

Jordi Garcia Gonzalo

Publications

Doctoral thesis

2007

Garcia-Gonzalo, J., Effects of management on timber production and carbon stocks in boreal forest ecosystem under changing climate: a model based approach. 2007. Thesis dissertation. *Dissertationes Forestales 42*, The Finish Society of forest Science. ISBN 978-951-651-173-6. <http://www.metla.fi/dissertations/df42.htm>

Papers in internationally peer-reviewed journals

2009

Borges P.J., Fragoso R., **Garcia-Gonzalo J.**, Borges J. G., Marques S., Lucas, M.R. Assessing impacts of Common Agricultural Policy changes on regional land use patterns with a decision support system. An application in Southern Portugal. *Forest Policy and Economics*. In print.

Zeng, H., Peltola, H., **Garcia-Gonzalo, J.**, and Kellomäki, S. The effects of forest structure on the risk of wind damage in a boreal forest ecosystem. *Annals of forest science*. In print.

Marcus Lindner, Tommi Suominen, Taru Palosuo, **Jordi Garcia-Gonzalo**, Peter Verweij, Sergey Zudin, Risto Päivinen. ToSIA – A Tool for Sustainability Impact Assessment of Forest-Wood-Chains. Submitted. *Ecological Modelling*. In print.

Lindner, M, Maroschek, M., Netherer, S., Kremer, A., Barbatie, A., **Garcia-Gonzalo, J.**, Seidl, R., Delzon, S., Corona, P., Kolström, M., Lexer, M.J., Marchetti, M. Potential impacts, adaptive capacity, and vulnerability of forests to climate change in Europe. *Forest Ecology and Management*. In print.

2008

Garcia-Gonzalo, J., Jäger, D., Lexer, M.J., Peltola, H., Briceño-Elizondo, E., and Kellomäki, S. 2008. Does climate change affect optimal planning solutions for multi-objective forest management? *Allgemeine Forst und Jagdzeitung (AFJZ)*. Volume 179. Issue 5-6/2008, pp 78-95.

Briceño-Elizondo, E., Jäger D., Lexer, M., **Garcia-Gonzalo, J.**, Peltola, H., Kellomäki, S. 2008. Multi-criteria evaluation of multi-purpose stand treatment programmes for Finnish boreal forests under changing climate. *Ecological Indicators*, Volume 8, Issue 1, pp 26-45. <http://dx.doi.org/10.1016/j.ecolind.2006.12.001>

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Garcia-Gonzalo, J., Peltola, H., Briceño-Elizondo, E., Kellomäki, S. 2007. Changed thinning regimes may increase carbon stock under climate change: A case study from a Finnish boreal forest. *Climatic Change*. Volume 81, Issues 3-4, pp 431-454. <http://dx.doi.org/10.1007/s10584-006-9149-8>

Garcia-Gonzalo, J., Peltola, H., Zubizarreta-Gerendiain, A., and Kellomäki, S. 2007. Impacts of forest landscape structure and management on timber production and carbon stocks in the boreal forest ecosystem under changing climate. *Forest Ecology and Management* Volume 241, Issues 1-3, pp 243-257. <http://dx.doi.org/10.1016/j.foreco.2007.01.008>

Garcia-Gonzalo, J., Peltola, H., Briceño-Elizondo, E., Kellomäki, S. 2007. Effects of climate change and management on timber yield in boreal forests, with economic implications: A case study. *Ecological Modelling*, Volume 209, Issues 2-4, pp 220-234. <http://dx.doi.org/10.1016/j.ecolmodel.2007.06.021>

2006

Briceño-Elizondo, E., **Garcia-Gonzalo, J.**, Peltola, H., Matala, J., Kellomäki, S. 2006. Sensitivity of growth of Scots pine, Norway spruce and silver birch to climate change and forest management in boreal conditions. *Forest Ecology and Management*. Volume 232, Issues 1-3, pp 152-167. <http://dx.doi.org/10.1016/j.foreco.2006.05.062>

Briceño-Elizondo, E., **Garcia-Gonzalo, J.**, Peltola, H., Kellomäki, S., 2006. Carbon stocks and timber yield in two boreal forest ecosystems under current and changing climatic conditions subjected to varying management regimes. *Environmental Science and Policy*, Volume 9, Issue 3, pp 237-252. <http://dx.doi.org/10.1016/j.envsci.2005.12.003>

Papers in books (reviewed)

2008

Garcia-Gonzalo, J., Lexer, M.J., Peltola, H., Kellomäki, S. Designing a forested landscape in Finland under different climate scenarios. In von Gadow, K and Pukkala, T (Eds), 2008. *Designing Green Landscapes*. SpringerPub. ISBN: 978-1-4020-6758-7 (Print) 978-1-4020-6759-4 (Online). Volume 15: 215-241. http://dx.doi.org/10.1007/978-1-4020-6759-4_9

Garcia-Gonzalo, J., Peltola, H., Zubizarreta-Gerendiain, A., and Kellomäki, S. Analysing the effects of forest structure on carbon stocks and timber production under changing management and climate. In Bravo, F., Lemay, V., von Gadow, K., Jandl, R. (Ed) 2008. *Climate Change and Forest Management*, Springer Pub. ISBN: 978-1-4020-8342-6 (Print) 978-1-4020-8343-3 (Online). Volume 17: 195-218. http://dx.doi.org/10.1007/978-1-4020-8343-3_12

Other scientific papers, reports and/or proceedings

2008

Marcus Lindner, **Jordi Garcia-Gonzalo**, Marja Kolström, Tim Green, Ricardo Reguera, Michael Maroschek, Rupert Seidl, Manfred J. Lexer, Sigrid Netherer, Axel Schopf, Antoine Kremer, Sylvain Delzon, Anna Barbati, Marco Marchetti, Piermaria Corona. 2008. *Impacts of Climate Change on European Forests and Options for Adaptation*. . AGRI-2007-G4-06. Report to the European Commission Directorate-General for Agriculture and Rural Development. EFI publisher.

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Garcia-Gonzalo, J., Jäger, D., Lexer, M., Peltola, H., Briceño-Elizondo, E., Kellomäki, S. 2006. Optimisation of Forest Management Under Current and Changing Climate: a case study of a Finnish Management Unit. *Proceedings to the International Conference: "Managing Forest Ecosystems: the Challenges of Climate Change"*. Palencia, Spain. April 3rd to 7th -2006.

2005

Badeck, F-W., Fürstenau, C., Lasch, P., Peltola, H., **Garcia-Gonzalo, J.**, Briceño-Elizondo, E., Kellomäki, S., Lexer, M.J., Jäger, D., Lindner, M., Thiel, D.K., Kaipainen, T., Lehtikoinen, S.J., and Feliu, J., 2005. Kellomäki, S. Chapter 7. Adaptive Forest Management at Scale of Management Unit. In: Kellomäki, S. & Leinonen, S. (eds). Management of European Forests under Changing Climatic Conditions. Research Notes 163, University of Joensuu, Forest Faculty, pp. 315-382.

2004

Briceño-Elizondo, E., Jäger, D., Lexer, M.J., **Garcia-Gonzalo, J.**, Peltola, H., Väisänen, H., and Kellomäki, S. (2004): Regional assessment of climate change impact on forest production, carbon sequestration and biodiversity - A Finnish case study. Proceedings of the International Conference on Modeling Forest Production, 19 - 22, April 2004, Vienna, Austria.