

曹田健

网站简介链接地址:

<http://cf.nwsuaf.edu.cn/show.php?articleid=1043>

姓名 Name: 曹田健 Tianjian Cao

教育背景 Education (with year of award)

2010 D.Sc. (Agr. & For.) ,
Department of Forest
Sciences, University of Helsinki

2003 M.Sc. (Agr. & For.) ,
Department of Forest Economics, University of Helsinki

1991 经济学学士 B.Sc. (Econ.) , 福建林学院林经系
Department of Forest Economics
Forestry College of Fujian

工作经历 Work Experience

2010-now: 森林经理学教授, 博导, 西北农林科技大学
Professor in Forest Management, Northwest A & F University
2005-10: Researcher , Department of Forest Sciences,
University of Helsinki

2005: Researcher, European Forest Institute (EFI)

2002-07: Assistant Researcher, Researcher, External
Researcher,
Finnish Forest Research Institute (METLA)

1994-2000: 专管员、分局副科长, 福建省南平市地方税务局
Manager, Municipal Tax Office of Nanping



1991- 94: 业务员、业务主办、分公司副经理 , 福建省南平地区物资局

Manager, Logistics Administration of Nanping

研究兴趣 Research Interests

森林资源管理与信息技术 Forest resources management and information technology. 该方向

属于林学、地学和信息科学交叉学科。具体研究森林资源监测评价系统和

森林资源管理信息系统的开发和应用。

森林经营与决策支持系统 Forest management and decision support system. 该方向属于林

学、生态学和应用数学交叉学科。具体研究森林生长 仿真预测模型和森林 经营规划优化模型的开发和集成。

科研项目 Research Projects

2012-15: 国家自然科学基金, 面上项目 (NSFC project 31170586) “气候变化条件下

森林生态系统的适应性经营 Adaptive Management of Forest Ecosystem under Climate Change ”.

2011- University of Helsinki (UH), SUVALUE project “Sustainable Forest Value Chains”.

2010-13: 西北农林科技大学, 引进人才科研启动项目 (NWSUAF project Z111021002)

“森林生物能源的利用及其对碳汇的影响 Utilization of Forest Bioenergy and Its Effects on Carbon

Sequestration” .

2010–11: Finnish Environmental Institute (SYKE), VACCIA project “Vulnerability

Assessment of ecosystem services for Climate Change Impacts and Adaptation”, sub-project “Assessment of impacts and adaptation measures for forest production”.

2008–11: Academy of Finland, Sustainable Energy Research Programme (SusEn), FOBIT

project “Forest-based bioenergy and its climatic and economic viability - an integrated analysis”, sub-project “Energy and material supply from forest resources”.

2007–10: Ministry of Education, GSForest school, “Eco-economic model linkages toward timber and non-timber production”.

2005–06: Foundation of Natural Resources in Finland, PURO research consortium,

“Optimization of the quantity and quality of wood raw material in forest management and industrial processes”.

2005: European Forest Institute (EFI), EFI SENSOR project, “Sustainability impact

assessment: tools for the environmental, social and economic effects of multifunctional land use in

European regions”.

2004: Finnish Forest Research Institute (METLA), Research programme “Pools and

fluxes of carbon in Finnish forests and their socio-economic implications”, Metla project 3399 “Forest carbon balance”.

2002–04: Academy of Finland, SUNARE Programme, METLA Research Programme

“Alternatives of silvicultural practices in forest management and their effects on forest production”, Metla project 3318 “Economic-ecological interactions in sustainable use of forest resources”.

教学 Teaching

056111 森林资源监测与评价，西北农林科技大学

Monitoring and Assessment of Forest Resources, Northwest A & F University

by016008 博士科技英文写作，西北农林科技大学

Writing for Scientific Journals, Northwest A & F University

FECM 210 Quantitative Methods in Forest Resources Management, University of Helsinki

FECM 220 Economics of the Timber Industry, University of Helsinki

主要论著 Selected publications

Cao, T., Valsta, L., Mäkelä, A., 2010. A comparison of

carbon assessment methods for

optimizing timber production and carbon sequestration in Scots pine stands.

Forest Ecology and Management. 260, 1726–1734.

Cao, T., 2010. Silvicultural decisions based on simulation-optimization systems. Dissertationes

Forestales 103. 48 + 53 pp. ISBN 978-951-651-296-2, ISSN 1795-7389.

Cao, T., Valsta, L., Härkönen, S., Saranpää, P., Mäkelä, A., 2008. Effects of thinning and

fertilization on wood properties and economic returns for Norway spruce. Forest

Ecology and Management. 256, 1280–1289.

Cao, T., Hyytiäinen, K., Tahvonen, O., Valsta, L., 2006. Effects of initial stand states on optimal

thinning and rotation of *Picea abies* stands. Scandinavian Journal of Forest

Research 21, 388–398.

Cao, T., 2003. Optimal harvesting for even-aged Norway spruce using an individual-tree model

Finnish Forest Research Institute, Research Papers 897. 44 pp. ISBN 951-40-1886-9, ISSN 0358-4283.

会议报告 Presentations

Cao, T., 2010. Utilization of forest bioenergy and its effects on carbon sequestration. 2010 Yangling

International Agri-science Forum. 1-3 November 2010.
Yangling, China.

Cao, T., Valsta, L., Härkönen, S., Mäkelä, A. 2007. Effects of silvicultural treatments on wood and tracheid properties, and economic returns of *Picea abies*. IUFRO, International Scientific Conference, 'Forest Growth and Timber Quality: Crown Models and Simulation Methods for Sustainable Forest Management'. 7-11 August 2007, Portland, Oregon, USA.

Cao, T., Hyytiäinen, K., Tahvonen, O, Valsta, L. 2004. Effects of initial states on optimal thinning and rotation. 2004 Scandinavian Society of Forest Economics, 12-15 May 2004, Järvenpää, Finland

Cao, T., 2003. Optimal harvesting for even-aged Norway spruce using an individual-tree model. 2003 Symposium for Systems Analysis in Forest Resources, 7-9 October 2003, Stevenson, Washington, USA

软件 Software

OptiFor A simulation optimization tool for forest and natural resources management

基于仿真优化的森林和自然资源管理软件 OptiFor

<https://sites.google.com/site/optifor>

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712100 Yangling, China.

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