

# Literatur / Bibliographie HOTSPOT 42

## S. 6-7: Pawłowski

Larsen B.B. et al. (2017): Inordinate Fondness Multiplied and Redistributed: the Number of Species on Earth and the New Pie of Life. *The Quarterly Review of Biology*. DOI: [10.1086/693564](https://doi.org/10.1086/693564)

Mora C. et al. (2011): How Many Species Are There on Earth and in the Ocean? *PLoS Biology* 9(8): e1001127.

Wilson E. O. (1992): *The Diversity of Life*. W. W. Norton & Co., New York.

## S. 8-9: Bodenleben

Carter D, Yellowlees D, Tibbett M. Cadaver decomposition in terrestrial ecosystems. *Naturwissenschaften*. 2007;94(1):12-24.

Davison, J., et al. "Global assessment of arbuscular mycorrhizal fungus diversity reveals very low endemism." *Science* 349.6251 (2015): 970-973.

Delgado-Baquerizo, Manuel, et al. "A global atlas of the dominant bacteria found in soil." *Science* 359.6373 (2018): 320-325.

Jassey, V.E.J., Signarbieux, C., Hättenschwiler, S., Bragazza, L., Buttler, A., Delarue, F., Fournier, B., Gilbert, D., Laggoun-Défarge, F., Lara, E., Mills, R.T.E., Mitchell, E.A.D., Payne, R.J. & Robroek, B.J.M. (2015) An unexpected role for mixotrophs in the response of peatland carbon cycling to climate warming. *Scientific Reports*, 5, 16931.

Lamentowicz, M., Lamentowicz, Ł., van der Knaap, W. O., Gąbka, M., & Mitchell, E. A. (2010). Contrasting species—environment relationships in communities of testate amoebae, bryophytes and vascular plants along the Fen–Bog gradient. *Microbial ecology*, 59(3), 499-510.

Mark, P., Jane, R., Joanna, N., Sophie, C. & Michal, K. (2019) Human cadaver burial depth affects soil microbial and nutrient status. *Archaeological and Environmental Forensic Science*, 1.

Metcalf, J.L., Xu, Z.Z., Weiss, S., Lax, S., Van Treuren, W., Hyde, E.R., Song, S.J., Amir, A., Larsen, P., Sangwan, N., Haarmann, D., Humphrey, G.C., Ackermann, G., Thompson, L.R., Lauber, C., Bibat, A., Nicholas, C., Gebert, M.J., Petrosino, J.F., Reed, S.C., Gilbert, J.A., Lynne, A.M., Bucheli, S.R., Carter, D.O. & Knight, R. (2016) Microbial community assembly and metabolic function during mammalian corpse decomposition. *Science*, 351, 158.

Oliverio, Angela M., et al. "The global-scale distributions of soil protists and their contributions to belowground systems." *Science advances* 6.4 (2020): eaax8787.

Orgiazzi A. et al. (Eds.) 2016: Global Soil Biodiversity Atlas. European Commission, Publications Office of the European Union, Luxembourg. 176 pp.

Peterson RL, Massicotte HB, Melville LH. 2004. Mycorrhizas: anatomy and cell biology. Ottawa, ON, Canada: NRC Research Press.

- Phillips, Helen RP, et al. "Global distribution of earthworm diversity." *Science* 366.6464 (2019): 480-485.
- Seppey, C.V.W., Fournier, B., Szelecz, I., Singer, D., Mitchell, E.A.D. & Lara, E. (2016) Response of forest soil euglyphid testate amoebae (Rhizaria: Ciliophora) to pig cadavers assessed by high-throughput sequencing. *International Journal of Legal Medicine*, 130, 551-562.
- Smith, M. L., Bruhn, J. N., & Anderson, J. B. (1992). The fungus *Armillaria bulbosa* is among the largest and oldest living organisms. *Nature*, 356(6368), 428-431.
- Szelecz, I., Fournier, B., Seppey, C., Amendt, J. & Mitchell, E. (2014) Can soil testate amoebae be used for estimating the time since death? A field experiment in a deciduous forest. *Forensic Science International*, 236, 90-98.
- Szelecz, I., Koenig, I., Seppey, C.V.W., Le Bayon, R.C. & Mitchell, E.A.D. (2018) Soil chemistry changes beneath decomposing cadavers over a one-year period. *Forensic Science International*, 286, 155-165.
- Szelecz, I., Lösch, S., Seppey, C.V.W., Lara, E., Singer, D., Sorge, F., Tschui, J., Perotti, M.A. & Mitchell, E.A.D. (2018) Comparative analysis of bones, mites, soil chemistry, nematodes and soil micro-eukaryotes from a suspected homicide to estimate the post-mortem interval. *Scientific Reports*, 8.
- Tedersoo, Leho, et al. "Global diversity and geography of soil fungi." *science* 346.6213 (2014).
- van Der Heijden, M. G., Bardgett, R. D., & Van Straalen, N. M. (2008). The unseen majority: soil microbes as drivers of plant diversity and productivity in terrestrial ecosystems. *Ecology letters*, 11(3), 296-310.

### **S. 10-11: Leben im Grundwasser**

- Altermatt, F., R. Alther, C. Fišer, and V. Švara. 2019. Amphipoda (Flohkrebse) der Schweiz. Fauna Helvetica 32. info fauna CSCF & SEG, Neuchâtel.
- Alther, R., N. Bongni, Š. Borko, C. Fišer, and F. Altermatt. 2020. Pilotstudie fördert Grundwasserfauna zu Tage. Aqua & Gas (in press).
- Arndt, H., B. Bendinger, M. Gierig, C. Griebler, I. Guderitz, H. J. Hahn, J. Marxsen, G. Preuß, S. Richter, D. Schlosser, and A. Thiem. 2012. Grundwasserbiologie - Grundlagen und Anwendungen. Page (A. Thiem, Ed.). DWA Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V., Hennef, Germany.
- BAFU 2019. Zustand und Entwicklung Grundwasser Schweiz. Ergebnisse der Nationalen Grundwasserbeobachtung NAQUA, Stand 2016. Page 138 Umwelt-Zustand Nr. 1901. Bundesamt für Umwelt BAFU, Bern.
- Burri, N. M., R. Weatherl, C. Moeck, and M. Schirmer. 2019. A review of threats to groundwater quality in the anthropocene. *Science of the Total Environment* 684:136–154.
- Fišer, C., M. Konec, R. Alther, V. Švara, and F. Altermatt. 2017. Taxonomic, phylogenetic and ecological diversity of Niphargus (Amphipoda: Crustacea) in the Höolloch cave system (Switzerland). *Systematics and Biodiversity* 15:218–237.

- Freiburghaus, M. 2012. Statistische Übersicht über die Wasserversorgung in der Schweiz 2010. *Aqua & Gas* 92:54–59.
- Griebler, C., and M. Avramov. 2015. Groundwater ecosystem services: a review. *Freshwater Science* 34:355–367.
- Saccò, M., A. Blyth, P. W. Bateman, Q. Hua, D. Mazumder, N. White, W. F. Humphreys, A. Laini, C. Griebler, and K. Grice. 2019. New light in the dark - a proposed multidisciplinary framework for studying functional ecology of groundwater fauna. *Science of the Total Environment* 662:963–977.
- Schminke, H. K., G. Gad, W. Ahlrichs, I. Bartsch, H. Christl, R. Gerecke, P. Martin, P. Rumm, and J. W. Wägele. 2007. Grundwasserfauna Deutschlands. Ein Bestimmungswerk. Page (H. K. Schminke and G. Gad, Eds.). DWA Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V., Hennef.
- Tschudin, P., S. Eggenberg, F. Fivaz, M. Jutzi, A. Sanchez, N. Schnyder, B. Senn-Irlet, and Y. Gonseth. 2017. Endemiten der Schweiz – Methode und Liste 2017. Schlussbericht im Auftrag des Bundesamts für Umwelt (BAFU). Page 37. Bern.

#### **S. 17: Umwelt-DNA macht die verborgene Vielfalt in Flussökosystemen sichtbar**

- Altermatt F, Little CJ, Mächler E, Wang S, Zhang X and Blackman RC (2020) Uncovering the complete biodiversity structure in spatial networks – the example of riverine systems. *Oikos*, 129, 607–618.
- Barnes MA and Turner CR (2016) The ecology of environmental DNA and implications for conservation genetics. *Conservation Genetics* 17, 1–17.
- Blackman RC, Constable D, Hahn C, Sheard AM, Durkota J, Häneling B and Handley LL (2017) Detection of a new non-native freshwater species by DNA metabarcoding of environmental samples—first record of *Gammarus fossarum* in the UK. *Aquatic Invasions* 12(2): 177–189
- Carraro L, Hartikainen H, Jokela J, Bertuzzo E and Rinaldo A (2018) Estimating species distribution and abundance in river networks using environmental DNA. *Proceedings of the National Academy of Sciences of the United States of America*, 115(46):11724–11729.
- Carraro L, Mächler E, Wüthrich R, Altermatt F. (2020): Environmental DNA allows upscaling spatial patterns of biodiversity in freshwater ecosystems. *Nature Communications*, DOI: 10.1038/s41467-020-17337-8
- Deiner K and Altermatt F (2014) Transport distance of invertebrate environmental DNA in a natural river. *PLoS One*, 9(2): e88786.
- Deiner K, Fronhofer EA, Mächler E, Walser J-C and Altermatt F (2016) Environmental DNA reveals that rivers are conveyer belts of biodiversity information. *Nature Communications*, 7: 12544.
- Deiner K, Bik HM, Mächler E, Seymour M, Lacoursière-Roussel A, Altermatt F, Creer S, Bista I, Lodge DM, de Vere N, Pfrenger ME and Bernatchez L (2017) Environmental DNA metabarcoding: transforming how we survey animal and plant communities. *Molecular Ecology*, 26: 5872–5895.
- Lawson Handley L. (2015) How will the ‘molecular revolution’ contribute to biological recording? *Biological Journal of the Linnean Society* 115(3), 750–766

**S. 18: Unsichtbare Lebensgemeinschaften in fermentierten Lebensmitteln**

- Bär C, Eugster E, St. Irmler, Moser A, Pelludat C, 2016. Die mikrobielle Biodiversität in Rohmilchkäse. *Agrarforschung Schweiz*, 7 (7-8), 352-355.
- Bokulich NA, Mills DA, 2012. Next-generation approaches to the microbial ecology of food fermentations. *BMB reports*, 45 (7), 377–389.
- Konopka A, 2009. What is microbial community ecology? *The ISME journal*, 3 (11), 1223–1230.
- Kohn C, Eugster E, 2014. Differenzieren mit «Liebefeld-Kulturen». *Alimenta*, 17, 26–27.
- Quigley L, O'Sullivan O, Stanton C, Beresford TP, Ross RP, Fitzgerald GF, Cotter PD, 2013. The complex microbiota of raw milk. *FEMS microbiology reviews*, 37 (5), 664–698.
- Schmidt R, Ulanova D, Wick LY, Bode HB, Garbeva P, 2019. Microbe-driven chemical ecology: past, present and future. *The ISME journal*, 13 (11), 2656–2663.
- Wolfe BE, Dutton RJ, 2015. Fermented foods as experimentally tractable microbial ecosystems. *Cell*, 161 (1), 49–55.
- Worrich A, Musat N, Harms H, 2019. Associational effects in the microbial neighborhood. *The ISME journal*, 13 (9), 2143–2149.
- Xiang H, Sun-Waterhouse D, Waterhouse GIN, Cui C, Ruan Z, 2019. Fermentation-enabled wellness foods: A fresh perspective. *Food Science and Human Wellness*, 8 (3), 203–243.
- Yeluri Jonnala BR, McSweeney PLH, Sheehan JJ, Cotter PD, 2018. Sequencing of the Cheese Microbiome and Its Relevance to Industry. *Frontiers in microbiology*, 9, 1020.
- Zabat MA, Sano WH, Wurster JI, Cabral DJ, Belenky P, 2018. Microbial Community Analysis of Sauerkraut Fermentation Reveals a Stable and Rapidly Established Community. *Foods*, 7 (5), 77.

**S. 19: Biodiversitätsmonitoring mit akustischen Methoden**

- Suter S.M., Giordano M., Nietlispach S., Apollonio M. & Passilongo D. 2016. Non-invasive acoustic detection of wolves. *Bioacoustics*. 26(3), 237-248 DOI: [10.1080/09524622.2016.1260052](https://doi.org/10.1080/09524622.2016.1260052)

Suter S.M. 2019. Wolfsmonitoring mit bioakustischen Methoden. *Fauna Focus* 55 Wolfsmonitoring. Wildtier Schweiz.

**Beispiele von Wolfsheulern aus der Schweiz (TI, VD, VS):** <https://wls.ch/portfolio-item/monitoring-acoustique-du-loup>

**S. 20: Warum wir manche Arten wahrnehmen und manche nicht**

- Breuer, G. B., Schlegel, J., Kauf, P., & Rupf, R. (2015). The Importance of Being Colorful and Able to Fly: interpretation and implications of children's statements on selected insects and other invertebrates. *International Journal of Science Education*, 37, 2664-2687. <https://doi.org/10.1080/09500693.2015.1099171>

Eberbach, C., & Crowley, K. (2009). From everyday to scientific observation: how children learn to observe the biologist's world. *Review of Educational Research*, 79, 39-68. <https://doi.org/10.3102/0034654308325899>

Wandersee, J. H., & Schussler, E. E. (2001). Toward a theory of plant blindness. *Plant Science Bulletin*, 47, 2-12.

**Weitere Literatur zum Thema:**

- Barrett, H. C., & Broesch, J. (2012). Prepared social learning about dangerous animals in children. *Evolution and Human Behavior*, 33, 499-508.  
<https://doi.org/10.1016/j.evolhumbehav.2012.01.003>
- Batt, S. (2009). Human attitudes towards animals in relation to species similarity to humans: a multivariate approach. *Bioscience Horizons*, 2, 180-190.  
<https://doi.org/10.1093/biohorizons/hzp021>
- Bermudez, G. M., Battistón, L. V., Capocasa, M. C. G., & De Longhi, A. L. (2017). Sociocultural variables that impact high school students' perceptions of native fauna: a study on the species component of the biodiversity concept. *Research in Science Education*, 47, 203-235. <https://doi.org/10.1007/s11165-015-9496-4>
- Bögeholz, S. (2006). Nature experience and its importance for environmental knowledge, values and action: recent German empirical contributions. *Environmental Education Research*, 12, 65-84. <https://doi.org/10.1080/13504620500526529>
- Borgi, M., & Cirulli, F. (2015). Attitudes toward animals among kindergarten children: species preferences. *Anthrozoös*, 28, 45-59. <https://doi.org/10.2752/089279315X14129350721939>
- Carmi, N., Arnon, S., & Orion, N. (2015). Transforming environmental knowledge into behavior: the mediating role of environmental emotions. *The Journal of Environmental Education*, 46, 183-201. <https://doi.org/10.1080/00958964.2015.1028517>
- Chawla, L. (2015). Benefits of nature contact for children. *Journal of Planning Literature*, 30, 433-452. <https://doi.org/10.1177/0885412215595441>
- Genovart, M., Tavecchia, G., Ensenat, J. J., & Laiolo, P. (2013). Holding up a mirror to the society: Children recognize exotic species much more than local ones. *Biological Conservation*, 159, 484–489. <https://doi.org/10.1016/j.biocon.2012.10.028>
- Gill, T. (2014). The benefits of children's engagement with nature: A systematic literature review. *Children Youth and Environments*, 24, 10-34.  
<https://doi.org/10.7721/chilyoutenvi.24.2.0010>
- Huxham, M., Welsh, A., Berry, A., & Templeton, S. (2006). Factors influencing primary school children's knowledge of wildlife. *Journal of Biological Education*, 41, 9-12.  
<https://doi.org/10.1080/00219266.2006.9656050>
- Leather, S. R., & Quicke, D. J. L. (2009). Where would Darwin have been without taxonomy? *Journal of Biological Education*, 43, 51-52. <https://doi.org/10.1080/00219266.2009.9656151>
- Leather, S. R., & Quicke, D. J. L. (2010). Do shifting baselines in natural history knowledge threaten the environment? *The Environmentalist*, 30, 1-2. <https://doi.org/10.1007/s10669-009-9246-0>
- Lindemann-Matthies, P. (2005). "Loveable" mammals and "lifeless" plants: how children's interest in common local organisms can be enhanced through observation of nature. *International Journal of Science Education*, 27, 635-677.  
<https://doi.org/10.1080/09500690500038116>
- Louv, R. (2006). Last child in the woods. Saving our children from nature-deficit disorder. Chapel Hill, NC: Algonquin books of Chapel Hill.
- Mullan, K. (2019): A child's day: trends in time use in the UK from 1975 to 2015. *British Journal of Sociology*, 70, 3, 997-1024.

- New, J., Cosmides, L., & Tooby, J. (2007). Category-specific attention for animals reflects ancestral priorities, not expertise. *Proceedings of the National Academy of Sciences*, 104, 16598-16603. <https://doi.org/10.1073/pnas.0703913104>
- Palmberg, I., Berg, I., Jeronen, E., Kärkkäinen, S., Norrgård-Sillanpää, P., ..., & Yli-Panula, E. (2015). Nordic–Baltic student teachers' identification of and interest in plant and animal species: the importance of species identification and biodiversity for sustainable development. *Journal of Science Teacher Education*, 26, 549-571. <https://doi.org/10.1007/s10972-015-9438-z>
- Patrick, P., Byrne, J., Tunnicliffe, S. D., Asunta, T., Carvalho, G., Havu-Nuutinen, S., ..., & Tracana, R. B. (2013). Students (ages 6, 10, 15 years) in six countries knowledge of animals. *Nordic Studies in Science Education*, 9, 18-32. <https://doi.org/10.5617/nordina.624>
- Pauly, D. (1995). Anecdotes and the shifting baseline syndrome of fisheries. *Trends in Ecology and Evolution*, 10(10), 430. [https://doi.org/10.1016/S0169-5347\(00\)89171-5](https://doi.org/10.1016/S0169-5347(00)89171-5)
- Prokop, P., & Randler, C. (2018). Biological predispositions and individual differences in human attitudes toward animals. In R. R. N. Alves, & U. P. de Albuquerque (Eds.), *Ethnozoology: animals in our lives* (pp. 447-466). London, UK: Academic Press.
- Tunnicliffe, S. D., & Reiss, M. J. (1999). Building a model of the environment: how do children see animals? *Journal of Biological Education*, 33, 142-148. <https://doi.org/10.1080/00219266.1999.9655654>
- Tunnicliffe, S. D., & Reiss, M. J. (2000). Building a model of the environment: how do children see plants? *Journal of Biological Education*, 34, 172-177. <https://doi.org/10.1080/00219266.2000.9655714>
- Wandersee, J. H., & Schussler, E. E. (1999). Preventing plant blindness. *The American Biology Teacher*, 61, 82-86. <https://www.jstor.org/stable/4450624>

## S. 21-23: Entdeckungen

### Erzwespen

Baur H (2015) Pushing the limits – two new species of *Pteromalus* (Hymenoptera, Chalcidoidea, Pteromalidae) from Central Europe with remarkable morphology. *ZooKeys* 514: 43–72. <https://doi.org/10.3897/zookeys.514.9910>

Baur H (2016) Erzwespen - Artenvielfalt im Dunkeln. *Bündnerwald* 69: 40–43.

### Zoo

Baur, B. 2011. Zoo Basel and its native biodiversity between the enclosures: a new strategy of cooperation with academic institutions. *International Zoo Yearbook* 45: 48–54.

Baur, B., Billen, W. & Burckhardt, D. (Red.) 2008. Vielfalt zwischen den Gehegen: wildlebende Tiere und Pflanzen im Zoo Basel. Monographien der Entomologischen Gesellschaft Basel, Band 3, 462 Seiten.

Zoo Basel 2020. Jahresbericht 2019. Zoologischer Garten Basel, 89 Seiten.

### Pilz

Beenken, L., A. Gross, and V. Queloz. 2020. Phylogenetic revision of *Petrakia* and *Seifertia* (Melanommataceae, Pleosporales): new and rediscovered species from Europe and North America. *Mycological Progress* 19:417-440. <https://doi.org/10.1007/s11557-020-01567-7>

Gross A, Beenken L, Dubach V, Queloz V, Tanaka K, Hashimoto A, Holdenrieder O (2017) Pseudodidymella fagi and Petrakia deviata: two closely related tree pathogens new to central. Eur For Pathol 00: e12351. <https://doi.org/10.1111/efp.12351>

### Fledermaus

Juste J., Ruedi M., Puechmaille S.J., Salicini I., Ibáñez C. 2018. Two new bat species within the *Myotis nattereri* species complex (Vespertilionidae, Chiroptera) from the Western Palaearctic. Acta Chiropterologica 20(2): 285-301.  
<https://doi.org/10.3161/15081109ACC2018.20.2.001>

### Orang-Utan

Nater A., Mattle-Greminger MP, Nurcahyo A, Nowak MG, de Manuel M, Desai T, Gives C, Pybus M, Bilgin Sonay T, Roos C, Lameira AR, Wich SA, Askew J, Davila-Ross M, Fredriksson G, de Valles G, Casals F, Prado-Martinez J, Goossens B, Verschoor E, Warren KS, Singleton I, Marques DA, Pamungkas J, Perwitasari-Farajallah W, Rianti P, Tuuga A, Gut IG, Gut M, Orozco-terWengel P, van Schaik CP, Bertranpetti J, Anisimova M, Scally A, Marques-Bonet T, Meijaard E, Krützen M. (2017): Morphometric, behavioral, and genomic evidence for a new orangutan species. Current Biology 27, 3487-3498.

### S. 24: Kombinierte Datensätze liefern wertvolle Informationen

Knaus P. et al. (2018): Schweizer Brutvogelatlas 2013-2016. Verbreitung und Bestandsentwicklung der Vögel in der Schweiz und im Fürstentum Liechtenstein. Schweizerische Vogelwarte, Sempach. 648 S.

Martinez N., Stickelberger C., Fässler F., Strebler N., Roth.T. (2020): Vorkommen von Wasseramsel *Cinclus cinclus* und Gebirgsstelze *Motacilla cinerea* in Abhängigkeit vom biologischen Zustand der Fliessgewässer. Ornithologischer Beobachter 117, 164-176.

### S. 26-27: Aromaviehfalt «alter» Obstsorten

Inderbitzin J., Bühlmann A., Gassmann J., Andreoli R. (2018). Cider - alte Sorten, neuer Schwung. Schweizer Zeitschrift für Obst- und Weinbau, 154 (14), 8-12.

Inderbitzin J., Bühlmann A., Arrigoni E., Zimmermann R., Petignat S., Gassmann J. und Andreoli R. (2016). Nutzung von Obstgenressourcen (NUVOG) - Cidre. Schweizer Zeitschrift für Obst- und Weinbau, 152 (12), 8-12.

Kellerhals M., Schütz S., Baumgartner I.O., Andreoli R., Gassmann J., Bolliger N., Schärer H.J., Ludwig M., Steineman B. (2018). Broaden the genetic basis in apple breeding by using genetic resources. Proceedings of the 18th International Conference on Organic Fruit-Growing, FOEKO, Weinsberg, 12-18.

Schaub S. (26. April 2018). Es kommt Bewegung in den Markt: Cider-Attacke auf die Schweiz am Wochenende. Abgerufen am 18. Juni 2020 von <https://www.aargauerzeitung.ch/leben/leben/es-kommt-bewegung-in-den-markt-cider-attacke-auf-die-schweiz-132430031>

Vombach D. (12. Mai 2020). Schweizer Cidre: Mehr als Most. falstaff Magazin 01/2020. Abgerufen am 18. Juni 2020 von <https://www.falstaff.ch/nd/schweizer-cidre-mehr-als-most/>

### S. 28-29: BAFU Boden

- Gschwend F., Hug A., Gubler A., Meuli R. G., Hartmann M., Frey B., Widmer F. (2018). Mikrobielle Diversität in Böden von 30 NABO-Referenzmessstandorten. Schlussbericht des MiDiBo NABObio Projekts. 28 Seiten.
- Gschwend F., Aregger K., Gramlich A., Walter T., Widmer F. (2020). Periodic waterlogging shapes agricultural soil microbiomes by promoting specific taxa. *Applied Soil Ecology* 155 (November): Article 103623
- Hartmann M., Niklaus P. A., Zimmermann S., Schmutz S., Kremer J., Abarenkov K., Lüscher P., Widmer F., Frey B. (2014). Resistance and resilience of the forest soil microbiome to logging-associated compaction. *The ISME Journal* 8: 226-244
- Hartmann M., Frey B., Mayer J., Mäder P., Widmer F. (2015). Distinct soil microbial diversity under long-term organic and conventional farming. *ISME Journal* 9: 1177-1194
- Mayerhofer J., Eckard S., Hartmann M., Grabenweger G., Widmer F., Leuchtmann A., Enkerli J. (2017). Assessing effects of the entomopathogenic fungus *Metarrhizium brunneum* on soil microbial communities in *Agriotes* spp. biological pest control. *FEMS Microbiology Ecology* 93: Article fix117
- Mayerhofer J., Wächter D., Calanca P., Kohli L., Roth T., Meuli R. G., Widmer F. (2020, submitted). Environmental and anthropogenic factors shape major bacterial community types across the complex mountain landscape of Switzerland.

### S. 30-31: Aus dem Forum

- Coady D., Parry I., Le N.-P., Shang B. (2019): Global fossil fuel subsidies remain large: An update based on country-level estimates (IMF Working Paper No. 19/89). Washington, DC: Fiscal Affairs Department, IMF.
- Sumaila U. R., Ebrahim N., Schuhbauer A., Skerritt D., Li Y., Sik Kim H., ... Pauly D. (2019): Updated estimates and analysis of global fisheries subsidies. *Marine Policy* 109, 103695.
- CBD (2011): Strategic plan for biodiversity 2011–2020, including Aichi Biodiversity Targets. Nagoya, Japan: The Convention on Biological Diversity.
- Schweizerischer Bundesrat (2017): Aktionsplan Strategie Biodiversität Schweiz. Bundesamt für Umwelt, Bern. S. 50