

CENTRE FOR ECOLOGICAL RESEARCH

Best publications of the last 5 years

Institute of Ecology and Botany

2020

Kovacs, B.; Tinya, F.; Nemeth, Cs.; Odor, P. Unfolding the effects of different forestry treatments on microclimate in oak forests: results of a 4-yr experiment. *ECOLOGICAL APPLICATIONS* 30: e02043. (2020)

Tölgyesi, Cs.; Török, P.; Hábcenyus, A.; Bátori, Z.; Valkó, O.; Deák, B.; Tóthmérész, B.; Erdős, L.; Kelemen, A. Underground deserts below fertility islands? Woody species desiccate lower soil layers in sandy drylands. *ECOGRAPHY* 43: 848-859. (2020)

Chamberlain, D.; Reynolds, C.; Amar, A.; Henry, D.; Caprio, E.; Batáry, P. Wealth, water and wildlife: Landscape aridity intensifies the urban luxury effect. *GLOBAL ECOLOGY AND BIOGEOGRAPHY* 29: 1595-1605. (2020)

Alignier, A.; Solé-Senan, X.O.; Robleño, I.; Baraibar, B.; Fahrig, L.; Giralt, D.; Gross, N.; Martin, J.L.; Recasens, J.; Sirami C.; Siriwardena G.; Boses Baillod A.; Bertrand, C.; Carrié, R.; Hass, A.; Henckel, L.; Miguet, P.; Badenhausser, I.; Baudry, J.; Bota, G.; Bretagnolle, V.; Brotons, L.; Burel, F.; Calatayud, F.; Clough, Y.; Georges, R.; Gibon, A.; Girard, J.; Lindsay, K.; Minano, J.; Mitchell, S.; Patry, N.; Poulin, B.; Tschardtke, T.; Vialatte, A.; Violle, C.; Yaverscovski, N.; Batáry P. Configurational crop heterogeneity increases within-field plant diversity. *JOURNAL OF APPLIED ECOLOGY* 57: 654-663. (2020)

Fischer, L.K.; Neuenkamp, L.; Lampinen, J.; Tuomi, M.; Alday, J.G.; Bucharova, A.; Cancellieri, L.; Casado-Arzuaga, I.; Čeplová, N.; Cerveró, L.; Deák, B.; Eriksson, O.; Fellowes, M.D.E.; Fernández, de M. M.; Filibeck, G.; González-Guzmán, A.; Hinojosa, M. B.; Kowarik, I.; Lumbierres, B.; Miguel, A.; Pardo, R.; Pons, X.; Rodríguez-García, E.; Schröder, R.; Gaia Sperandii, M.; Unterweger, P.; Valkó, O.; Vázquez, V., Klaus, V.H. Public attitudes toward biodiversity-friendly greenspace management in Europe. *CONSERVATION LETTERS* Early view e12718. (2020)

2019

Biró, M.; Molnár, Zs.; Babai, D.; Dénes, A.; Fehér, A.; Barta, S.; Sáfián, L.; Szabados, K.; Kis, A.; Demeter, L.; Öllerer, K. Reviewing historical traditional knowledge for innovative conservation management: a re-evaluation of marshland grazing. *SCIENCE OF THE TOTAL ENVIRONMENT* 666: 1114-1125. (2019)

Gallé, R.; Happe, A.-K.; Baillod, A.B.; Tschardtke, T.; Batáry, P. Landscape configuration, organic management, and within-field position drive functional

diversity of spiders and carabids. JOURNAL OF APPLIED ECOLOGY 56: 63-72. (2019)

Marja, R.; Kleijn, D.; Tscharntke, T.; Klein, A.-M.; Frank, T.; Batáry, P. Effectiveness of agri-environmental management on pollinators is moderated more by ecological contrast than by landscape structure or land-use intensity. ECOLOGY LETTERS 22: 1493-1500. (2019)

Öllerer, K.; Varga, A.; Kirby, K.; Demeter, L.; Biró, M.; Bölöni, J.; Molnár, Zs. Beyond the obvious impact of domestic livestock grazing on temperate forest vegetation – A global review. BIOLOGICAL CONSERVATION 237: 209-219. (2019)

Török, K.; Horváth, F.; Kövendi-Jakó, A.; Halassy, M.; Bölöni, J.; Szitár, K. Meeting Aichi Target 15: Efforts and further needs of ecological restoration in Hungary. BIOLOGICAL CONSERVATION 235: 128-135. (2019)

2018

Biró, M.; Bölöni, J.; Molnár, Zs. Use of long-term data to evaluate loss and endangerment status of Natura 2000 habitats and effects of protected areas. CONSERVATION BIOLOGY 32: 660-671. (2018)

Bobiec, A.; Reif, A.; Öllerer, K. Seeing the oakscape beyond the forest: a landscape approach to the oak regeneration in Europe. LANDSCAPE ECOLOGY 33: 513-528. (2018)

Botta-Dukát, Z. The generalized replication principle and the partitioning of functional diversity into independent alpha and beta components. ECOGRAPHY 41: 40-50. (2018)

Czúcz, B.; Arany, I.; Potschin-Young, M.; Bereczki, K.; Kertész, M.; Kiss, M.; Aszalós, R. Haines-Young, R. Where concepts meet the real world: A systematic review of ecosystem service indicators and their classification using CICES. ECOSYSTEM SERVICES 29: 145-157. (2018)

Erdős, L.; Kröel-Dulay, Gy.; Bátori, Z.; Kovács, B.; Németh, Cs.; Kiss, P. J.; Tölgyesi, Cs. Habitat heterogeneity as a key to high conservation value in forest-grassland mosaics. BIOLOGICAL CONSERVATION 226: 72-80. (2018)

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Kovács-Hostyánszki, A.; Espíndola, A.; Vanbergen, A.; Settele, J.; Kremen, C.; Dicks, L. Ecological intensification to mitigate impacts of conventional intensive land use on pollinators and pollination. ECOLOGY LETTERS 20: 673-689. (2017)

Kovács, B.; Tinya, F.; Ódor P. Stand structural drivers of microclimate in mature temperate mixed forests. AGRICULTURAL AND FOREST METEOROLOGY 234-235: 11-21. (2017)

Mihók, B.; Biró, M.; Molnár, Z.; Kovács, E.; Bölöni, J.; Erős, T.; Standovár, T.; Török, P.; Csorba, G.; Margóczy, K.; Báldi A. Biodiversity on the waves of history: conservation in a changing social and institutional environment in Hungary, a post-soviet EU member state. *BIOLOGICAL CONSERVATION* 211: 67-75. (2017)

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Botta-Dukát, Z.; Czúcz, B. Testing the ability of functional diversity indices to detect trait convergence and divergence using individual-based simulation. *METHODS IN ECOLOGY AND EVOLUTION* 7:114-126. (2016)

Crowther, T.W.; Todd-Brown, K.E.O.; Rowe, C.W.; Wieder, W.R.; Carey, J.C.; Machmuller, M.B.; Snoek, B.L.; Fang, S.; Zhou, G.; Allison, S.D.; Blair, J.M.; Bridgham, S.D.; Burton, A.J.; Carrillo, Y.; Reich, P.B.; Clark, J.S.; Classen, A.T.; Dijkstra, F.A.; Elberling, B.; Emmett, B.A.; Estiarte, M.; Frey, S.D.; Guo, J.; Harte, J.; Jiang, L.; Johnson, B.R.; Kröel-Dulay, G.; Larsen, K.S.; Laudon, H.; Lavelle, J.M.; Luo, Y.; Lupascu, M.; Ma, L.N.; Marhan, S.; Michelsen, A.; Mohan, J.; Niu, S.; Pendall, E.; Peñuelas, J.; Pfeifer-Meister, L.; Poll, C.; Reinsch, S.; Reynolds, L.L.; Schmidt, I.K.; Sistla, S.; Sokol, N.W.; Templer, P.H.; Treseder, K.K.; Welker, J.M.; Bradford, M.A. Quantifying global soil carbon losses in response to warming. *NATURE* 540: 104-108. (2016)

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Danube Research Institute

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Vági, B*.; Végvári, Z*.; Liker, A.; Freckleton, R.P.; Székely, T. Climate and mating systems as drivers of global diversity of parental care in frogs. *GLOBAL ECOLOGY AND BIOGEOGRAPHY* 29:1373–1386. (2020)

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Kubelka, V.; Šálek, M.; Tomkovich, P.; Végvári, Z.; Freckleton, R.P.; Székely, T. (2019). Response to Comment on “Global pattern of nest predation is disrupted by climate change in shorebirds”. *SCIENCE*, 364(6445). (2019)

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Erős, T.; O'Hanley, J.R.; Czeglédi, I. A Unified Model for Optimizing Riverscape Conservation. *JOURNAL OF APPLIED ECOLOGY* 55:1871-1883. (2018)

Lengyel, Sz.; Kosztyi, B.; Schmeller, D.S.; Henry, P-Y.; Kotarac, M.; Lin, Y-P.; Henle, K. Evaluating and benchmarking biodiversity monitoring: Metadata-based indicators for sampling design, sampling effort and data analysis *ECOLOGICAL INDICATORS* 85:624-633. (2018)

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Pereira, J.; Saura, S.; Jordán, F. Single-node vs. multi-node centrality in landscape graph analysis: key habitat patches and their protection for 20 bird species in NE Spain. *METHODS IN ECOLOGY AND EVOLUTION* 8: 1458-1467. (2017)

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Institute of Evolution

Note that evolution has been a topic in the Centre from 2017 only, year 2016 is presented as supplementary information on related work by the current affiliates of the Institute.

2020

Adamski, P; Eleveld, M.; Sood, A.; Kun, Á.; Szilágyi, A.; Czárán, T.; Szathmáry, E.; Otto, S.: From self-replication to replicator systems en route to de novo life. *NATURE REVIEWS CHEMISTRY* 4 (2020)

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Balaton Limnological Institute

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