

BRIEF LOG SHEET: How natural forest expansion in Europe can offer cost-effective benefits to people

Delbaere Consulting was contracted on behalf of BiodivERsA by the Royal Belgian Institute of Natural Sciences (RBINS)/Belgian Science Policy Office (BELSPO) to produce a policy brief based on the results of the [SPONFOREST project](#) co-funded by the [BiodivERsA call 2015-2016](#), with the national funders ANR (France), DFG (Germany), MINECO (Spain), and FCT (Portugal) as well as the European Commission.

Knowledge and methodology used

The Policy Brief 'How natural forest expansion in Europe can offer cost-effective benefits to people' is based on the scientific results of the named project. The Brief extracts and summarises some key results of the project and provides a list of relevant policy recommendations linked to current EU policy processes. The Brief was drafted by Delbaere Consulting, in consultation with the BiodivERsA Policy briefs Working Group, and with researchers from the respective project. The topic of the brief was proposed bottom-up by the SPONFOREST researchers through a call for topics launched early 2020, and ultimately selected based on feedbacks from the BiodivERsA Advisory Board and Policy briefs Working Group. Initial scoping of content and possible messages was done during a virtual meeting with the project partners in August 2020, facilitated by the BiodivERsA science-policy/science-society officer. Delbaere Consulting consulted all relevant SPONFOREST outcomes as supplied by the BiodivERsA secretariat. All sources used are listed below.

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Sources of information consulted for key research findings

Peer-reviewed scientific publications used:

- Acuña-Míguez B., Valladares F. & Martín-Forés I. (2020) Both Mature Patches and Expanding Areas of *Juniperus thurifera* Forests Are Vulnerable to Climate Change But for Different Reasons. *Forests* 11(9): 960.
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- Boivin T., Doublet V. & Candau J.N. (2018) The ecology of predispersal insect herbivory on tree reproductive structures in natural forest ecosystems. *Insect Science* 26: 182-198.
- Castagneyrol B., Giffard B., Valdés-Correcher E. & Hampe A. (2019) Tree diversity effects on leaf insect damage on pedunculate oak: the role of landscape context and forest stratum. *Forest Ecology and Management* 433: 287-294.
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- Hampe A., Alfaro-Sánchez R. & Martín-Forés I. (2020) Establishment of second-growth forests in human landscapes: ecological mechanisms and genetic consequences. *Annals of Forest Science* 77: 87.
- Lamonica D., Pagel J., Valdés-Correcher E., Bert D., Hampe A. & Schurr F.M. (2020) Growth potential varies more than competition among spontaneously established forest stands of Pedunculate oak (*Quercus robur*). *Annals of Forest Science* 77: 80.
- Martín-Forés I., Magro S., Bravo-Oviedo A., Alfaro-Sánchez R., Espelta J.M., Frei T., Valdés-Correcher E., Rodríguez Fernández-Blanco C., Winkel G., Gerzabek G., González-Martínez S.C., Hampe A. & Valladares F. (2020) Spontaneous forest regrowth in South-West Europe: consequences for nature's contributions to people. *People and Nature* 3
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- Ruíz-Carbayo H., Pino J., Bonal R., James P.A., Hampe A. & Espelta J.M. (2020) Insect herbivory in novel *Quercus ilex* L. forests: the role of landscape attributes, forest composition and host traits. *Annals of Forest Science* 77: 32.
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Other research papers consulted to contextualise and corroborate the BiodivERSA research findings, not cited in the policy brief itself:

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- Meli P., Holl K.D., Rey Benayas J.M., Jones J.P., Jones P.C., Montoya D. & Moreno Matteos D. (2017) A global review of past land use, climate, and active vs. passive restoration effects on forest recovery. *PLoS One*

Relevant EU policy instruments and their websites:

- Our life insurance, our natural capital: an EU Biodiversity Strategy to 2020 (COM(2011) 244) - https://ec.europa.eu/environment/nature/biodiversity/strategy_2020/index_en.htm
- EU Biodiversity Strategy for 2030: Bringing nature back into our lives (COM/2020/380) - https://ec.europa.eu/environment/nature/biodiversity/strategy/index_en.htm
- The European Green Deal (COM(2019) 640) - https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
- EU Forest Strategy: for forests and the forest-based sector (COM/2013/0659) - <https://ec.europa.eu/info/food-farming-fisheries/forestry/forestry-explained>
- EU Communication on Stepping up EU Action to Protect and Restore the World's Forests (COM(2019) 352) - https://ec.europa.eu/environment/forests/eu_comm_2019.htm
- New EU adaptation strategy – blueprint - <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12381-EU-Strategy-on-Adaptation-to-Climate-Change/public-consultation>
- Common agricultural policy (CAP) and rural development - https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/rural-development_en
- Future CAP - https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap_en
- Green Infrastructure (GI) – Enhancing Europe's Natural Capital (COM(2013) 0249) https://ec.europa.eu/environment/nature/ecosystems/strategy/index_en.htm
- Proposal for a European Climate Law - https://ec.europa.eu/clima/policies/eu-climate-action/law_en