. 8: 494.

Zhang, H. et al. 2013. Community assembly along a successional gradient in sub-alpine meadows of the Qinghai-Tibetan Plateau, China. – Oikos 122: 952–960.

Zhang, H. et al. 2015. Using functional trait diversity to evaluate the contribution of multiple ecological processes to community assembly during succession. – Ecography 38: 1176–1186.

Zhang, Q. et al. 2011. Patterns of species richness in relation to temperature, taxonomy and spatial scale in eastern China. – Acta Oecol. 37: 307–313.

Zulliger, D. et al. 2013. – Are adaptive loci transferable across genomes of related species? Outlier and environmental association analyses in Alpine Brassicaceae species. – Mol. Ecol. 22: 1626–1639.