

Dr. Juan A. Blanco

Senior Researcher ("Ramón y Cajal" research fellow)

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SCI publications: www.researcherid.com/rid/A-4554-2009

MAIN PROFESSIONAL ACHIEVEMENTS

- 15 years of scientific research specialized in ecological processes in forests, both at empirical (field work) and theoretical (modelling) levels.
- Expert knowledge in development, testing and application of ecological models to assess effects of forest management, climate, and natural disturbances on forest growth and carbon pools in forest ecosystems.
- Wide experience in scientific and technical writing: 36 scientific paper (27 in SCI journals), 6, books, 17 book chapters, 7 technical reports, as well as research projects and other academic publications for academia, government, NGOs and general public. Participant in several technical writing workshops.
- Demonstrated presentation and communication skills: 34 oral communications and 14 posters presented at international meetings (including the opening lecture at the 5th International Symposium on Sustainable Forest Management in Pinar del Rio, Cuba, on April 23rd 2008, and the opening lecture of the 3rd Meeting of the Forest Modelling Working Group of the Spanish Society of Forest Sciences, in Lugo, Spain on May 4th 2012).
- Demonstrated collaboration and networking skills: professional relationships with international research teams from Canada, China, Spain, Cuba, USA and Taiwan, in addition to an extensive contact network in Mexico, Finland and Germany.
- Important teaching skills developed working as Instructor of Forestry 202 (Forest Ecology) at the University of British Columbia, and the organization of three international workshops on the use of ecological models for forest management in China, Spain and Cuba. Participant in courses of professional development and teaching for international students.
- Clear leadership and supervision skills, obtained during the coordination and management of scientific research projects and supervising graduate students, and organizing the 11th Congress of the Spanish Association of Terrestrial Ecology in May 6th-10th, 2013).

EDUCATION

1998 – 2004. **Ph.D. in Forest Ecology.** Universidad Pública de Navarra, Pamplona. (UPNA – Public University of Navarre)

PhD Thesis: *The practice of forest thinning and its influence on nutrient cycling in two Scots pine stands in the Navarrese Pyrenees* (in Spanish). Marked as Outstanding *Cum Laude*.

1993 – 1998. **Diploma in Agricultural Engineering.** UPNA.

LANGUAGES

Spanish: Mother language.

English: high proficiency and working capacity at both languages (speaking, writing and listening). Cambridge Proficiency Level (C2).

Mandarin Chinese: Basic reading, speaking and listening skills (1st year at the Spanish National Language School).

WORKING EXPERIENCE

- 2012 – Present **SENIOR RESEARCHER**
Departamento de Ciencias del Medio Natural, UPNA, Pamplona, Navarra, Spain.
- 2009 – Present **ADJUNT PROFESSOR**
International Research Center of Spatial-Ecology and Ecosystem Ecology, Zhejiang Forestry University, Lin-An, Zhejiang, P.R. China.
- 2011– Present **ASSOCIATED CONSULTANT**
DPI Territorial Inc., Vancouver, British Columbia, Canada.
2011. **RESEARCH ASSOCIATE**
Dep. Forest Sciences, University of British Columbia. Vancouver, BC, Canada.
- 2008 – 2011. **ASSOCIATED CONSULTANT**
FOR_{rx} Consulting Inc., Belcarra, BC, Canada.
- 2007 – 2010. **POSTDOCTORAL RESEARCH FELLOW**
Dep. Forest Sciences, UBC. Vancouver, BC, Canada.
- 2004 – 2006. **VISITING SCIENTIST**
Dep. of Forest Sciences, UBC. Vancouver, BC, Canada.
- 1999 – 2004. **RESEARCH ASSISTANT**
Dep. Ciencias del Medio Natural, UPNA. Pamplona, Navarre, Spain.
- 1998 – 1999 **RESEARCH ASSISTANT**
Herbarium Escuela Técnica Superior de Ingenieros Agrónomos, UPNA, Pamplona, Navarre, Spain

TEACHING EXPERIENCE

- 2011 – 2012. **Instructor** of *Forest Ecology* (FRST 202) in the Faculty of Forestry, University of British Columbia.
- 2007 – 2010. **Guest Instructor** in FRST 202 in the Faculty of Forestry, University of British Columbia. Instructors: Dr. Brad Seely and Dr. Hamish Kimmins.
- 2007 – 2010. **Lab instructor** in FRST 202 in the Faculty of Forestry, University of British Columbia. Instructors: Dr. Brad Seely and Dr. Hamish Kimmins.
2009. Participant in the course **Instructional Skills Program for International Teaching Assistants**, taught by the UBC Centre for Intercultural Communication (University of British Columbia), Vancouver, Canada. January 14th – March 18th.
2009. **Instructor and organizer** of the technical workshop “Simulating effects of acid rain in forests”, at Zhejiang Forestry University, Hangzhou, P.R. China. 80 hours.
2005. **Instructor and organizer** of the international technical workshop “forest models to simulate ecosystems”, at the Universidad de Pinar del Río, Pinar del Río, Cuba, 50 hours.
2005. **Instructor and organizer** of the technical workshop “FORECAST: Ecological forest model” at the Universidad de Lleida, Lleida, Spain. 15 hours.

SCIENTIFIC EXPERIENCE

EXPERIENCE IN MANAGING RESEARCH PROJECTS

PROJECTS AS PRINCIPAL INVESTIGATOR

- 2013 – 2016. **Integration of ecological processes in forest models to assess long-term effects of management and global change on forests in southwestern Europe.** Entidad Financiadora. 7th European Framework Program (Marie Curie – Career Integration Grants). Project ECOPYREN3. € 100,000.

- 2013 – 2015. **Interacciones entre clima, gestión forestal y competencia interespecífica en bosques mixtos de pino albar y haya en el norte de la Península Ibérica.** Entidad Financiadora: Ministerio de Economía y Competitividad (Plan Nacional de I+D). Proyect AGL2012-33465. € 90,000.
- 2012 – 2014. **Long-term interactions between climate, species competition and forest management in scots pine / european beech mixed forests.** Funding agency: Ministerio de Ciencia e Innovación, Subprograma Ramón y Cajal (Madrid, Spain). € 15,000.
- 2012 **Integration of ecological processes in forest models to estimate the long-term effects of forest management and climate change in the Navarrese Pyrenees.** Funding agency: Gobierno de Navarra, Departamento de Educación, Programa ANABASI+D (Pamplona, Spain). € 26,823.
- 2011 – 2012. **Community fire interface biomass utilization for heating fuel** Funding agency: Pacific Institute For Climate Solutions (Victoria, Canada). \$ 50,000.
2011. **Assessing the effects of climate change on wildlife habitat in boreal forest reclamation** Funding agency: MITACS - Accelerate BC and FOR_{rx} Consulting Inc. (Vancouver, Canada). \$ 15,000.
2010. **Application of habitat suitability models in boreal forest reclamation** Funding agency: MITACS - Accelerate BC and FOR_{rx} Consulting Inc. (Vancouver, Canada). \$ 15,000.
2009. **Development of tree ring - climate relationships in boreal forests.** Funding agency: MITACS - Accelerate BC and FOR_{rx} Consulting Inc. (Vancouver, Canada). \$ 15,000.
2008. **Development and evaluation of an integrated modeling approach for a risk analysis of alternative oil sands reclamation strategies** Funding agency: MITACS - Accelerate BC and FOR_{rx} Consulting Inc. (Vancouver, Canada). \$ 15,000.
2006. **Evaluation of the ecosystem model FORECAST.** Funding agency: Departamento de Medioambiente del Gobierno Provincial de Navarra (Pamplona, Spain). € 30,000.
2005. **Development and validation of ecological models for sustainable forest management.** Funding agency: Ministerio de Educación de Spain (Madrid, Spain). € 30,000.

PARTICIPATION IN RESEARCH PROJECTS

- 2011 – 2013. **Vulnerability to drought and adaptive management of relictic forests of *Abies pinsapo*: a question of exhaustion of carbon reserves or hydraulic failure in the trees?** Funding agency: Ministerio de Ciencia e Innovación (Plan Nacional de I+D). I.P.: Jose Antonio Carreira de la Fuente, Universidad de Jaén. € 118,580.
2011. **Using red alder as an adaptation strategy to reduce environmental, social and economic risks of climate change in coastal British Columbia.** Funding agency: Future Forest Ecosystems Scientific Council Project B6. I.P.: Louise deMontigny, BC Ministry of Forest, Mines and Lands, \$ 319,884.
- 2009-2011. **Application of FORECAST software to assess sustainable productivity and carbon sequestration in major Chinese forests.** Funding agency: BC-China Innovation and Commercialization Strategic Development Program. B.C. Innovation Council - Chinese Ministry of Science and Technology. I.P. Adam Wei, University of British Columbia \$ 255,000.
- 2008-2009. **Defining boreal mixedwoods and exploring their response to management and natural disturbance (fire, MPB) through spatially-explicit, stand level, ecosystem management modeling.** Funding agency: Forest Science Program, B.C. Ministry of Forests.

I.P. Clive Welham, University of British Columbia, \$ 190,000.

2008. **Towards the application of SOM as a measure of ecosystem productivity in the Quesnel Forest District: deriving thresholds, determining effective sampling regimes, and evaluating practices.** Funding agency: Forest Science Program, B.C. Ministry of Forests. I.P. Brad Seely, University of British Columbia, \$ 70,000.
2007. **A Systems approach to integrating ecological, economic and social values within the SFM Framework for Tree Farm License 49.** Funding agency: Sustainable Forest Management Network - Network of Centres of Excellence. I.P. J.P. (Hamish) Kimmins, University of British Columbia, \$ 29,750.
2006. **Evaluation of an ecosystem-based approach to mixedwood modelling.** Funding agency: Forest Science Program - BC Ministry of Forests. I.P. J.P. (Hamish) Kimmins, University of British Columbia, \$ 49,350.
2005. **Complexity and scale in forest ecosystem management and agroforestry modeling.** Funding agency: NSERC. I.P. J.P. (Hamish) Kimmins, University of British Columbia, \$ 25,000.
- 2007 – 2009. **Sustainability of thinning in mixed forests in the Navarrese Pyrenees: Importance of spatial heterogeneity on nutrient cycling.** Funding agency: CICYT – Ministerio de Educación (Plan Nacional de I+D). I.P. Federico J. Castillo, Universidad Pública de Navarra, € 109,263..
- 2001 – 2005. **Sustainable management of natural resources** Funding agency: CSIC – Gobierno de Navarra. I.P. Federico J. Castillo, Universidad Pública de Navarra, € 90,151.
- 2000 – 2002. **Nutrient balance in two Scots pine stands in response to different thinning intensities.** Funding agency: Gobierno de Navarra. I.P. Federico J. Castillo, Universidad Pública de Navarra, € 23,391.
- 2000 – 2002. **Ecological functions of Mediterranean species in adverse environmental conditions.** Funding agency: CICYT. I.P. Federico J. Castillo, Universidad Pública de Navarra, € 40,388.
- 2000 – 2001. **Sustainable management of natural resources: nutrient balance in two Scots pine stands in response to different thinning intensities.** Funding agency: Universidad de Navarra. I.P. Federico J. Castillo, Universidad Pública de Navarra, € 6,000.

SCIENTIFIC PUBLICATIONS

SCIENTIFIC PAPERS (* = Science Citation Index journal)

- * **Blanco J.A.**, Dubois D., Littlejohn D., Flanders D., Robinson P., Welham C. 2013. Fire in the woods or fire in the boiler: implementing rural district heating to reduce wildfire risks in the forest-urban interface. *Process Safety and Environmental Protection*, in press.
- * Liu Y., Kang X., Wei X., Wang W., **Blanco J.A.**, Guo Y. 2013. Using the control method to determine the optimal selection cutting intensity based on long term observations from Changbai Mountain, Northeast China. *Forest Ecology and Management*, in press.
- * Wang F., Mladenoff D., Forrester J., **Blanco J.A.**, Scheller R., Peckham S., Keough C. 2013. Multi-Model Simulations of Long-Term Effects of Forest Harvesting on Ecosystem Productivity and C/N Cycling. *Ecological Applications*, in press.
- * Wang W., Wei X., Liao W., **Blanco J.A.**, Liu Y., Liu S., Liu G., Guo X., Guo S. 2013. Evaluation of

the effects of forest management strategies on carbon sequestration in evergreen broad-leaved (*Phoebe bournei*) plantation forests using FORECAST ecosystem model. *Forest Ecology and Management*, in press.

Blanco J.A. 2013. Beyond growth models: Hybrid ecological models in the context of sustainable forest management (in Spanish). *Cuadernos de la Sociedad Española de Ciencias Forestales*, 34, 11-25. ISSN 1575-2410.

* **Blanco J.A.** 2012. Forests may need centuries to recover their original productivity after continuous intensive management: an example from Douglas-fir. *Science of the Total Environment*, 437, 91-103.

* **Blanco J.A.**, Wei X., Jiang H. Jie C.Y., Xin Z.H. 2012. Enhanced nitrogen deposition in south-east China could partially offset negative effects of soil acidification on biomass production of Chinese fir plantations. *Canadian Journal of Forest Research*, 42: 437-450.

* Wei, X., **Blanco J.A.**, Jiang H., Kimmins J.P. 2012. Effects of nitrogen deposition on carbon sequestration in Chinese fir forests. *Science of the Total Environment*, 416, 351-361.

* **Blanco J.A.**, Imbert J.B., Castillo F.J. 2011. Thinning affects *Pinus sylvestris* needle decomposition rates and chemistry differently depending on site conditions. *Biogeochemistry*, 106, 397-414.

* Lo Y.-H., **Blanco J.A.**, Seely B., Welham C., Kimmins J.P. 2011. Generating reliable meteorological data in mountainous areas with scarce presence of weather records: the performance of MTCLIM in interior British Columbia, Canada. *Environmental Modelling & Software*, 26, 644-657.

* Schwab O., Maness T., Bull G.Q., Welham C., Seely B., **Blanco J.A.** 2011. Modelling the timber supply impact of introducing weevil-resistant spruce in British Columbia. *Forest Policy and Economics*, 13, 61-68.

* **Blanco J.A.**, González E. 2010. The legacy of forest management in tropical forests: analysis of its long-term influence with ecosystem-level model (in Spanish). *Forest Systems*, 19(2), 249-262.

* **Blanco J.A.**, González E. 2010. Exploring the sustainability of current management prescriptions for *Pinus caribaea* plantations in Cuba: a modelling approach. *Journal of Tropical Forest Science*, 22(2), 139-154.

* Lo Y.-H., **Blanco J.A.**, Kimmins J.P. 2010. A word of caution when projecting future shifts of tree species ranges. *The Forestry Chronicle*, 86(3), 312-316.

* Lo Y.-H., **Blanco J.A.**, Seely B., Welham C., Kimmins J.P. 2010. Relationships between Climate and Tree Radial Growth in Interior British Columbia, Canada. *Forest Ecology and Management*, 259, 932-942.

* Seely B., Welham C., **Blanco J.A.** 2010. Towards the application of soil organic matter as an indicator of ecosystem productivity: Deriving thresholds, developing monitoring systems, and evaluating practices. *Ecological Indicators*, 10, 999-1008.

Blanco J.A., Wei X. 2010. Atmospheric pollution and forest management in China's forests. *Branch Lines*, 21(1), 8-9. ISSN 1181-9936.

* **Blanco J.A.**, Imbert J.B., Castillo F.J. 2009. Thinning affects nutrient resorption and nutrient-use efficiency in two *Pinus sylvestris* stands in the Pyrenees. *Ecological Applications*, 19(3), 682-698.

* **Blanco J.A.**, Welham C., Kimmins J.P., Seely B., Mailly D. 2009. Guidelines for modeling natural regeneration in boreal forests. *The Forestry Chronicle*. 85(3), 427-439.

Flanders D., Sheppard S.R.J., **Blanco J.A.** 2009. The Potential for Local Bioenergy in Low-Carbon Community Planning. *Smart Growth on the ground: Prince George. Foundation research Bulletin #4.*

Smart growth BC, Vancouver, BC, Canada. 9 p.

* **Blanco J.A.**, Imbert J.B., Castillo F.J. 2008. Nutrient return via litterfall in two contrasting *Pinus sylvestris* forests in the Pyrenees under different thinning intensities. *Forest Ecology and Management*, 256(11), 1840-1852.

* Kimmins J.P., **Blanco J.A.**, Seely B., Welham C., Scoullar K. 2008. Complexity in Modeling Forest Ecosystems; How Much is Enough? *Forest Ecology and Management*, 256(10), 1646-1658.

* Seely B., Hawkins C., **Blanco J.A.**, Welham C., Kimmins J.P. 2008. Evaluation of a mechanistic approach to mixedwood modelling. *The Forestry Chronicle*, 84(2), 181-193.

Welham C., **Blanco J.A.**, Kimmins J.P. 2008. FORCEEE helps to manage mixedwoods. *Link*, 10(2), 12. ISSN 1709-917x.

* **Blanco J.A.**, Seely B., Welham C., Kimmins J.P., Seebacher T.M. 2007. Testing the performance of FORECAST, a forest ecosystem model, against 29 years of field data in a *Pseudotsuga menziesii* plantation. *Canadian Journal of Forest Research*, 37, 1808-1820.

* Bi J., **Blanco J.A.**, Kimmins J.P., Ding Y., Seely B., Welham C. 2007. Yield decline in Chinese Fir plantations: A simulation investigation with implications for model complexity. *Canadian Journal of Forest Research*, 37, 1615-1630.

* **Blanco J.A.** 2007. The representation of allelopathy in ecosystem-level forest models. *Ecological Modelling*, 209 (2-4), 65-77.

* **Blanco J.A.**, Imbert J.B., Castillo F.J. 2006. Influence of site characteristics and thinning intensity on litterfall production in two *Pinus sylvestris* L. forests in the Western Pyrenees. *Forest Ecology and Management*, 237 (1-3), 342-352.

* **Blanco J.A.**, Imbert J.B., Castillo F.J. 2006. Effects of thinning on nutrient pools in two contrasting *Pinus sylvestris* L. forests in the western Pyrenees. *Scandinavian Journal of Forest Research*, 21(2), 143-150.

* **Blanco J.A.**, Zavala M.A., Imbert J.B., Castillo F.J. 2005. Sustainability of forest management practices: Evaluation through a simulation model of nutrient cycling. *Forest Ecology and Management* 213 (1-3), 209-228.

Blanco J.A. 2005. La práctica de las claras y su influencia en el ciclo de nutrientes en dos bosques de pino Silvestre en los Pirineos Occidentales. *Ecosistemas*, 14(2), 182-188. ISSN 1697-2473.

Blanco J.A., Zavala M.A., Imbert J.B., Castillo F.J. 2004. Sostenibilidad del manejo forestal en bosques de *Pinus sylvestris* L. en los Pirineos Occidentales. *Cuadernos de la Sociedad Española de Ciencias Forestales* 18, 39-44. ISSN 1575-2410; ISBN 978-84-936854-0-9.

Castillo F.J., Imbert J.B., **Blanco J.A.**, Traver C., Puertas. F. 2003. Manejo forestal sostenible de *Pinus sylvestris* in los Pirineos. *Ecosistemas*, 12(3), 40-48. ISSN 1697-2473.

* Larraya L.M., Pérez G., Iribarren I., **Blanco J.A.**, Alfonso M., Pisabarro A.G., Ramírez, L. 2001. Relationship between Monokaryotic growth rate and mating type in the edible Basidiomycete *Pleurotus ostreatus*. *Applied and Environmental Microbiology* 67(8), 3385-3390.

BOOKS

Blanco JA. (Ed.) 2013. Application of ecological models for natural resource management (in Spanish). Omnia Science, Barcelona, Spain. In press.

Blanco J.A., Lo Y.-H. (Eds.) 2012. Forest Ecosystems: more than just trees. InTech, Rijeka, Croatia. 464 pp. ISBN: 978-953-51-0202-1.

Blanco J.A., Kheradmand H. (Eds.) 2011. Climate Change – Geophysical basis and ecological effects. InTech, Rijeka, Croatia. ISBN: 978-953-307-419-1.

Blanco J.A., Kheradmand H. (Eds.) 2011. Climate Change – Socioeconomic effects. InTech, Rijeka, Croatia. ISBN: 979-953-307-277-6.

Blanco J.A., Kheradmand H. (Eds.) 2011. Climate Change – Research and Technology for adaptation and mitigation. InTech, Rijeka, Croatia. ISBN: 979-953-307-278-3.

Kimmins J.P., **Blanco J.A.**, Seely B., Welham C., Scoullar K. 2010. Forecasting Forest Futures: A Hybrid Modelling Approach to the Assessment of Sustainability of Forest Ecosystems and their Values. Earthscan Ltd. London, UK. 281 pp. ISBN: 978-1-84407-922-3.

BOOK CHAPTERS

Blanco J.A., Littlejohn D., Dubois D., Flanders D., Robinson P. 2013. ¿Fuego en el bosque o en la caldera?: uniendo las cortas preventivas con la generación de energía. In: Blanco J.A. (Ed.) Application of ecological models for natural resource management (in Spanish). Omnia Science, Barcelona. In press.

Lo Y.-H., **Blanco J.A.**, Seely B., Kimmins J.P., Welham C. 2013. Testing of a tree productivity-Climate model with dendrochronological data. In: Zhang W.-J. (Ed.) *Network Biology: Theories, Methods and Applications*. Nova Science Publishers, NY. In press.

Welham C., **Blanco J.A.**, Seely B., Bampfylde C. 2012. Oil sands reclamation and the projected development of wildlife habitat attributes. In: Vitt. D.H. (Ed.) Reclamation and Restoration of Boreal Ecosystems: attaining sustainable development. Cambridge University Press, Cambridge, UK. ISBN 978-1107015715. In press.

Welham C., Seely B., **Blanco J.A.** 2012. Projected patterns of C storage in upland forests reclaimed after oil sands mining. In: Vitt. D.H. (Ed.) Reclamation and Restoration of Boreal Ecosystems: attaining sustainable development. Cambridge University Press, Cambridge, UK. ISBN 978-1107015715. In press.

Lo Y.-H., Lin Y.-C., **Blanco J.A.**, Yu C.-H., Guan B.T. 2012. Moving from ecological conservation to restoration: an example from central Taiwan, Asia. In: Blanco J.A., Lo, Y.-H. (Eds.) Forest Ecosystems: more than just trees. Pp 339-354. InTech, Rijeka, Croatia. ISBN: 978-953-307-667-6.

Lo Y.-H., **Blanco J.A.**, Kimmins, J.P., Seely B., Welham C. 2011. Linking climate change and forest ecophysiology to project future trends in tree growth: a review of forest models. In: Blanco J.A., Kheradmand H. (Eds.) 2011. Climate Change – Research and Technology for adaptation and mitigation. InTech, Rijeka, Croatia. Pp 63-86. ISBN: 979-953-307-278-3.

Welham C., **Blanco J.A.**, Kimmins J.P., Seely B. 2010. The utility and application of ecological models in agroforestry: the FORECAST family of models. In: Kellimore L.R. (Ed.) *Handbook of Agroforestry: Management, Practices and Environmental Impact*. Nova Science Publishers, NY. Pp 347-366. ISBN: 978-1-60876-359-7.

Kimmins J.P., **Blanco J.A.** 2010. Forest Management in Canada: A study in change. In: Chen J., Chao L., Laforteza R. (Eds.) *Landscape Ecology and Forest Management: Challenges and Solutions in a Changing Globe*. Springer, NY. Pp 46 – 72. ISBN: 978-3-642-12753-3.

Blanco J.A. 2010. Computer models for adaptive forest management: some examples from UBC. Pp 106-115 en: Méndez, P. F., L. Santamaría, J. Amezaga, G. Hearn. 2010. Adaptive Strategies for

Natural Resources and Ecosystems Management in Canada. Opportunities and Constraints for Implementation in Europe. Prepared for the International Council for Canadian Studies, by the Laboratory of Spatial Ecology. IMEDEA. Institutional Analysis and Policy Support, Technical Publications Series. ILSE-IAPS-TP-001. 121 pp.

Blanco J.A. 2010. The legacy of forest management: analyzing its influence on tree growth with ecosystem models. In: Karam W.P. *Tree Growth: Influences, layers and types*. Nova Science Publishers, NY. Pp 10-18. I SBN: 978-1-60741-784-2.

Blanco J.A., Kimmins J.P. 2009. The role of allelopathy in ecosystem-level forest models: a study case in the Pacific NW. In: Dykstra D.P., Monserud R.A. (Eds.) *Forest Growth and Timber Quality: Crown Models and Simulation Methods for Sustainable Forest Management*. USDA Forest Service General Technical Report PNW-GTR-791, Portland, OR. Pp 205-210.

Seely B., Hawkins C., **Blanco J.A.**, Welham C., Kimmins J.P. 2009. Evaluation of an Ecosystem-Based Approach to Mixedwood Modeling. In: Dykstra D.P., Monserud R.A. (Eds.) *Forest Growth and Timber Quality: Crown Models and Simulation Methods for Sustainable Forest Management*. USDA Forest Service General Technical Report PNW-GTR-791, Portland, OR. 219-223.

Imbert B., **Blanco J.A.**, Castillo F. 2008. Gestión forestal y ciclo de nutrientes en el marco del cambio global. In: Valladares F. (Ed.) *Ecología del bosque mediterráneo en un mundo cambiante, 2ª Edición*. Ministerio de Medio Ambiente / EGRAF S.A., Madrid, Spain. Pp 481-508. ISBN: 978-84-8014-738-5.

Zavala M.A., Zamora R., Pulido F., **Blanco J.A.**, Imbert B., Marañón T., Castillo F., Valladares F. 2008. Nuevas perspectivas en la conservación, restauración y manejo del bosque mediterráneo. In Valladares F. (Ed.) *Ecología del bosque mediterráneo en un mundo cambiante, 2ª Edición*. Ministerio de Medio Ambiente / EGRAF, Madrid, Spain. pp 511-532. ISBN: 978-84-8014-738-5.

Seely B., **Blanco J.A.**, Welham C., Kimmins J.P., Scoullar K., Cavens D. 2008. LLEMS: un modelo espacialmente explícito para el manejo forestal sostenible. In: Maestre F.T., Escudero A., Bonet A. (Ed.) *Introducción al análisis espacial en ecología y ciencias ambientales: métodos y aplicaciones*. Dykinson S.L., Madrid, Spain. Pp 677 – 696. ISBN: 978-84-9849-308-5.

Imbert B., **Blanco J.A.**, Castillo F. 2004. Gestión forestal y ciclo de nutrientes en el marco del cambio global. In: Valladares F. (Ed.) *Ecología del bosque mediterráneo en un mundo cambiante, 1ª Edición*. Ministerio de Medio Ambiente / EGRAF S.A., Madrid. Pp 479-506. ISBN: 84-8014-552-8.

Zavala M.A., Zamora R., Pulido F., **Blanco J.A.**, Imbert B., Marañón T., Castillo F., Valladares F. 2008. Nuevas perspectivas en la conservación, restauración y manejo del bosque mediterráneo. In: Valladares F. (Ed.) *Ecología del bosque mediterráneo en un mundo cambiante, 1ª Edición*. Ministerio de Medio Ambiente / EGRAF, Madrid, Spain. Pp 509-529. ISBN 84-8014-552-8.

TECHNICAL REPORTS

Blanco J.A. 2011. Using red alder as an adaptation strategy in CWH forests. *Informe para Dr. Phil Comeau, como parte del FFESC Project B6 "Using red alder as an adaptation strategy to reduce environmental, social and economic risks of climate change in coastal British Columbia"*. University of British Columbia, Vancouver, Canada. 65p.

Seely B., **Blanco J.A.**, Gerzon M. 2011. Projecting Long-Term old growth recovery following variable retention harvest. *Informe para Interfor Ltd*. University of British Columbia, Vancouver, Canada, 51 p.

Seely B., Welham C., **Blanco J.A.**, Lo Y.-H. 2009. Representation of climate change impacts on forest growth in FORECAST. *Informe para BC Ministry of Forests – Forest Science Program, Project G095109*. University of British Columbia, Vancouver, Canada. 32 p.

Schwab O., Maness T., Welham C., Seely B., **Blanco J.A.**, Bull G. 2008. Assessment of the impacts of improved weevil resistance in spruce on volume production: Provincial level scenario analysis. *Preparado en apoyo del componente GE³LS del proyecto Conifer Forest Health Genomic*. Genome Canada, University of British Columbia, Vancouver, Canada. 53 p.

Seely B., Welham C., **Blanco J.A.**, Schwab O., Bull G. 2008. Assessment of the impacts of climate change and improved weevil resistance in spruce on volume production: Forest management unit scenario analyses. *Preparado en apoyo del componente GE³LS del proyecto Conifer Forest Health Genomic*. Genome Canada, University of British Columbia, Vancouver, Canada. 45 p.

Welham C., Seely B., Straker J., **Blanco J.A.** 2007. Managing for timber volume and Mountain Pine Beetle susceptibility: impacts on ecosystem production and soil organic carbon. *Informe para BC Ministry of Forests – Forest Science Program, Project Y071160*. University of British Columbia., Vancouver, Canada. 35 p.

Blanco J.A., Zamora G. 2002. Restauración vegetal del Lago Uru Uru. *Informe para el Centro de Ecología y los Pueblos Andinos*, Oruro, Bolivia. 20 p.

BOOK REVIEWS AND JOURNAL EDITORIALS

Cayuela L., Alonso A., **Blanco J.A.**, Puerta-Piñero C., Rodríguez-Echeverría S., Jiménez-Eguizábal L. 2013. Ecosistemas en cifras: datos para el optimismo. *Ecosistemas* 22(1), 67-68.

Blanco J.A. 2012. "Incendios Forestales" by Juli G. Pausas. 2012. ISBN 978-84-8319-717-1/978-84-00-09492-8, Catarata y CSIC, Madrid, Spain. *Ecosistemas* 21(3), 121.

Cayuela L., Alonso A., **Blanco J.A.**, Puerta-Piñero C., Rodríguez-Echeverría S., Martín N., Jiménez-Eguizábal L. 2012. Novedades en Ecosistemas. *Ecosistemas* 21(3), 97-99.

Cayuela L., Alonso A., **Blanco J.A.**, Puerta-Piñero C., Rodríguez-Echeverría S., Jiménez-Eguizábal L. 2012. La política editorial de Ecosistemas. *Ecosistemas* 21(3), 100-102.

Blanco J.A. 2010. "Mountain Timber. The Comox Logging Company in the Vancouver Island Mountains" by Richard Somerset Mackie. *The Forestry Chronicle*, 86(5), 861 – 862.

ORAL PRESENTATIONS AT SCIENTIFIC MEETINGS

Blanco J.A., Imbert J.B., Castillo F.J. 2013. Differential changes in pine stands growth as consequence of climate change. 6th Spanish Forest Congress, Vitoria, June 10-14.

Castrillón Y., **Blanco J.A.**, Primicia I., Ansó M., Imbert J.B., Castillo F.J. 2013. Evaluation of the ecological model FORECAST to simulate litter production in pine stands in the Pyrenees. *11th Congress of the AEET: invitation to Ecology: strengthening links with Society* Pamplona, May 6-10th.

Lo Y.-H., Guan B.T., Lin Y.-C., **Blanco J.A.**, Yu C.-W. 2013. Moving from conservation to ecological restoration: an example from central Taiwan, Asia. *11th Congress of the AEET: invitation to Ecology: strengthening links with Society*. Pamplona, May 6-10th.

Dubois, D., Littlejohn D., Robinson P, **Blanco JA**, Flanders D. 2013. District Heating: A Tool for Wildfire Mitigation and Economic Development. International Biomass Conference & Expo. Conference, Minneapolis, MN, April 8-10th.

Blanco J.A., Littlejohn D., Dubois D., Flanders D., Robinson P. 2012. Community Fire Interface Biomass Utilization for Heating Fuel. *Quest International Conference & Trading Show "Smart Energy Communities in Cold Climates"*. Winnipeg, November 18-21.

Dubois, D, Littlejohn D, Robinson P, **Blanco JA**, Flanders D. 2012. District Heating: A Tool to Protect Communities from Wildfire While Reducing Green House Gases. 62nd Canadian Chemical Engineering Conference, Vancouver, Canada. October 14-17th.

Dubois, D, Littlejohn D, Robinson P, **Blanco JA**, Flanders D. 2012. Understanding how biomass derive from wildfire mitigation can be a catalyst to developing a local bioenergy solution. 62nd Canadian Chemical Engineering Conference, Vancouver, Canada. October 14-17th.

Wang F., Mladenoff D., Forrester J., **Blanco J.A.**, Scheller R., Peckham S., Keough C. 2012. Multi-Model Simulations of Long-Term Effects of Forest Harvesting on Ecosystem Productivity and C/N Cycling. 97th. *Ecological Society of America* annual meeting, Portland, USA, August 5-10.

Blanco J.A., Littlejohn D., Dubois D., Flanders D., Robinson P. 2012. Community Fire Interface Biomass Utilization for Heating Fuel. *Quest International Conference & Trading Show "Smart Energy Communnities in Cold Climates"*. Winnipeg, November 18-21.

Blanco J.A. 2012. Switching From Timber To Biomass Production: Long-Term Ecological Consequences. Invited talk, 2nd World Congress of Bioenergy, Xi'an, P.R. China. April 25-29th.

Blanco J.A., Wei X., Jiang H., Zavala M.A. 2011. Bringing ecology into forest management through ecological models: examples from the Northern Hemisphere. Invited opening session talk, 12th European Ecological Federation congress, Avila, Spain. September 25-29th.

Blanco J.A. 2011. Beyond growth and yield models: hybrid ecological based models as a tool for sustainable forest management (in Spanish). Opening plenary talk at the *3rd Meeting of the Working Group on Forest Modelling from the Spanish Society of Forest Sciences*, Lugo, Spain. May 4th-6th.

Jie C., Jiang H., Zhou G., Wei X., **Blanco J.A.**, Jiang Z., Xin Z. 2011. Simulating the carbon storage of spruce forests based on the FORECAST model and remotely sensed data. *Proceedings - 2011 19th International Conference on Geoinformatics, Geoinformatics 2011*. Article number 5981581. ISBN: 978-161284848-8. DOI: 10.1109/Geoinformatics.2011.5981581. June 26-28, 2011.

Blanco J.A., González E. 2010. The legacy of forest management in tropical plantations: analyzing its influence with ecosystem models. *IUFRO World Conference 2010*, Seoul, Korea. Agust 23-28.

Lo Y.-H., **Blanco J.A.**, Kimmins J.P., Welham C., Seely B. 2009. Using Dendroclimatological Data to Predict Future Tree Growth: A Preliminary Modelling Approach. *Eurodendro 2009*, Cala Minor, Mallorca, Spain, October 26-30..

Blanco J.A., Imbert J.B., Castillo F.J. 2009. La práctica silvícola de las claras y su influencia en los ciclos de nutrientes en dos pinares de los Pirineos navarros. Resúmenes del *5º Congreso Forestal Español*, Ávila, Spain September 21-25. ISBN 978-84-936854-6-1. Ref. 5CFE01-110, 15 pp.

Blanco J.A., Seely B., Welham C., Kimmins J.P. 2008. Validation of FORECAST. Results from coastal and interior forests in BC, Canada. *International Workshop on Simulation of Ecosystem Productivity, C-N Cycling and Multi-objective Forest Management*. Hangzhou, Zhejiang, China. September 22-24.

Welham C., Seely B., **Blanco J.A.**, Kimmins J.P. 2008. Using the ecosystem simulation model, FORECAST, to develop and evaluate reclamation strategies for degraded landscapes. *International Workshop on Simulation of Ecosystem Productivity, C-N Cycling and Multi-objective Forest Management*. Lin-An, Zhejiang, China. September 22-24.

Seely B., Welham C., **Blanco J.A.**, Kimmins J.P. 2008. An integrated modeling approach for the assessment of forest growth and development in the face of climate change: a case study in the western boreal forest. *International Workshop on Simulation of Ecosystem Productivity, C-N Cycling and Multi-objective Forest Management*. Lin-An, Zhejiang, China. September 22-24.

Blanco J.A., Seely B., Welham C., Kimmins J.P., Bi J. 2008. Use of soil organic matter as a tool to predict forest productivity at landscape level. *IUFRO Landscape Ecology Conference*, Chengdu, Sichuan, China, September 16-18.

Blanco J.A. 2008. Modelos forestales: una importante herramienta para predecir el desarrollo de los ecosistemas forestales. Ponencia plenaria de apertura del 5° *Simposio Internacional sobre el Manejo Sostenible de los Recursos Forestales (SIMFOR)*. Pinar del Río, Cuba. April 22-26. Proceedings: ISBN 978-959-16-0655-6.

Blanco J.A. 2008. Aplicaciones actuales del modelo FORECAST. 5° *Simposio Internacional sobre el Manejo Sostenible de los Recursos Forestales (SIMFOR)*. Pinar del Río, Cuba. April 22-26. Proceedings: ISBN 978-959-16-0655-6.

Blanco J.A., González E., Haynes P. 2008. Evaluación del modelo FORECAST en ecosistemas forestales de Norteamérica y el Caribe. 5° *Simposio Internacional sobre el Manejo Sostenible del Recurso Forestal (SIMFOR)*. Pinar del Río, Cuba. April 22-26. Proceedings: ISBN 9789591606556.

Seely B., Hawkins C., **Blanco J.A.**, Welham C., Kimmins J.P. 2007. Evaluation of an ecosystem-based approach to mixedwood modelling. *Forest Growth and Timber Quality: Crown Models and Simulation Methods for Sustainable Forest Management*. Portland, OR. August 7-10..

Blanco J.A., Seely B., González E., Haynes P., Welham C., Kimmins J.P., Seebacher T. 2007. Testing the ecosystem-level forest model FORECAST through North America, from the Caribbean Sea to the Pacific NW. 6th *North American Forest Ecology Workshop*. Vancouver, June 18-22.

Kimmins J.P., Seely B., Welham W., **Blanco J.A.** 2007. Complexity in modeling forest ecosystems: How much is enough? 6th *North American Forest Ecology Workshop*. Vancouver, June 18-22.

Blanco J.A., Olarieta J.R., Kimmins J.P. 2006. Assessment of long-term sustainability of forest management in Scots pine forests in the Pyrenees: An ecosystem-level simulation approach. 1st *International Conference on Sustainability Measurement and Modelling: ICSMM 06*. Terrasa. November 16-17: Proceedings First ICSMM. Ed. E. Carrera, J.J. de Felipe, B. Sureda, T. Nicalla. International Center for Numerical Methods in Engineering, Barcelona, 2006. ISBN 84-96736-06-7. 121 pp.

Blanco J.A., Bi J., Kimmins J.P., Ding Y., Seely B., Welham C. 2006. Yield decline and sustainability in Chinese Fir plantations – a simulation investigation to analyze the possible causes. Pp 400 U.S.S.E. (Ed) *Proceedings of International congress on cultivated forests*. Bilbao, October 3-7. Union of Forest Owners of Southern Europe, Derio, Vizcaya. 422 pp.

Blanco J.A., Kimmins J.P., Seely B., Welham C., Scoullar K. 2006. LLEMS: an ecologically-based spatially-explicit tool for assessing the implications of variable retention management for selected indicators of Sustainable Forest Management. 1st *Meeting of the Working Group on Spatial Ecology of the Spanish Association of Terrestrial Ecology: Spatial analysis: methods and applications*. Alcoy, Alicante, Spain. September 28-29.

Kimmins J.P., **Blanco J.A.**, Zhong A., Seely B., Welham C. 2006. Biofuels as an ecosystem management non-timber forest product: Assessing the tradeoffs. *IEA Bioenergy workshop. Biofuels and Bioenergy: Challenges and opportunities*. Vancouver, Canada, August 28 – September 1.

Haynes P., **Blanco J.A.**, González E. 2006. Aplicación de FORECAST, un modelo ecosistémico híbrido, a rodales de *Pinus caribaea* var. *caribaea* en Pinar del Río (Cuba). 4° *Simposio Internacional sobre el Manejo Sostenible del Recurso Forestal (SIMFOR)* Pinar del Río, Cuba. April 19-22. Proceedings: ISBN 959-16-0408-4, pp 960-974.

Blanco J.A., Seely B., Seebacher T., Welham C., Kimmins H. 2005. Evaluation of FORECAST, a stand-level forest ecosystem model, against 26 years of growth response data from a thinning and fertilization trial in a Douglas-fir plantation on Vancouver Island, BC, Canada. "UNITY IN DIVERSITY"

A conference on Ecology after the legacy of Ramón Margalef. Barcelona, Spain. November 16-18.

Blanco J.A., Zavala M.A., Imbert J.B., Castillo F.J. 2004. Sostenibilidad del manejo forestal en rodales de *Pinus sylvestris* L. en los Pirineos navarros. Evaluación por medio de un modelo de proceso. *1st Meeting of the Working Group of Forest Models of the Spanish Society of Forest Sciences*. Palencia, Spain. March 3-5.

Blanco J.A., Imbert J.B., Ozcáriz A., Castillo F.J. 2003. Decomposition and nutrient release from *Pinus sylvestris* L. leaf litter in stands with different thinning intensity (2000-2002). *I.U.F.R.O. Meeting "Silviculture and sustainable management in mountain forests in the western Pyrenees (Navarre, Spain)"*. Pamplona, Spain. September 15-19.

POSTERS PRESENTADOS EN CONFERENCIAS CIENTÍFICAS

Blanco J.A., Littlejohn D., Dubois D., Flanners D., Robinson P. 2013. Incorporating SOM as an indicator of sustainable management for wildfire risk reduction and bioenergy production in the urban interface. *12th North American Forest Soil Conference*, whitefish, Montana. June 16-20.

Blanco J.A., Littlejohn D., Dubois D., Flanders D., Robinson P. 2012. Community Fire Interface Biomass Utilization for Heating Fuel. *Climate Change Solutions: The Road Ahead. PICS Symposium*. Victoria, BC, Canadá. June 13-14.

Lo Y.-H., **Blanco J.A.**, Kimmins J.P., Welham C., Seely B. 2009. Relationships between Climate and Tree Radial Growth along an altitude gradient in Interior British Columbia, Canada. *Eurodendro 2009*, Cala Minor, Mallorca, Spain 30 – 26 de Octubre.

Blanco J.A., Kimmins J.P., Zhong A., Seely B., Welham C. 2008. Managing forests for biofuels: assessing the tradeoffs. *The scientific foundation for sustainable forest biomass harvesting guidelines and policy. SFM Network Workshop*. Toronto, Canada. February 18-21.

Blanco J.A., Kimmins J.P. 2007. The role of allelopathy in ecosystem-level forest models: a study case in the Pacific NW. *Forest Growth and Timber Quality: Crown Models and Simulation Methods for Sustainable Forest Management*. Portland, OR. August 7-10.

Blanco J.A., Kimmins J.P., Seely B., Welham C., Scoullar K. 2006. Hybrid ecosystem-level forest models as tools for forest management and research. *Southern Interior Silviculture Committee (SISCO): Winter Meeting: Silviculture interventions for high profile issues in forestry today*. Penticton, Canada. March 6-8.

Blanco J.A., Imbert J.B., Castillo F.J., Zavala M.A. 2005. Importance of site-specific characteristic regarding thinning effects on nutrient cycling in two contrasting *Pinus sylvestris* L. forests in the Pyrenees (Northern Spain). *Proceedings of the 90th Annual Meeting of the E.S.A. and IX INTECOL International Congress of Ecology*, pp 44. Montreal, Canada. August 7 – 12.

Cuevas S., Vázquez F.A., Torres E., **Blanco J.A.**, Bindrabán P.S. 2005. Optimizing cork oak dehesa forest management using FORECAST ecosystem model. *Suberwood 2005: new challenges for integration of cork oak forests and products*. Huelva, Spain. October 20 -22.

Imbert J.B., **Blanco J.A.**, Valladares F., Castillo F.J. 2005. Influence of thinning on plant species richness and diversity, and solar radiation indices in two contrasting Iberian *Pinus sylvestris* L. forests during a five year period. *1st DIVERSITAS Open Science Conference "Integrating biodiversity science for human well-being"*. Oaxaca, México. November 9-12.

Blanco J.A., Imbert J.B., Arricibita F.J., Castillo F.J. 2003. Producción de hojarasca en bosques de *P. sylvestris* L. bajo distintas intensidades de clara. *Proceedings 7th National Congress of the Spanish Association of Terrestrial Ecology*. Pp. 267-279. Barcelona, Spain. July 2-4.

Imbert J.B., Irazu A., Beraza I., **Blanco J.A.**, Castillo F.J. 2003. Cambios diarios y estacionales en la respiración del suelo en dos bosques experimentales de *Pinus sylvestris* bajo dos intensidades de clara diferentes. Proceedings 7th National Congress of the Spanish Association of Terrestrial Ecology. Barcelona, Spain. July 2-4.

Imbert J.B., Beraza I., **Blanco J.A.**, Castillo F.J. 2002. Effects of forest thinning on seasonal and diurnal changes in soil respiration rates and related abiotic factors in two contrasting locations. 9th European Ecological Federation congress (Eureco '02). Lund, Sweden. July 27 – August 1.

Blanco J.A., Imbert J.B., Castillo F.J. 2002. Decomposition and nutrient release from *Pinus sylvestris* L. leaf litter in stands with different thinning intensity (2000-2001). 9th European Ecological Federation congress (Eureco '02). Lund, Sweden. July 27 – August 1.

Blanco J.A., Imbert J.B., Castillo F.J. 2001. Cambios en el sotobosque de pinaes en los Pirineos Occidentales bajo distintas intensidades de clara. Proceedings of the 3rd Spanish forest Congress, Sierra Nevada 2001. Vol 1, 340-345. Granada, Spain. September 25-29.

MEMBER OF EDITORIAL BOARDS OF SCIENTIFIC JOURNALS

Conference Papers in Environmental Sciences	2314-5382	2012
Ecological Modelling	0304-3800	2011
Ecosistemas	1697-2473	2012
ISRN Ecology	2090-4614	2011

REVIEWER

• Scientific Journals

Acta Oecologica	1146-609X	2009
Agroforestry Systems	1572-9680	2010
African Journal of Agricultural Research	1991- 637X	2011
Allelopathy Journal	0971-4693	2012
Arid Land Research and Management	1532-4982	2010
Annals of Forest Science	1286-4560	2011
Baltic Forestry	1392-1355	2009
Ecological Complexity	1476-945X	2012
Ecological Modelling	0304-3800	2008
Ecological Research	1440-1703	2011
European Journal of Forest Research	1612-4677	2008
Forest Ecology and Management	0378-1127	2008
Forestry	0015-752X	2011
Forests	1999-4907	2012
Forestry Studies in China	1993-0372	2011
Frontiers of Earth Science	2095-0195	2012
Global and Planetary Change	0921-8181	2011
Hortscience	0018-5345	2012
International Journal of Biodiversity and Conservation	2141-243X	2011
International Journal of Forest Research	1464-3626	2009
ISRN Ecology	2090-4614	2011
Journal of Agriculture and Biological Sciences	1990-6145	2011
Journal of Environmental Quality and Management	Pending	2012
Journal of Forestry Research	1993-0607	2012
Journal of Forest Research	1610-7403	2009
Journal of Plant Interactions	1742-9145	2012
Journal of Medicinal Plants Research	1996-0875	2011
Journal of Tropical Forest Science	0128-1283	2010
PLOS One	1932-6203	2012
The Forestry Chronicle	0015-7546	2010

- **Technical Reports**

- International Panel for Climate Change, 5th Assessment Report.

RESEARCH STAYS

- 2011, 2013. School of Forestry and Resource Conservation, National Taiwan University, Taipei, Taiwán.
- 2009, 2010. International Research Center of Spatial-Ecology and Ecosystem Ecology, Zhejiang Forestry University, Lin-An, Zhejiang, China.
2005. Dep. Medioambiente y Ciencias del Suelo, Universidad de Lleida.
2003. Dep. Ecología, Universidad de Alcalá, Madrid.
2002. Facultad de Ingeniería Metalúrgica, Universidad Técnica de Oruro, Oruro, Bolivia.
2001. Dep. Ecología y Medioambiente, Consejo Superior de Investigaciones Científicas, Madrid.

SEMINARS

- 19 – IX – 2012 **Fire in the woods or fire in the boiler: exploring sustainable alternatives to combine wildfire risk control with local energy generation.** Seminar Series of the Pacific Institute for Climate Solutions, Victoria, BC, Canada.
- 4 – V – 2011 **Beyond growth and yield models: hybrid ecological models as a tool for sustainable forest management.** Opening lecture at the 3rd Meeting of the Working Group of Forest Modelling of the Spanish Society of Forest Sciences, Lugo, Spain.
- 5 – XI – 2010 **Climate change: Adaptation technology related to Forest Biomaterial Utilization.** School of Forestry and Resource Management, National Taiwan University, Taipei, Taiwan.
- 23 – IV – 2008 **Forest models: important tool to predict growth of forest ecosystems.** Opening lecture at the 5th International Symposium of Sustainable Forest Management (SIMFOR). Pinar del Río, Cuba.
- 30 – V – 2008 **Ecological models of forest management developed at the University of British Columbia. General description and study cases** CIFOR – INIA, Madrid.
- 29 – V – 2006 **Sustainable forest management: basic concepts and tools for analysis.** Universidad de Alcalá, Alcalá de Henares, Madrid, Spain.
- 28 – IV – 2006 **Computer models in forestry**, Professional Development Day “Forestry: Science made practical”, University of British Columbia, Vancouver, Canada.
- 9 – III – 2005 **Sustainable forestry in Spain: researching into biophysical foundations of sustainability**, University of British Columbia, Vancouver, Canadá.
- 1 – III – 2005 **Spanish ecosystems: their ecology, diversity, and sustainable management**, University of British Columbia, Vancouver, Canada.
- 19 – X – 2003 **Nutrient cycling and forest thinning.** Universidad de Alcalá, Alcalá de Henares, Madrid, Spain.
- 2 – X – 2002 **Academic aspects of the Universidad Pública de Navarra.** Universidad Técnica de Oruro, Oruro, Bolivia.
- 9 – 10 – 2002 **Environmental assessment in forest ecosystems.** Universidad Técnica de Oruro, Oruro, Bolivia.

OTHER COURSES

Natural Resources Modelling

- 2009. PROGNOSIS BC Training workshop. BC Ministry of Forest and Range. Penticton, Canada.
- 2006. An introduction to Ecological-Economic Modelling. University of Leipzig, Bad Schandau, Germany.
- 2005. Ecosystem Dynamic & Productivity: concepts, measures and management applications. UBC, Canada.
- 2004. Natural resources planning and management. Universidad del País Vasco, San Sebastián, Spain.
- 2003. Sustainable management of natural resources. Universidad del País Vasco, San Sebastián, Spain.
- 1998. Specialist in Computer Assisted Design (CAD). Asociación de la Industria Navarra, Pamplona, Spain.

Technical writing

- 2012. Electronics resources for information in teaching and research in the area of agri-food sciences. Centro Superior de Innovación Educativa, UPNA, Pamplona, Spain.
- 2012. Use of the database SCOPUS. Fundación Española para la Ciencia y Tecnología, UPNA, Pamplona, Spain.
- 2010. From Academic Researcher to Commercial Writer. UBC, Vancouver, Canada.
- 2009. Bridging the Gap: From Academic Writing to Business Writing. MITACS & Hurley Write Inc. Vancouver, Canada.
- 2008. BEST Workplace Language Program. UBC, Vancouver, Canada.

Project management

- 2009. Time Management. MITACS & KWELA Leadership and Talent Management. Vancouver, Canada.
- 2009. Foundations of Project Management II: A Team-Based Approach. MITACS & E.M. Sciences Ltd. Vancouver, Canada.
- 2009. Managing Projects. MITACS. Vancouver, Canada..
- 2008. The art of positive networking. MITACS & Shepa Learning Company. Vancouver, Canada..
- 2008. Foundations of Project Management I: A Team-Based Approach. MITACS & E.M. Sciences Ltd. Vancouver, Canada.

Environmental Assessment and Environmental Quality

- 2002. 1st Conference on work safety in the agricultural sector: forest tractors and machines. Universidad Pública de Navarra, Spain.
- 1999. Quality and Environment: ISO 14.000 and environmental assessment. Fundación para la Educación y el Empleo, Pamplona, Spain.
- 1999. Training of internal auditor, environmental quality systems ISO 14.000. InterQ Asesores, Pamplona, Spain.
- 1999. Chemical bases of pollution and their control. Universidad Nacional de Educación a Distancia, Spain.
- 1997. How to control quality in business with SO 9.000. Gesem Formación and Campus Elkarte, Pamplona, Spain.

Teaching

- 2012. Tools for evaluation in MiAulario I: Tasks + Evaluation book. Centro Superior de Innovación Educativa, UPNA, Pamplona, Spain
- 2012. Tools for evaluation in MiAulario II: Exams + Evaluation book. Centro Superior de Innovación Educativa, UPNA, Pamplona, Spain
- 2009. Instructional Skills Program for International Teaching Assistants. UBC Centre for Intercultural Communication (University of British Columbia), Vancouver, Canada.

AWARDS

- 2011. **Outstanding Reviewer Award.** *Ecological Modelling*. Elsevier Publishing.
- 2010. **Honorable Mention Reviewer.** *Ecological Modelling*. Elsevier Publishing.
- 2007. **Honorable Mention (2nd).** International Competition of Postcards. Green College, University of British Columbia, Vancouver.

1999. **Special Mention** in the Spain National Awards to universities studies completed in the academic year 1997-98, in Agricultural Engineering. Ministerio de Educación y Ciencia, Madrid.
1998. **Extraordinary Award of Graduation**, to the best academic record in Agricultral Engineers in 1998. Universidad Pública de Navarra, Pamplona.

MEMBERSHIPS

- Spanish Association of Terrestrial Ecology (A.E.E.T.)
- International Ecological Society (INTECOL)
- Green College Society (University of British Columbia)

MEMBER OF PHD COMMITTEES

2-IX-2012.	PhD. Irantzu Primicia Álvarez.	Universidad Pública de Navarra. <i>Suplente</i> .
25-I-2013.	PhD. Luis Galindo Jaime.	Universidad Complutense de Madrid. <i>Suplente</i> .
29-I-2013.	PhD. Angélica Camacho Cruz.	Universidad Complutense de Madrid. <i>Vocal</i> .

EXPERIENCE IN EVENT ORGANIZATION

6-10 May 2013.	Member of the Organizing Committee of the <i>11th Congress of the Spanish Association for Terrestrial Ecology</i> , Pamplona, Navarra.
25-29 Sept. 2012	Session organizer at the <i>12th European Ecological Federation congress</i> , Avila, Spain.
18-22 June 2007.	Member of the Organizing Committee of the <i>6th North American Forest Ecology Workshop</i> . Vancouver, Canadá.

EXPERIENCE IN SCIENCE OUTREACH ACTIVITIES

7 May 2013	Symposium Ecology and Society. Held at UPNA as an open session for the general public on how to teach and transfer science.
14 November 2012.	Scientific culture and divulgation activities: 3-Minute thesis competition and communications course. P.I. Scientific Research Unit of the UPNA. Funded by FECYT €7,000, Project FCT-12-4896.