

# Publications

## ■ EFI series

- Winkel, G. (ed.) Towards a sustainable European forest-based bioeconomy – assessment and the way forward. *What Science Can Tell Us* 8, 2017
- Sotirov, M. (ed.) Natura 2000 and forests: Assessing the state of implementation and effectiveness. *What Science Can Tell Us* 7, 2017
- Hetemäki, L., Hanewinkel, M., Muys, B., Ollikainen, M., Palahí, M. and Trasobares, A. Leading the way to a European circular bioeconomy strategy. *From Science to Policy* 5, 2017
- Tognetti, R., Scarascia Mugnozza, G. and Hofer, T. (eds.) Mountain Watersheds and Ecosystem Services: Balancing multiple demand of forest management in head-watersheds. Technical Report 101. 2017.
- Rougieux, P., Van Brusselen, J., Lovrić, M., Kiljunen, J., Varis, S. and Zudin, S. The Forest Products Trade Flow Database – A reproducible method and tool to support the analysis of international forest products trade. Technical Report 100, 2017.

## ■ Peer-reviewed articles

- Auty, D., Moore, J., Achim, A., Lyon, A., Mochan, S., and Gardiner, B. Effects of early re-spacing on the density and microfibril angle of Sitka spruce wood. *Forestry* 91(3): 307–319. First published on line 2017 at <https://doi.org/10.1093/forestry/cpx004>
- Bauhus J., Forrester D.I., Gardiner B., Jactel H., Vallejo R. and Pretzsch H. Ecological Stability of Mixed-Species Forests. In: Pretzsch H., Forrester D., Bauhus J. (eds) *Mixed-Species Forests*. Springer, Berlin, Heidelberg. Pp. 337–382. [https://doi.org/10.1007/978-3-662-54553-9\\_7](https://doi.org/10.1007/978-3-662-54553-9_7)
- Bechini, L., Koenderink, N., ten Berge, H.F.M., Corre, W., van Evert, F.K., Facchi, A., Gharsallah, O., Gorriz-Mifsud, E., Grignani, C., den Herder, M., Hily, Y., Justes, E., Lepennetier, A., Moretti, B., Newell-Price, P., Nonini, L., Oberti, R., Ramonteu, S., Rois, M., de Ruijter, F., Sacco, D., Schuler, P.M., Willems, D., Zandstra, A. and Top, J. Improving access to research outcomes for innovation in agriculture and forestry: the VALERIE project. *Italian Journal of Agronomy* 12(2).
- Blondet, M., De Koning, J., Borrass, L., Ferranti, F., Geitznauer, M., Weiss, G., Turnhout, E. and Winkel, G. Participation in the implementation of Natura 2000: a comparative study of six EU member states. *Land Use Policy* 66: 346–355.
- Borrass, L.; Kleinschmit, D. and Winkel, G. The “German model” of integrative multifunctional forest management. Analysing the emergence and political evolution of a forest management concept. *Forest Policy and Economics* 77: 16–23.
- Brocknerhoff, E.G., Barbaro, L., Castagneyrol, B., Forrester, D.I., Gardiner, B., González-Olabarria, J.R., Lyver, P. O’B., Meurisse, N., Oxbrough, A., Taki, H., Thompson, I.D., van der Plas, F. and Jactel, H. Forest biodiversity, ecosystem functioning and the provision of ecosystem services. *Biodiversity and Conservation* 26: 3005–3035. <https://doi.org/10.1007/s10531-017-1453-2>
- Burns, S. L., Brukas, V., Krott, M. and Giessen, L. Trends in European forest policy research. *Forest Policy and Economics* 83: 179–180.
- Burns, S.L., Krott, M., Sayadyan, H. and Giessen L. The World Bank improving environmental and natural resource policies: power, deregulation, and privatization in (post-Soviet) Armenia. *World Development* 92: 215–224.
- Carvalho de, E. F. and Giessen, L. Los progresos y retrocesos del ordenamiento normativo forestal brasileño: pobre gobernanza forestal y acelerada deforestación [Progress and setbacks of the Brazilian forest regulatory system: poor forest governance and rapid deforestation]. *Revista de Direito Ambiental* 22(86): 97–136.
- Csilléry, K., Kunstler, G., Courbaud, B., Allard, D., Lassegues, P., Haslinger, K. and Gardiner, B. Coupled effects of wind-storms and drought on tree mortality across 115 forest stands from the Western Alps and the Jura mountains. *Global Change Biology* 23: 5092–5107. <https://doi.org/10.1111/gcb.13773>
- D’Amato, D., Droste, N., Allen, B., Kettunen, M., Lähinen, K., Korhonen, J., Leskinen, P., Matthies, B.D. and Toppinen, A. Green, circular, bio economy: A comparative analysis of sustainability avenues. *Journal of Cleaner Production* 168: 716–734.
- De Luca, A.I., Iofrida, N., Leskinen, P., Stillitano, T., Falcone, G., Strano, A. and Gulisano, G. Life cycle tools combined with multi-criteria and participatory methods for agricultural sustainability: Insights from a systematic and critical review. *Science of the Total Environment* 595: 352–370.
- den Herder, M., Kurttila, M., Leskinen, P., Lindner, M., Haatanen, A., Sironen, S., Salminen, O., Juusti, V., Holma, A. Is enhanced biodiversity protection conflicting with ambitious bioenergy targets in eastern Finland? *Journal of Environmental Management* 187: 54–62. <https://doi.org/10.1016/j.jenvman.2016.10.065>
- den Herder, M., Moreno, G., Mosquera-Losada, R.M., Palma, J.H.N., Sidiropoulou, A., Santiago Freijanes, J.J., Crous-Duran, J., Paulo, J.A., Tomé, M., Pantera, A., Papanastasis, V.P., Mantzanas, K., Pachana, P., Papadopoulos, A., Plieninger, T., Burgess, P.J. Current extent and stratification of agroforestry in the European Union. *Agriculture, Ecosystems & Environment* 241: 121–132. <https://doi.org/10.1016/j.agee.2017.03.005>
- García de Jalon, S., Burgess, P.J., Graves, A., Moreno, G., McAdam, J., Pottier, E., Novak, S., Bondesan, V., Mosquera M.R., Crous-Duran, J., Palma, J.H.N., Paulo, J.A., Oliveira, T., Cirou, E., Hannachi, Y., Pantera, A., Wartelle, R., Kay, S., Malignier, N., Van Lerberghe, P., Tsonka, P., Mirck, J., Rois, M., Kongsted, A.G., Thenail, C., Luske, B., Berg, S., Gosme, M., Vityi, A. How is agroforestry perceived in Europe? An assessment of positive and negative aspects by stakeholders. *Agroforestry Systems*. <https://doi.org/10.1007/s10457-017-0116-3>

- Geitzenauer, M., Blondet, M., De Koning, J., Ferranti, F., Sotirov, M., Weiss, G. and Winkel, G. The challenge of financing the implementation of Natura 2000. Empirical evidence from six European Union Member States. *Forest Policy and Economics* 82: 2–13.
- Giessen, L. and Sahide, M.A.K. Blocking, attracting, imposing, and aligning: The utility of ASEAN forest and environmental regime policies for strong member states. *Land Use Policy* 67: 13–26.
- Haara, A., Store, R. and Leskinen, P. Analyzing uncertainties and estimating priorities of landscape sensitivity based on expert opinions. *Landscape and Urban Planning* 163: 56–66.
- Harrison, P. A., Dunford, R., Barton, D. N., Kelemen, E., Martin-Lopez, B., Norton, L., Termansen, M., Saarikoski, H., Hendriks, K., Gomez-Baggethun, E., Czúcz, Bálint; Garcia-Llorente, M., Howard, D., Jacobs, S., Karlsen, M., Kopperoinen, L., Madsen, A., Rusch, G., Eupen, M. van, Verweij, P., Smith, R., Tuomasjukka, D. and Zulian, G. Selecting methods for ecosystem service assessment: A decision tree approach. *Ecosystem Services*. <https://doi.org/10.1016/j.ecoser.2017.09.016>
- Hart, E., Sims, K., Kamimura, K., Gardiner, B. A Hybrid Method for Feature Construction and Selection to Improve Wind-Damage Prediction in the Forestry Sector. *GECCO '17 Proceedings of the Genetic and Evolutionary Computation Conference*. Pp. 1121–1128. <https://doi.org/10.1145/3071178.3071217>
- Jactel, H., Boberg, J., Bonal, D., Castagneyrol, B., Gardiner, B., Gonzalez-Olabarria, J.R., Koricheva, J., Meurisse, N. and Brockerhoff, E.G. Tree diversity drives forest stand resistance to natural disturbances. *Current Forestry Report*. <https://doi.org/10.1007/s40725-017-0064-1>
- Jasinevičius, G., Lindner, M., Cienciala, E. and Tykkyläinen, M. Carbon Accounting in Harvested Wood Products: Assessment Using Material Flow Analysis Resulting in Larger Pools Compared to the IPCC Default Method. *Journal of Industrial Ecology*. <https://doi.org/10.1111/jiec.12538>
- Jasinevičius, G., Lindner, M., Verkerk, P.J. and Aleinikovas, M. Assessing impacts of wood utilisation scenarios for a Lithuanian bioeconomy on carbon in forests and harvested wood products and on the socio-economic performance of the forest sector. *Forests*.
- Kamimura, K., Gardiner, B., and Koga, S. Observations and predictions of wind damage on *Larix kaempferi* trees following pre-commercial thinning. *Forestry*. <https://doi.org/10.1093/forestry/cpx006>
- Karvonen, J., Halder, P., Kangas, J. and Leskinen, P. Indicators and tools for assessing sustainability impacts of the forest bioeconomy. *Forest Ecosystems* 4.
- Konczal, A. A. Forest anthropology. Foresters – perception and formation of visions of nature in Poland [in Polish]. Warsaw-Poznan: Polish Academy of Science Press, Adam Mickiewicz University Press.
- Konczal, A. A. Trees of which a task is to remember. “Groves of a memory” in a duty of a forest mythopractice [in Polish] *Czas Kultury* 3.
- Kraus D., Schuck A., Bebi P., Blaschke M., Bütler R., Flade M., Heintz W., Krumm F., Lachat T., Larrieu L., Lehnerova L., Levin M., Mergner U., Pach M., Paillet Y., Pyttel P., Rydkvist T., Santopuoli G., Sever K., Sturm K., Vandekerkhove K., Winter S. and Witz, M. Spatially explicit database of tree related microhabitats (TreMs). Version 1.2. Integrate+ project. Published by Institut National de la Recherche Agronomique (INRA).
- Leipold, S. and Winkel, G. Discursive Agency: (Re) Conceptualising actors and practices in the analysis of discursive policy making. *Policy Studies Journal* 45: 510–534.
- Lindner, M. and Suominen, T. Towards a sustainable bioeconomy. *Scandinavian Journal of Forest Research* 32(7): 549–550. <https://doi.org/10.1080/02827581.2017.1357329>
- Locatelli, T., Tarantola, S.; Gardiner, B. and Patenaude, G. Variance-based sensitivity analysis of the ForestGALES wind risk model – model behaviour and lessons for forest modelling. *Environmental Modelling and Software* (87). <https://doi.org/10.1016/j.envsoft.2016.10.010>
- Logmani, J., Krott, M., Leczyk, M. and Giessen, L. Customizing elements of the International Forest Regime Complex in Poland? Non-implementation of a National Forest Programme and redefined transposition of NATURA 2000 in Białowieża Forest. *Forest Policy and Economics* 74: 81–90.
- Lotze-Campen, H., Verburg, P.H., Popp, A., Lindner, M., Verkerk, P.J., Moiseyev, A., Schrammeijer, E., Helming, J., Tabeau, A., Schulp, C.J.E., van der Zanden, E.H., Lavalley, C., e Silva, F.B., Walz, A. and Bodirsky, B. A cross-scale impact assessment of European nature protection policies under contrasting future socio-economic pathways. *Regional Environmental Change*. First online 16 May 2017. <https://doi.org/10.1007/s10113-017-1167-8>
- Maier, C. and Winkel, G. Implementing nature conservation through integrated forest management: a street-level bureaucracy perspective on the German public forest sector. *Forest Policy and Economics* 82: 14–19.
- Moore, J., Gardiner, B. and Sellier, D. *Tree Mechanics and Wind Loading*. Plant Biomechanics. Springer.
- Mouchet, M.A., Paracchini, M.L., Schulp, C.J.E., Stürck, J., Verkerk, P.J., Verburg, P.H. and Lavorel, S. Bundles of ecosystem (dis)services and multifunctionality across European landscapes. *Ecological Indicators*, Pp. 23–28. <https://doi.org/10.1016/j.ecolind.2016.09.026>
- Mouchet, M.A., Rega, C., Lasseur, R., Georges, D., Paracchini, M.-L., Renaud, J., Stürck, J., Schulp, C.J.E., Verburg, P.H., Verkerk, P.J. and Lavorel, S. Ecosystem service supply by European landscapes under alternative land-use and environmental policies. *International Journal of Biodiversity Science, Ecosystem Services & Management*. Pp. 1–13. <https://doi.org/10.1080/21513732.2017.1381167>

- Mustalahti, I., Cramm, M., Ramcilovic-Suominen, S. and Tegegne Y.T. Resources and rules of the game: Participation of Civil Society in REDD+ and FLEGT-VPA processes in Lao PDR. *Forests* 8(2): 50. <https://doi.org/10.3390/f8020050>
- Myllyviita, T., Antikainen, R. and Leskinen, P. Sustainability assessment tools – their comprehensiveness and utilisation in company-level sustainability assessments in Finland. *International Journal of Sustainable Development & World Ecology* 24(3): 236–247.
- Orazio, C., Cordero Montoya, R., Régolini, M., Borges, J., Garcia-Gonzalo, J., Barreiro, S., Botequim, B., Marques, S., Sedmák, R., Smreček, R., Brodrechtová, Y., Brukas, V., Chirici, G., Marchetti, M., Moshammer, R., Biber, P., Corrigan, E., Eriksson, L., Favero, M., Galev, E., Hengeveld, G., Kavaliauskas, M., Mozgeris, G., Navrátil, R., Nieuwenhuis, M., Paligorov, I., Pettenella, D., Stanislavaitis, A., Tomé, M., Trubins, R., Tuček, J., Vizzarri, M., Wallin, I., Pretzsch, H. and Sallnäs O. Decision Support Tools and Strategies to Simulate Forest Landscape Evolutions Integrating Forest Owner Behaviour: A Review from the Case Studies of the European Project, INTEGRAL. *Sustainability* 9(4): 599. <https://doi.org/10.3390/su9040599>
- Poëtte, C., Gardiner B., Dupont, S., Brunet, Y., Böhm, M., Harman, I., Finnigan, J. and Hughes, D. The impact of landscape fragmentation on atmospheric flow: a wind tunnel study. *Boundary-Layer Meteorology*. <https://doi.org/10.1007/s10546-017-0238-1>
- Rahman, R. and Giessen, L. Formal and informal interests of donors to allocate aid: Spending patterns of USAID, GIZ, and EU forest development policy in Bangladesh. *World Development* 94: 250–267.
- Reyer, C.P.O., Bathgate, S., Blennow, K., Borges, J.G., Bugmann, H., Delzon, S., Faias, S.P., Garcia-Gonzalo, J., Gardiner, B., Gonzalez-Olabarria, J.R., Gracia, C., Guerra Hernández, J., Kellomäki, S., Kramer, K., Lexer, M.J., Lindner, M., van der Maaten, E., Maroschek, M., Muys, B., Nicoll, B., Palahi, M., Palma, J.H.N., Paulo, J.A., Peltola, H., Pukkala, T., Rammer, W., Ray, D., Sabaté, S., Schelhaas, M.-J., Seidl, R., Temperli, C., Tomé, M., Yousefpour, R., Zimmermann, N.E. and Hanewinkel, M. Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests? *Environment Research Letters* (12). <https://doi.org/10.1088/1748-9326/aa5ef1>
- Rois-Díaz, M., Lovric, N., Lovric, M., Ferreiro-Domínguez, N., Mosquera-Losada, M.R., den Herder, M., Graves, A., Palma, J.H.N., Paulo, J.A., Pisanelli, A., Smith, J., Moreno, G., García, S., Varga, A., Pantera, A., Mirck, J. and Burgess, P. Farmers' reasoning behind the uptake of agroforestry practices: evidence from multiple case-studies across Europe. *Agroforestry Systems* 1–18. <https://doi.org/10.1007/s10457-017-0139-9>
- Saikku, L., Tainio, P., Hilden, M., Antikainen, R., Leskinen, P. and Koskela, S. Diffusion of solar electricity in the network of private actors as a strategic experiment to mitigate climate change. *Journal of Cleaner production* 142: 2730–2740.
- Sarker, P., Rahman, S. and Giessen, L. Empowering state agencies through national and international community forestry policies in Bangladesh. *International Forestry Review* 19(1): 79–101.
- Seppälä, J., Leskinen, P. and Myllyviita, T. Expert Panel Weighting and Aggregation of the Sustainable Society Index (SSI) 2010 – a Decision Analysis Approach. *Sustainable Development* 25: 322–335.
- Singer, B. and Giessen, L. Towards a donut regime? Domestic actors, climatization, and the hollowing-out of the international forests regime in the Anthropocene. *Forest Policy and Economics* 79: 69–79.
- Sotirov, M., Stelter, M. and Winkel, G. The Emergence of the European Union Timber Regulation: How Baptists, Bootleggers, Devil Shifting and Moral Legitimacy Drive Change in the Environmental Governance of Global Timber Trade. *Forest Policy and Economics* 81: 69–81.
- Suominen, T., Kunttu, J., Tuomasjukka, D., Jasinevičius, G. and Lindner, M. Trade-offs in sustainability impacts of introducing cascade use of wood. *Scandinavian Journal of Forest Research* 32(7): 588–597. <https://doi.org/10.1080/02827581.2017.1342859>
- Tegegne, Y.T., Ramcilovic-Suominen, S., Fobissie, K., Visseren-Hamakers, M.I.J., Lindner, M. and Kanninen, M. Synergies among social safeguards in FLEGT and REDD + in Cameroon. *Forest Policy Economics* 75: 1–11. <http://dx.doi.org/10.1016/j.forpol.2016.11.005>
- Tuomasjukka, D., Athanassiadis, D. and Vis, M. Threefold Sustainability Impact Assessment method expansion for renewable energy value chains. *International Journal of Forest Engineering* 28: 116–122. <https://doi.org/10.1080/14942119.2017.1318549>
- van der Zanden, E.H., Verburg, P.H., Schulp, C.J.E. and Verkerk, P.J. Trade-offs of European agricultural abandonment. *Land Use Policy* 62: 290–301. <https://doi.org/10.1016/j.landusepol.2017.01.003>
- Verkerk, P., Sánchez, A., Libbrecht, S., Broekman, A., Bruggeman, A., Daly-Hassen, H., Giannakis, E., Jebari, S., Kok, K., Krivograd Klemenčić, A., Magjar, M., Martinez de Arano, I., Robert, N., Smolar-Žvanut, N., Varela, E., Zoumides, C. A Participatory Approach for Adapting River Basins to Climate Change. *Water* 9(12), 958. <https://doi.org/10.3390/w9120958>
- Winkel, G., Leipold, S., Buhmann, K., Cashore, B., De Jong, W., Nathan, I., Sotirov, M. and Stone, M. Narrating illegal logging across the globe. *Between Green Protectionism and Sustainable Resource Use. International Forestry Review* 19: 1–17.
- Yousefpour, R., Temperli, C., Jacobsen, J.B., Thorsen, B.J., Meilby, H., Lexer, M.J., Lindner, M., Bugmann, H., Borges, J.G., Palma, J.H.N., Blennow, K., Ray, D., Zimmermann, N.E., Delzon, S., Kremer, A., Kramer, K., Rey, C., Lasch, P., Garcia-Gonzalo, J. and Hanewinkel, M. Framework for modelling adaptive management and decision-making in forestry under climate change. *Ecology and Society* 22.
- Yusran, Y., Sahide, A., Supratman, S., Sabar, A., Krott, M., and Giessen, L. The empirical visibility of land use conflicts: From latent to manifest conflict through law enforcement in a national park in Indonesia. *Land Use Policy* 62: 302–315.

### ■ Other peer-reviewed

- Arifi, B., Shawn, B., Winkel, G. and Ruppert-Winkel, G. The Simmern Solidarity Pact – Reconciling Income Imbalances between Villages. In: Bieling, C. & Plieninger, T. *The Science and Practice of Landscape Stewardship*. Cambridge University Press. Pp. 181–183.
- Arifi, B., Winkel, G. and Ruppert-Winkel, C. Landscape stewardship in wind energy conflicts: between cultural myths and interests. In: Bieling, C. and Plieninger, T. *The Science and Practice of Landscape Stewardship*. Cambridge University Press. Pp. 167–181.
- Hapca, A., Price, A., Gardiner, B. and Macdonald, E. *Methods for Assessing Stem Straightness* Forestry Commission Technical Note 21, Forestry Commission, Edinburgh.
- Konczal, A. A. Telling (hi)stories in the Anthropocene. When forest is multispecies relation. In: eds. E. Kavalski, S. Hobden, E. Cudworth. *Posthuman Dialogues in International Relations*. London: Routledge. Pp. 53–67.
- Lindner, M., Dees, M.G., Anttila, P., Verkerk, P.J., Fitzgerald, J., Datta, P., Glavonjic, B., R., P. and Zudin, S. Assessing Lignocellulosic Biomass Potentials From Forests and Industry. In: Panoutsou, C. (Ed.), *Modeling and Optimization of Biomass Supply Chains. Top-Down and Bottom-up Assessment for Agricultural, Forest and Waste Feedstock*. Academic Press. Pp. 127–159.
- Schelhaas, M.-J., Nabuurs, G.-J., Verkerk, P.J., Hengeveld, G., Packalen, T., Sallnäs, O., Pilli, R., Grassi, G., Forsell, N., Frank, S., Gusti, M. and Havlik, P. *Forest Resource Projection Tools at the European Level*. In: Barreiro, S., Schelhaas, M.-J., McRoberts, R.E., Kändler, G. (eds.). *Forest Inventory-based Projection Systems for Wood and Biomass Availability*. Springer. Pp. 49–68. <https://www.springer.com/us/book/9783319561998>