

REFEROIDUT JULKAISUT

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Alm, J., Shurpali, N.J., Minkkinen, K., Aro, L., Hytönen, J., Laurila, T., Lohila, A., Maljanen, M., Martikainen, P.J., Mäkiranta, P., Penttilä, T., Saarnio, S., Silvan, N., Tuittila, E.-S. & Laine, J. Emission factors and their uncertainty for the exchange of CO₂, CH₄ and N₂O in Finnish managed peatlands. *Boreal Environment Research* 12(2): 191-209.

Alm, J., Shurpali, N.J., Tuittila, E.-S., Laurila, T., Maljanen, M., Saarnio, S. & Minkkinen, K. Methods for determining emission factors for the use of peat and peatlands flux measurements and modelling. *Boreal Environment Research* 12(2): 85-100.

Aurela, M., Riutta, T., Laurila, T., Tuovinen, J.-P., Vesala, T., Tuittila, E.-S., Rinne, J., Haapanala, S., & Laine, J. CO₂ exchange of a sedge fen in southern Finland - the impact of a drought period. *Tellus Series B: Chemical and Physical Meteorology* 59: 826-837.

Auvinen, A.-P. et al. (24 kirjoittajaa, Metlasta Korhonen, K.T., Kärkkäinen, L., Nuutinen, T. & Salminen, O.). Evaluation of the Finnish National Biodiversity Action Plan 1997-2005. *Monographs of the Boreal Environment Research* 29. 54 s.

Bell, S., Tyrväinen, L., Sievänen, T., Pröbstl, U. & Simpson, M. Outdoor recreation and nature tourism: trends, conflicts and research needs - a European perspective. *Living Reviews in Landscape Research* 1(2). 46 s.

Bergvall, U.A., Rautio, P., Luotola, T. & Leimar, O. A test of simultaneous and successive negative contrast in fallow deer foraging behaviour. *Animal Behaviour* 74: 395-402.

Buurman, P., Schellekens, J., Fritze, H. & Nierop, K.G.J. Selective depletion of organic matter in mottled podzol horizons. *Soil Biology & Biochemistry* 39: 607-621.

Byholm, P. & Nikula, A. Nesting failure in Finnish Northern Goshawks *Accipiter gentilis*: incidence and cause. *Ibis* 149(3): 597-604.

Byholm, P., Nikula, A., Kenttä, J. & Taivalmäki, J.-P. Interactions between habitat heterogeneity and food affect reproductive output in a top predator. *Journal of Animal Ecology* 76: 392-401.

Campbell, R., McCarroll, D., Loader, N., Grudd, H., Robertson, I. & Jalkanen, R. Blue intensity in *Pinus sylvestris* tree-rings: developing a new palaeoclimate proxy. *The Holocene* 17(6): 821-828.

Cornelissen, H. et al. (34 kirjoittajaa, Metlasta Tolvanen, A.). Global negative vegetation feedback to climate warming responses on leaf litter decomposition rates in cold biomes. *Ecology Letters* 10: 619-627.

D'Amico, L., Motta, E., Annesi, T., Scire, M., Luchi, N., Hantula, J., Korhonen, K. & Capretti, P. The North American P group of *Heterobasidion annosum* s.l. is widely distributed in *Pinus pinea* forests of the western coast of central Italy. *Forest Pathology* 37(5): 303-320.

- Eerikäinen, K., Miina, J. & Valkonen, S. Models for the regeneration establishment and the development of established seedlings in uneven-aged, Norway spruce dominated forest stands of southern Finland. *Forest Ecology and Management* 242(2-3): 444-461.
- Eriksson, M., Neuvonen, S. & Roininen, H. Retention of wind-felled trees and the risk of consequential tree mortality by the European spruce bark beetle *Ips typographus* in Finland. *Scandinavian Journal of Forest Research* 22: 516-523.
- Favada, I.M., Kuuluvainen, J. & Uusivuori, J. Consistent estimation of long-run nonindustrial private forest owner timber supply using micro data. *Canadian Journal of Forest Research* 37(8): 1485-1494.
- Favada, I.M., Kuuluvainen, J. & Uusivuori, J. Optimal timber stock in Finnish nonindustrial private forests. *Forest Policy and Economics* 9(5): 527-535.
- Fedorkov, A., Kaitera, J. & Jalkanen, R. Condition and growth of Scots pine seedlings under strong and weak pollution in Kola Peninsula. *Baltic Forestry* 13(2): 179-183.
- Finér, L., Helmisaari, H.-S., Lõhmus, K., Majdi, H., Brunner, I., Børja I., Eldhuset, E., Godbold, D., Grebenc, T., Konôpka, B., Kraigher, H., Möttönen M.-R., Ohashi, M., Oleksyn, J., Ostonen, I., Uri, U. & Vanguelova, E. Variation in fine root biomass of three European tree species: Beech (*Fagus sylvatica* L.), Norway spruce (*Picea abies* L. Karst.) and Scots pine (*Pinus sylvestris* L.). *Plant Biosystems* 141: 394-405.
- Frouz, J. & Finér, L. Diurnal and seasonal fluctuations in wood ant (*Formica polyctena*) nest temperature in two geographically distant populations along a south-north gradient. *Insectes Sociaux* 54: 251-259.
- Fältmarsch, R., Peltola, P., Åström, M. & Raitio, H. Abundance, correlations and spatial patterns of nutrients and metals in till, humus, moss and pine needles in a boreal forest, western Finland. *Geochemistry: Exploration, Environment, Analysis* 7: 57-69.
- Gagen, M., McCarroll, D., Loader, N., Robertson, I., Jalkanen, R. & Anchukaitis, K.J. Exorcising the segment length curse: summer temperature reconstruction since AD 1640 using non-detrended stable carbon isotope ratios from pine trees in northern Finland. *The Holocene* 17(4): 435-446.
- Gerasimov, Y., Karjalainen, T., Ilavský, J., Tahvanainen, T. & Goltsev, V. Possibilities for energy wood procurement in north-west Russia: Assessment of energy wood resources in the Leningrad region. *Scandinavian Journal of Forest Research* 22(6): 559-567.
- Grekin, M. Color and color uniformity variation of Scots pine wood in the air-dry condition. *Wood and Fiber Science* 39(2): 279-290.
- Gross, J., Fatouros, N.E., Neuvonen, S. & Hilker, M. The role of competitors for *Chrysomela lapponica*, a north Eurasian willow pest, in pioneering a new host plant. *Journal of Pest Science* 80(3): 139-143.
- Hakkarainen, H., Huhta, E., Koskela, E., Mappes, T., Soveri, T. & Suorsa, P. Elmeria-parasites are associated with a lowered mothers and offspring body condition in island and mainland populations of the bank vole. *Parasitology* 134: 23-31.

Hallikainen, V., Hyppönen, M., Hyvönen, J. & Niemelä, J. Establishment and height development of harvested and naturally regenerated Scots pine near the timberline in North-East Finnish Lapland. *Silva Fennica* 41(1): 71-88.

Haukisalmi, V. & Henttonen, H. A taxonomic revision of the *Paranoplocephala primordialis* (Douthitt) complex (Cestoda: Anoplocephalidae) in voles and squirrels. *Zootaxa* 1548: 51-68.

Haukisalmi, V., Hardman, L.M., Hardman, M., Laakkonen, J., Niemimaa, J. & Henttonen, H. Morphological and molecular characterisation of *Paranoplocephala buryatiensis* n. sp. and *P. longivaginata* Chechulin & Gulysev, 1998 (Cestoda: Anoplocephalidae) in *Clethrionomys* voles. *Systematic Parasitology* 66: 55-71.

Haukisalmi, V., Hardman, L.M., Niemimaa, J. & Henttonen, H. Taxonomy and genetic divergence of *Paranoplocephala kalelai* (Tenora, Haukisalmi & Henttonen, 1985) (Cestoda: Anoplocephalidae) in the grey-sided vole *Myodes rufocanus* in northern Fennoscandia. *Acta Parasitologica* 52(4): 335-341.

Hautala, H. & Vanha-Majamaa, I. Immediate tree uprooting after retention felling in coniferous boreal forest. *Canadian Journal of Forest Research* 36: 3167-3172.

Heikkilä, J., Sirén, M. & Äijälä, O. Management alternatives of energy wood thinning stands. *Biomass & Bioenergy* 31(5): 255-266.

Hein, S., Mäkinen, H., Yue, C. & Kohnle, U. Modelling branch characteristics of Norway spruce from wide spacings in Germany. *Forest Ecology and Management* 242: 155-164.

Heiska, S., Tikkanen, O.-P., Rousi, M. & Julkunen-Tiitto, R. Bark salicylates and condensed tannins reduce vole browsing amongst cultivated dark-leaved willows (*Salix myrsinifolia*). *Chemoecology* 17: 245-253.

Heiska, S., Tikkanen, O.-P., Rousi, M., Turtola, S., Tirkkonen, V., Meier, B. & Julkunen-Tiitto, R. The susceptibility of herbal willow to *Melampsora* rust and herbivores. *European Journal of Plant Pathology* 118: 275-285.

Heiskanen, J. Effect of subirrigation on the growth of Norway spruce container seedlings in a greenhouse: A pilot study. *Wirkung der Unterflurbewässerung auf das Wachstum von Containerpflanzen norwegischer Fichtensetzlinge unter Gewächshausbedingungen: Eine Pilotstudie. Journal of Applied Irrigation Science* 42(1): 19-28.

Heiskanen, J., Mäkitalo, K. & Hyvönen, J. Long-term influence of site preparation on water-retention characteristics of forest soil in Finnish Lapland. *Forest Ecology and Management* 241: 127-133.

Helmisaari, H.-S., Derome, J., Nöjd, P. & Kukkola, M. Fine root biomass in relation to site and stand characteristics in Norway spruce and Scots pine stands. *Tree Physiology* 27: 1493-1504.

Helmisaari, H.-S., Salemaa, M., Derome, J., Kiikkilä, O., Uhlig, C. & Nieminen, T. Remediation of heavy metal-contaminated forest soil using recycled organic matter and native woody plants. *Journal of Environmental Quality* 36: 1145-1153.

- Hilli, P., Kallio, M. & Kallio, M. Real option analysis of a technology portfolio. *Review of Financial Economics* 16(2): 127-147.
- Huitu, O., Jokinen, I., Korpimäki, E., Koskela, E. & Mappes, T. Phase dependence in winter physiological condition of cyclic voles. *Oikos* 116(4): 565-577.
- Hujala, T., Pykäläinen, J. & Tikkanen, J. Decision making among Finnish non-industrial private forest owners: The role of professional opinion and desire to learn. *Scandinavian Journal of Forest Research* 22(5): 454-463.
- Huotari, N., Tillman-Sutela, E., Kauppi, A. & Kubin, E. Fertilization ensures rapid formation of ground vegetation on cut-away peatlands. *Canadian Journal of Forest Research* 37: 874-883.
- Hurme, E., Reunanen, P., Mönkkönen, M., Nikula, A., Nivala, V. & Oksanen, J. Local habitat patch pattern of the Siberian flying squirrel in a managed boreal forest landscape. *Ecography* 30: 277-287.
- Huttunen, L., Niemelä, P., Peltola, H., Heiska, S., Rousi, M. & Kellomäki, S. Is a defoliated silver birch seedling able to overcompensate the growth under changing climate? *Environmental and Experimental Botany* 60: 277-238.
- Huuskonen, S. & Miina, J. Stand-level growth models for young Scots pine stands in Finland. *Forest Ecology and Management* 241(1-3): 49-61.
- Hyttiäinen, K. & Penttinen, M. Applying portfolio optimisation to the harvesting decisions of non-industrial private forest owners. *Forest Policy and Economics* 10(3): 151-160.
- Häikiö, E., Freiwald, V., Silfver, T., Beuker, E., Holopainen, T. & Oksanen, E. Impacts of elevated ozone and nitrogen on growth and photosynthesis of European aspen (*Populus tremula*) and hybrid aspen (*P. tremula* x *Populus tremuloides*) clones. *Canadian Journal of Forest Research* 37(11): 2326-2336.
- Hänninen, R. & Kallio, A.M.I. Economic impacts on the forest sector of increasing forest biodiversity conservation in Finland. *Silva Fennica* 41(3): 507-523.
- Hänninen, R., Toppinen, A. & Toivonen, R. Transmission of price changes in sawnwood and sawlog markets of the new and old EU member countries. *European Journal of Forest Research* 126(1): 111-120.
- Insinna, P., Götz, B., Jalkanen, R. & Aas, G. One-hundred-year foliage comparison of *Pinus ponderosa* and *Pinus sylvestris* under dry growing conditions in Brandenburg, Germany. *Scandinavian Journal of Forest Research* 22(2): 149-159.
- Insinna, P., Jalkanen, R. & Götz, B. Climate impact on 100-year old foliage chronologies of Scots pine and Ponderosa pine in the northeast lowlands of Brandenburg, Germany. *Silva Fennica* 41(4): 605-620.
- Jaakkola, L., Helle, T., Soppela, J., Kuitunen, M. & Yrjönen, M. Effects of forest characteristics on the abundance of alectoroid lichens in northern Finland. *Canadian Journal of Forest Research* 36: 2955-2965.

- Jaakkola, T., Mäkinen, H. & Saranpää, P. Effects of thinning and fertilisation on tracheid dimensions and lignin content of Norway spruce. *Holzforschung* 61: 301-310.
- Jaatinen, K., Fritze, H., Laine, J. & Laiho, R. Effects of short- and long-term water-level drawdown on populations and activity of aerobic decomposers in a boreal peatland. *Global Change Biology* 13: 491-510.
- Jalkanen, R. Diseases, pests and abiotic disorders of trees in the changing environment in Finnish Lapland. Julkaisussa: Taulavuori, E. & Taulavuori, K. (eds.). *Physiology of Northern Plants Under Changing Environment*. Research Signpost. Kerala. s. 105-133.
- Jalkanen, R., Aalto, T., Pensa, M. & Salminen, H. Development of Scots pine in the changing environment of the Northern Boreal Zone in Finland. Julkaisussa: Taulavuori, E. & Taulavuori, K. (eds.). *Physiology of Northern Plants Under Changing Environment*. Research Signpost. Kerala. s. 271-289.
- Jalkanen, R., Büttner, C. & von Bargen, S. Cherry leaf roll virus abundant on *Betula pubescens* in Finland. *Silva Fennica* 41(4): 755-762.
- Jokimäki, J., Kaisanlahti-Jokimäki, M-L, Tuulentie, S, Laine, K. & Uusitalo, M. (eds.). Environment, local society and sustainable tourism. *Arctic Centre Reports* 50. 124 s.
- Jokinen, M. & Sippola, S. Social sustainability at tourist destinations - local opinions on their development and future in northern Finland. Julkaisussa: Jokimäki, J., Kaisanlahti-Jokimäki, M.-L., Tuulentie, S., Laine, K. & Uusitalo, M. (eds.). *Environment, local society and sustainable tourism*. *Arctic Centre Reports* 50: 89-99.
- Jutras, S., Begin, J., Plamondon, A. & Hökkä, H. Draining an unproductive black spruce peatland stand: 18-year post-treatment tree growth and stand productivity. *Forestry Chronicle* 83(5): 723-732.
- Jylhä, P. & Laitila, J. Energy wood and pulpwood harvesting from young stands using a prototype whole-tree bundler. *Silva Fennica* 41(4): 763-779.
- Jäntti, A., Suorsa, P., Hakkarainen, H., Sorvari, J., Huhta, E. & Kuitunen, M. Within territory abundance of red wood ants *Formica rufa* is associated with the body condition of nestlings in the Eurasian treecreeper *Certhia familiaris*. *Journal of Avian Biology* 38: 619-624.
- Kaakinen, S., Saranpää, P. & Vapaavuori, E. Effect of growth differences due to geographical location and N-fertilisation on wood chemistry of Norway spruce. *Trees - Structure and Function* 21(2): 131-139.
- Kaitera, J. Effect of tree susceptibility on *Peridermium pini* lesion development and sporulation on Scots pine. *Baltic Forestry* 13(1): 45-53.
- Kallio, E.R., Voutilainen, L., Vapalahti, O., Vaheri, A., Henttonen, H., Koskela, E. & Mappes, T. Endemic hantavirus infection impairs the winter survival of its rodent host. *Ecology* 88: 1911-1916.
- Kanerva, S. & Smolander, A. Microbial activities in forest floor layers under silver birch, Norway spruce and Scots pine. *Soil Biology & Biochemistry* 39: 1459-1467.

- Kangas, A., Leskinen, P. & Kangas, J. Comparison of fuzzy and statistical approaches in multicriteria decisionmaking. *Forest Science* 53: 37-44.
- Kangas, K., Sulkava, P., Koivuniemi, P., Tolvanen, A., Siikamäki, P. & Norokorpi, Y. What determines the area of impact around campsites? A case study in a Finnish national park. *Forest, Snow and Landscape Research* 81(1/2): 139-150.
- Kantola, A., Mäkinen, H. & Mäkelä, A. Stem form and branchiness of Norway spruce as a sawn timber - Predicted by a process based model. *Forest Ecology and Management* 241: 209-222.
- Karppanen, O., Venäläinen, M., Harju, A.M., Willför, S., Pietarinen, S., Laakso, T. & Kainulainen, P. Knotwood as a window to the indirect measurement of the decay resistance of Scots pine heartwood. *Holzforschung* 61(5): 600-604.
- Kasurinen, A., Peltonen, P.A., Holopainen, J.K., Vapaavuori, E. & Holopainen, T. Leaf litter under changing climate: Will increasing levels of CO₂ and O₃ affect decomposition and nutrient cycling processes? *Dynamic Soil, Dynamic Plant* 1: 58-67.
- Kasurinen, A., Peltonen, P.A., Julkunen-Tiitto, R., Vapaavuori, E., Nuutinen, V., Holopainen, T. & Holopainen, J.K. Effects of elevated CO₂ and O₃ on leaf litter phenolics and subsequent performance of litter-feeding soil macrofauna. *Plant and Soil* 292: 25-43.
- Keski-Saari, S., Falck, M., Heinonen, J., Zon, J. & Julkunen-Tiitto, R. Phenolics during early development of *Betula pubescens* seedlings: inhibition of phenylalanine ammonia lyase. *Trees - Structure and Function* 21: 273-281.
- Kilpeläinen, J., Finér, L., Niemelä, P., Domisch, T., Neuvonen, S., Ohashi, M., Risch, A.C. & Sundström, L. Carbon, nitrogen and phosphorus dynamics of ant mounds (*Formica rufa* group) in managed boreal forests of different successional stages. *Applied Soil Ecology* 36: 156-163.
- Kinnunen, P.M., Billich, C., Ek-Kommonen, C., Henttonen, H., Kallio, E.R.K., Niemimaa, J., Palva, A., Stäheli, P., Vaheri, A. & Vapalahti, O. Serological evidence for Borna disease virus infection in humans, wild rodents and other vertebrates in Finland. *Journal of Clinical Virology* 38(1): 64-69.
- Kirkinen, J., Minkkinen, K., Penttilä, T., Kojola, S., Sievänen, R., Alm, J., Saarnio, S., Silvan, N., Laine, J. & Savolainen, I. Greenhouse impact due to different peat fuel utilisation chains in Finland - a life-cycle approach. *Boreal Environment Research* 12(2): 211-223.
- Kivimäenpää, M. & Sutinen, S. Microscopic structure of Scots pine (*Pinus sylvestris* (L.) needles during ageing and autumnal senescence. *Trees - Structure and Function* 21(6): 645-659.
- Kivimäki, K., Kärkkäinen, K., Gaudeul, M., Loe, G. & Ågren, J. Gene, phenotype and function: GLABROUS1 and resistance to herbivory in natural populations of *Arabidopsis lyrata*. *Molecular Ecology* 16(2): 453-462.
- Knuuttila, M., Vatanen, E. & Jansik, C. Finnish food industry in 1989-2002: an output-oriented input-output analysis. *Acta Agriculturae Scandinavica, Section C: Food Economics* 4(4): 217-228.

Koivisto, E., Huitu, O. & Korpimäki, E. Smaller *Microtus* vole species competitively superior in the absence of predators. *Oikos* 116(1): 156-162.

Konijnendijk, C.C., Busse Nielsen, A., Schipperijn, J., Rosenblad, Y., Sander, H., Sarv, M., Mäkinen, K., Tyrväinen, L., Donis, J., Gundersen, V., Åkerlund, U. & Gustavsson, R. Assessment of urban forestry research and research needs in Nordic and Baltic countries. *Urban Forestry & Urban Greening* 6(4): 297-309.

Konijnendijk, C.C., Thorsen, B.J., Tyrväinen, L., Anthon, S., Rahim Nik, A., Norini, H. & Abd. Ghani, A.N. The right forest for the right city: Decision-support for land-use planning through assessment of multiple forest benefits. *Allgemeine Forst- und Jagdzeitung* 178(4): 74-84.

Kontinen, K., Luoranen, J. & Rikala, R. Growth and frost hardening of *Picea abies* seedlings after various night length treatments. *Baltic Forestry* 13(2): 140-148.

Kontunen-Soppela, S., Ossipov, V., Ossipova, S. & Oksanen, E. Shift in birch leaf metabolome and carbon allocation during long-term open-field ozone exposure. *Global Change Biology* 13(5): 1053-1067.

Korhonen, L., Korhonen, K.T., Stenberg, P., Maltamo, M. & Rautiainen, M. Local models for forest canopy cover with beta regression. *Silva Fennica* 41(4): 671-685.

Korkalainen, T., Laurén, A. & Kokkonen, T. A GIS-based analysis of catchment properties within a drumlin field. *Boreal Environment Research* 12: 489-500.

Korkama, T., Fritze, H., Kiikkilä, O. & Pennanen, T. Do same-aged but different height Norway spruce (*Picea abies*) clones affect soil microbial community? *Soil Biology & Biochemistry* 39(9): 2420-2423.

Korkama, T., Fritze, H., Pakkanen, A. & Pennanen, T. Interactions between extraradical ectomycorrhizal mycelia, microbes associated with the mycelia and growth rate of Norway spruce (*Picea abies*) clones. *New Phytologist* 173: 798-807.

Koutaniemi, S., Warinowski, T., Kärkönen, A., Alatalo, E., Fossdal, C.G., Saranpää, P., Laakso, T., Fagerstedt, K.V., Simola, L.K., Paulin, L., Rudd, S. & Teeri, T.H. Expression profiling of the lignin biosynthetic pathway in Norway spruce using EST sequencing and real-time RT-PCR. *Plant Molecular Biology* 65(3): 311-328.

Kuikka, K., Rautio, P. & Markkola, A.-M. Carbon availability and mycorrhizal symbiosis of boreal forest trees in a changing environment. *Julkaisussa: Taulavuori, E. & Taulavuori, K. (eds.). Physiology of Northern Plants Under Changing Environment. Research Signpost. Kerala. s. 227-239.*

Kutzbach, L., Schneider, J., Sachs, T., Giebels, M., Nykänen, H., Shurpali, N.J., Martikainen, P.J., Alm, J. & Wilmking, M. CO₂ flux determination by closed-chamber methods can be seriously biased by inappropriate application of linear regression. *Biogeosciences* 4: 1005-1025.

Laakkonen, J., Kallio-Kokko, H., Vapalahti, O., Vaheri, A., Vyskocilová, M., Munclinger, P., Macholán, M. & Henttonen, H. The screening of parasites and viral pathogens of small mammals

from a farm in southern Finland, and genetic identification of the Finnish house mouse, *Mus musculus*. *Annales Zoologici Fennici* 44: 202-208.

Laitila, J., Asikainen, A. & Nuutinen, Y. Forwarding of whole trees after manual and mechanized felling bunching in pre-commercial thinnings. *International Journal of Forest Engineering* 18(2): 29-39.

Latva-Karjanmaa, T., Penttilä, R. & Siitonen, J. The demographic structure of European aspen (*Populus tremula*) populations in managed and old-growth boreal forests in eastern Finland. *Canadian Journal of Forest Research* 37: 1070-1081.

Laurén, A., Koivusalo, H., Ahtikoski, A., Kokkonen, T. & Finér, L. Water protection and buffer zones: How much does it cost to reduce nitrogen load in a forest cutting? *Scandinavian Journal of Forest Research* 22(6): 537-544.

Lehtonen, A., Cienciala, E., Tatarinov, F. & Mäkipää, R. Uncertainty estimation of biomass expansion factors for Norway spruce in the Czech Republic. *Annals of Forest Science* 64(2): 133-140.

Leskinen, P. Comparison of alternative scoring techniques when assessing decision maker's multi-objective preferences in natural resource management. *Journal of Environmental Management* 85: 363-370.

Lilja, A., Luoranen, J., Rikala, R. & Heinonen, R. The effects of calcium on stem lesions of silver birch seedlings. *Forest Pathology* 37: 96-104.

Lilja, A., Rytönen, A., Kokkola, M., Parikka, P. & Hantula, J. 2007. First report of *Phytophthora ramorum* and *P. inflata* in ornamental rhododendrons in Finland. *Plant Disease* 91(8): 1055.

Lindner, M. & Karjalainen, T. Carbon inventory methods and carbon mitigation potentials of forests in Europe: a short review of recent progress. *European Journal of Forest Research* 126: 149-156.

Lindroos, A.-J., Derome, J., Raitio, H. & Rautio, P. Heavy metal concentrations in soil solution, soil and needles in a Norway spruce stand on an acid sulphate forest soil. *Water, Air, and Soil Pollution* 180(1): 155-170.

Loader, N.J., McCarroll, D., Gagen, M.H., Robertson, I. & Jalkanen, R. Extracting climatic information from stable isotopes in tree rings. *Julkaisussa: Dawson, T. & Siegwolf, R. (eds.). Stable isotopes as indicators of ecological change. Terrestrial Ecology Series. Elsevier/Academic Press. Amsterdam. s. 27-48.*

Lohila, A., Laurila, T., Aro, L., Aurela, M., Tuovinen, J.-P., Laine, J., Kolari, P. & Minkkinen, K. Carbon dioxide exchange above a 30-year-old Scots pine plantation established on organic-soil cropland. *Boreal Environment Research* 12(2): 141-157.

Luoranen, J., Helenius, P., Huttunen, L. & Rikala, R. Short-day treatment enhances root egress of summer-planted *Picea abies* seedlings under dry conditions. *Scandinavian Journal of Forest Research* 22(5): 384-389.

- Lähtinen, K. Linking resource-based view with business economics of woodworking industry: earlier findings and future insights. *Silva Fennica* 41(1): 149-165.
- Malaty, R., Toppinen, A. & Viitanen, J. Modelling and forecasting Finnish pine sawlog stumpage prices using alternative time-series methods. *Canadian Journal of Forest Research* 37(1): 178-187.
- Malinen, J., Kilpeläinen, H., Piira, T., Redsvén, V., Wall, T. & Nuutinen, T. Comparing model-based approaches with bucking simulation-based approach in the prediction of timber assortment recovery. *Forestry* 80(3): 309-321.
- Maljanen, M., Hytönen, J., Mäkiranta, P., Alm, J., Minkkinen, K., Laine, J. & Martikainen, P.J. Greenhouse gas emissions from cultivated and abandoned organic croplands in Finland. *Boreal Environment Research* 12(2): 133-140.
- Martz, F., Sutinen, M.-L., Derome, K., Wingsle, G., Julkunen-Tiitto, R. & Turunen, M. Effects of ultraviolet (UV) exclusion on the seasonal concentration of photosynthetic and UV-screening pigments in Scots pine needles. *Global Change Biology* 13: 252-265.
- Mattila, U. & Nuutinen, T. Assessing the incidence of butt rot in Norway spruce in southern Finland. *Silva Fennica* 41(1): 29-43.
- McRoberts, R., Tomppo, E.O., Finley, A.O. & Heikkinen, J. Estimating areal means and variances of forest attributes using the k-Nearest Neighbors technique and satellite imagery. *Remote Sensing of Environment* 111: 466-480.
- McRoberts, R.E. & Tomppo, E.O. Remote sensing support for national forest inventories. *Remote Sensing of Environment* 110: 412-419.
- Minkkinen, K., Laine, J., Shurpali, N.J., Mäkiranta, P., Alm, J. & Penttilä, T. Heterotrophic soil respiration in forestry-drained peatlands. *Boreal Environment Research* 12(2): 115-126.
- Minkkinen, K., Penttilä, T. & Laine, J. Tree stand volume as a scalar for methane fluxes in forestry-drained peatlands in Finland. *Boreal Environment Research* 12(2): 127-132.
- Monni, S., Peltoniemi, M., Palosuo, T., Lehtonen, A., Mäkipää, R. & Savolainen, I. Uncertainty of forest carbon stock changes - implications to the total uncertainty of GHG inventory of Finland. *Climatic Change* 81: 391-413.
- Mutanen, A. & Toppinen, A. Price dynamics in the Russian-Finnish roundwood trade. *Scandinavian Journal of Forest Research* 22(1): 71-80.
- Muukkonen, P. & Heiskanen, J. Biomass estimation over a large area based on standwise forest inventory data and ASTER and MODIS satellite data: A possibility to verify carbon inventories. *Remote Sensing of Environment* 107(4): 617-624.
- Mäkinen, H., Hallaksela, A.-M. & Isomäki, A. Increment and decay in Norway spruce and Scots pine after artificial logging damage. *Canadian Journal of Forest Research* 37: 2130-2141.
- Mäkinen, H., Jaakkola, T., Piispanen, R. & Saranpää, P. Predicting wood and tracheid properties of Norway spruce. *Forest Ecology and Management* 241: 175-188.

Mäkiranta, P., Hytönen, J., Aro, L., Maljanen, M., Pihlatie, M., Potila, H., Shurpali, N.J., Laine, J., Lohila, A., Martikainen, P.J. & Minkkinen, K. Soil greenhouse gas emissions from afforested organic soil croplands and cutaway peatlands. *Boreal Environment Research* 12(2): 159-175.

Männistö, M., Tirola, M. & Häggblom, M. Bacterial communities in Arctic fjelds of Finnish Lapland are stable but highly pH-dependent. *FEMS Microbiology Ecology* 59(2): 452-465.

Müller, M.M., Heinonen, J. & Korhonen, K. Occurrence of *Heterobasidion* basidiocarps on cull pieces of Norway spruce left on cutting areas and in mature spruce stands. *Forest Pathology* 37: 374-386.

Müller, M.M., Valjakka, R. & Hantula, J. Genetic diversity of *Lophodermium piceae* in South Finland. *Forest Pathology* 37(5): 329-337.

Nabuurs, G.J. et al. (17 kirjoittajaa, Metlasta Karjalainen, T.). *Forestry*. Julkaisussa: Metz, B., Davidson, O.R., Bosch, P.R., Dave, R. & Meyer, L.A. (eds.). *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. Cambridge and New York. s. 541-584.

Neuvonen, M., Sievänen, T., Tönnies, S. & Koskela, T. Access to green areas and the frequency of visits - A case study in Helsinki. *Urban Forestry & Urban Greening* 6(4): 235-247.

Niemelä, M., Piispanen, J., Poikolainen, J. & Perämäki, P. Preliminary study of the use of terrestrial moss (*Pleurozium schreberi*) for biomonitoring traffic-related Pt and Rh deposition. *Archives of Environmental Contamination and Toxicology* 52(3): 347-354.

Niemi, K., Julkunen-Tiitto, R., Häggman, H. & Sarjala, T. *Suillus variegatus* causes significant changes in the content of individual polyamines and flavonoids in Scots pine seedlings during mycorrhiza formation in vitro. *Journal of Experimental Botany* 58: 391-401.

Niemi, K., Sarjala, T., Chen, X. & Häggman, H. Spermidine and the ectomycorrhizal fungus *Pisolithus tinctorius* synergistically induce maturation of Scots pine embryogenic cultures. *Journal of Plant Physiology* 164: 629-635.

Niemi, R.M., Vepsäläinen, M., Erkomaa, K. & Ilvesniemi, H. Microbial activity during summer in humus layer under *Pinus sylvestris* and *Alnus incana*. *Forest Ecology and Management* 242: 314-323.

Nieminen, M., Moilanen, M. & Piirainen, S. Phosphorus allocation in surface soil of two drained peatland forests following wood and peat ash application - Why effective adsorption on low sorptive soils? *Silva Fennica* 41(3): 395-407.

Niskanen, A. & Karppinen, H. (eds.). *Forest entrepreneurship in Europe*. *Small-Scale Forestry* 6(4): 329-456.

Nurmi, J. Recovery of logging residues for energy from spruce (*Picea abies*) dominated stands. *Biomass & Bioenergy* 31(6): 375-380.

Nurmi, J. & Hillebrand, K. The characteristics of whole-tree fuel stocks from silvicultural cleanings and thinnings. *Biomass & Bioenergy* 31(6): 381-392.

Nurminen, T. & Heinonen, J. Characteristics and time consumption of timber trucking in Finland. *Silva Fennica* 41(3): 471-487.

Ní Dhubháin, A., Cobanova, R., Karppinen, H., Mizaraite, D., Ritter, E., Slee, B. & Wall, S. The values and objectives of private forest owners and their influence on forestry behaviour: The implications for entrepreneurship. *Julkaisussa: Niskanen, A. & Karppinen, H. (eds.). Forest entrepreneurship in Europe. Small-Scale Forestry* 6(4): 347-357.

Ohashi, M., Finér, L., Domisch, T., Risch, A.C., Jurgensen, M.F. & Niemelä, P. Diurnal and seasonal variation in CO₂ efflux from ant mounds and forest floor. *Soil Biology & Biochemistry* 39: 1504-1511.

Ohashi, M., Kilpeläinen, J., Finér, L., Risch, A.C., Domisch, T., Neuvonen, S. & Niemelä, P. The effect of red wood ant (*Formica rufa* group) mounds on root biomass, density, and nutrient concentrations in boreal managed forests. *Journal of Forest Research* 12: 113-119.

Oksanen, E., Kontunen-Soppela, S., Riikonen, J., Peltonen, P., Uddling, J. & Vapaavuori, E. Northern environment predisposes birches to ozone damage. *Plant Biology* 9: 191-196.

Ostonen, I., Lõhmus, K., Helmisaari, H.-S., Truu, J. & Meel, S. Fine root morphological adaptations in Scots pine, Norway spruce and silver birch along a latitudinal gradient in boreal forests. *Tree Physiology* 27: 1627-1634.

Painter, J.N., Siitonen, J. & Hanski, I. Phylogeographical patterns and genetic diversity in three species of Eurasian boreal forest beetles. *Biological Journal of the Linnean Society* 91: 267-279.

Palviainen, M., Finér, L., Laurén, A., Mannerkoski, H., Piirainen, S. & Starr, M. Development of ground vegetation biomass and nutrient pools in a clear-cut disc-plowed boreal forest. *Plant and Soil* 297: 43-52.

Parviainen, J., Bozzano, M., Estreguil, C., Koskela, J., Lier, M., Vogt, P. & Ostapowicz, K. Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems. *Julkaisussa: Köhl, M. & Rametsteiner, E. (eds.). State of Europe's Forests 2007 - the MCPFE report on sustainable forest management in Europe. Ministerial Conference on the Protection of Forests in Europe, Liaison Unit. Warsaw. s. 45-72.*

Peltola, H., Kilpeläinen, A., Sauvala, K., Räisänen, T. & Ikonen, V.-P. Effects of early thinning regime and tree status on the radial growth and wood density of Scots pine. *Silva Fennica* 41(3): 489-505.

Peltoniemi, M., Heikkinen, J. & Mäkipää, R. Stratification of regional sampling by model-predicted changes of carbon stocks in forested mineral soils. *Silva Fennica* 41(3): 527-539.

Peltoniemi, M., Thürig, E., Ogle, S., Palosuo, T., Schrump, M., Wutzler, T., Butterbach-Bahl, K., Chertov, O., Komarov, A., Mikhailov, A., Gärdenäs, A., Perry, C., Liski, J., Smith, P. & Mäkipää, R. Models in country scale carbon accounting of forest soils. *Silva Fennica* 41(3): 575-602.

Pensa, M., Jalkanen, R. & Liblik, V. Variation in Scots pine needle longevity and nutrient conservation in different habitats and latitudes. *Canadian Journal of Forest Research* 37(9): 1599-1604.

Peuhkurinen, J., Maltamo, M., Malinen, J., Pitkänen, J. & Packalén, P. Preharvest measurement of marked stands using airborne laser scanning. *Forest Science* 53(6): 653-661.

Peura, M., Kölln, K., Grottkopp, I., Saranpää, P., Müller, M. & Serimaa, R. The effect of axial strain on crystalline cellulose in Norway spruce. *Wood Science and Technology* 41: 565-583.

Pietikäinen, J., Tikka, P.J., Valkonen, S., Isomäki, A. & Fritze, H. Is the soil microbial community related to the basal area of trees in a Scots pine stand? *Soil Biology & Biochemistry* 39: 1832-1834.

Pietiläinen, P., Hartman, M. & Moilanen, M. Nitrogen and Scots pine on drained peatlands. *Julkaisussa: Taulavuori, E. & Taulavuori, K. (eds.). Physiology of Northern Plants Under Changing Environment. Research Signpost. Kerala. s. 255-269.*

Pihlajaniemi, H., Siuruainen, M., Rautio, P., Laine, K., Peteri, S.-L. & Huttunen, S. Successful growth of micro-propagated ornamental tree forms in northern Finland. *Dendrobiology* 57: 61-71.

Pihlatie, M., Pumpanen, J., Rinne, J., Ilvesniemi, H., Simojoki, A., Hari, P. & Vesala, T. Gas concentration driven fluxes of nitrous oxide and carbon dioxide in boreal forest soil. *Tellus Series B: Chemical and Physical Meteorology* 59: 458-469.

Piirainen, S., Finér, L., Mannerkoski, H. & Starr, M. Carbon, nitrogen and phosphorus leaching after site preparation at a boreal forest clear-cut area. *Forest Ecology and Management* 243: 10-18.

Piri, T. & Korhonen, K. Spatial distribution and persistence of *Heterobasidion parviporum* genets on a Norway spruce site. *Forest Pathology* 37(1): 1-8.

Pykäläinen, J., Hiltunen, V. & Leskinen, P. Complementary use of voting methods and interactive utility analysis in participatory strategic forest planning: experiences gained from western Finland. *Canadian Journal of Forest Research* 37: 853-865.

Qin, G.-F., Zhao, J. & Korhonen, K. A study on intersterility groups of *Armillaria* in China. *Mycologia* 99: 430-441.

Radoglou, K., Cabral, R., Repo, T., Hasanagas N., Sutinen, M.-L. & Waisel, Y. Appraisal of root leakage as a method for estimation of root viability. *Plant Biosystems* 141(3): 443-459.

Raiskila, S., Pulkkinen, M., Laakso, T., Fagerstedt, K., Löija, M., Mahlberg, R., Paajanen, L., Ritschkoff, A.-C. & Saranpää, P. FTIR spectroscopic prediction of Klason and acid soluble lignin variation in Norway spruce cutting clones. *Silva Fennica* 41(2): 351-371.

Ranta, T., Lahtinen, P., Elo, J. & Laitila, J. The effect of CO₂ emission trade on the wood fuel market in Finland. *Biomass & Bioenergy* 31(8): 535-542.

Rautiainen, M., Suominen, J., Mottus, M., Stenberg, P., Voipio, P., Peltoniemi, J. & Manninen, T. Coupling forest canopy and understory reflectance in the Arctic latitudes of Finland. *Remote Sensing of Environment* 110: 332-343.

Rautio, P., Bergvall, U.A., Karonen, M. & Salminen, J.-P. Bitter problems in ecological feeding experiments: Commercial tannin preparations and common methods for tannin quantifications. *Biochemical Systematics & Ecology* 35: 257-262.

Repo, T., Sutinen, S., Nöjd, P. & Mäkinen, H. Implications of delayed soil thawing on trees: A case study of a *Picea abies* stand. *Scandinavian Journal of Forest Research* 22(2): 118-127.

Riikonen, J., Kets, K., Darbah, J., Oksanen, E., Sober, A., Vapaavuori, E., Kubiske, M.E., Nelson, N. & Karnosky, D.F. Carbon gain and bud physiology in *Populus tremuloides* and *Betula papyrifera* grown under long-term exposure to interacting elevated CO₂ and O₃. *Tree Physiology* 28: 243-254.

Riutta, T., Laine, J. & Tuittila, E.-S. Sensitivity of CO₂ exchange of fen ecosystem components to water level variation. *Ecosystems* 10: 718-733.

Riutta, T., Laine, J., Aurela, M., Rinne, J., Vesala, T., Laurila, T., Haapanala, S., Pihlatie, M. & Tuittila, E.-S. Spatial variation in plant community functions regulates carbon gas dynamics in a boreal fen ecosystem. *Tellus Series B: Chemical and Physical Meteorology* 59: 838-852.

Rousi, M. & Heinonen, J. Temperature sum accumulation effects on within-population variation and long-term trends in date of bud burst of European white birch (*Betula pendula*). *Tree Physiology* 27(7): 1019-1025.

Rusanen, M. & Granholm, H. Finland's national strategy for adaptation to climate change. *Julkaisussa: Koskela, J., Buck, A. & Teissier du Cross, E. (eds.). Climate change and forest genetic diversity: Implications for sustainable forest management in Europe. Biodiversity International. Rome. s. 85-94.*

Ryynänen, L. & Aronen, T. Phenotypic expression of leaf variegation in two *Betula pendula* Roth genotypes following micropropagation, cryopreservation and grafting. *Propagation of Ornamental Plants* 7(1): 23-28.

Räisänen, M., Repo, T. & Lehto, T. Cold acclimation was partially impaired in boron deficient Norway spruce seedlings. *Plant and Soil* 292: 271-282.

Saarnio, S., Morero, M., Shurpali, N.J., Tuittila, E.-S., Mäkilä, M. & Alm, J. Annual CO₂ and CH₄ fluxes of pristine boreal mires as a background for the lifecycle analyses of peat energy. *Boreal Environment Research* 12(2): 101-113.

Saarsalmi, A. & Levula, T. Wood ash application and liming: Effects on soil chemical properties and growth of Scots pine transplants. *Baltic Forestry* 13(2): 149-157.

Saarsalmi, A., Starr, M., Hokkanen, T., Ukonmaanaho, L., Kukkola, M., Nöjd, P. & Sievänen, R. Predicting annual canopy litterfall production for Norway spruce (*Picea abies* (L.) Karst.) stands. *Forest Ecology and Management* 242(2-3): 578-586.

Saksa, T. & Miina, J. Cleaning methods in planted Scots pine stands in southern Finland: 4-year results on survival, growth and whipping damage of pines. *Silva Fennica* 41(4): 661-670.

Salminen, H. & Jalkanen, R. Intra-annual height increment of *Pinus sylvestris* at high latitudes in Finland. *Tree Physiology* 27(9): 1347-1353.

Sarjala, T., Niemi, K. & Jokela, A. Polyamines in the responses of boreal trees to environmental stress and symbiotic fungi. *Julkaisussa: Taulavuori, E. & Taulavuori, K. (eds.). Physiology of Northern Plants Under Changing Environment. Research Signpost. Kerala. s. 241-254.*

Savolainen, O., Bokma, F., Knürr, T., Kärkkäinen, K., Pyhäjärvi, T. & Wachowiak, W. Adaptation of forest trees to climate change. Julkaisussa: Koskela, J., Buck, A. & Teissier du Cross, E. (eds.). Climate change and forest genetic diversity: Implications for sustainable forest management in Europe. Biodiversity International. Rome. s. 19-29.

Selby, A., Koskela, T. & Petäjistö, L. Evidence of lay and professional forest-based development discourses in three contrasting regions of Finland. *Forest Policy and Economics* 9: 633-646.

Seppälä, R. Global forest sector: Trends, threats and opportunities. Julkaisussa: Freer-Smith, P.H., Broadmeadow, M.S.J. & Lynch, J.M. (eds.). *Forestry and climate change*. CAB International. s. 25-30.

Sidoroff, K., Kuuluvainen, T., Tanskanen, H. & Vanha-Majamaa, I. Tree mortality after low-intensity prescribed fires in managed *Pinus sylvestris* stands in southern Finland. *Scandinavian Journal of Forest Research* 22(1): 2-12.

Sievänen, T., Pouta, E. & Neuvonen, M. Recreational home users - Potential clients for countryside tourism? *Scandinavian Journal of Hospitality and Tourism* 7(3): 223-242.

Siipilehto, J., Sarkkola, S. & Mehtätalo, L. Comparing regression estimation techniques when predicting diameter distribution of Scots pine on drained peatlands. *Silva Fennica* 41(2): 333-349.

Silfver, T., Mikola, J., Rousi, M., Roininen, H. & Oksanen, E. Leaf litter decomposition differs among genotypes in a local *Betula pendula* population. *Oecologia* 152: 707-714.

Sipponen, A., Rautio, M., Jokinen, J.J., Laakso, T., Saranpää, P. & Lohi, J. Resin-salve from Norway spruce - a potential method to treat infected chronic skin ulcers? *Drug Metabolism Letters* 1(2): 143-145.

Smolander, A. & Heiskanen, J. Soil N and C transformations in two forest clear-cuts during three years after mounding and inverting. *Canadian Journal of Soil Science* 87: 251-258.

Somogyi, Z., Cienciala, E., Mäkipää, R., Lehtonen, A., Muukkonen, P. & Weiss, P. Indirect methods of large-scale forest biomass estimation. *European Journal of Forest Research* 126(2): 197-207.

Stark, S., Julkunen-Tiitto, R. & Kumpula, J. Ecological role of reindeer summer browsing in the mountain birch (*Betula pubescens* ssp. *czerepanovii*) forests: effects on plant defense, litter decomposition, and soil nutrient cycling. *Oecologia* 151: 486-498.

Stark, S., Kytöviita, M.-M. & Neumann, A.B. The phenolic compounds in *Cladonia* lichens are not antimicrobial in soils. *Oecologia* 152: 299-306.

Starr, M., Ukonmaanaho, L., Sibley, P.K., Hazlett, P.W. & Gordon, A.M. Deposition in boreal forests in relation to type, size, number and placement of collectors. *Environmental Monitoring and Assessment* 125: 123-136.

Steffenrem, A., Saranpää, P., Lundqvist, S.-O. & Skroepa, T. Variation in wood properties among five full-sib families of Norway spruce (*Picea abies*). *Annals of Forest Science* 64: 799-806.

Stupak, I. et al. (29 kirjoittajaa, Metlasta Asikainen, A., Pasanen, K., Röser, D., Saarsalmi, A., Helmisaari, H.-S., Kukkola, M. & Tamminen, P.). Sustainable utilisation of forest biomass for energy - Possibilities and problems: Policy, legislation, certification, and recommendations and guidelines in the Nordic, Baltic, and other European countries. *Biomass & Bioenergy* 31(10): 666-684.

Sulkava, M., Luysaert, S., Rautio, P., Janssens, I.A. & Hollmén, J. Modeling the effects of varying data quality on trend detection in environmental monitoring. *Ecological Informatics* 2: 167-176.

Sutinen, M.-L. Lipid changes during cold acclimation and de-acclimation of herbaceous and woody species. Julkaisussa: Taulavuori, E. & Taulavuori, K. (eds.). *Physiology of Northern Plants Under Changing Environment*. Research Signpost. Kerala. p. 19-37.

Sutinen, R., Kuoppamaa, M., Hyvönen, E., Hänninen, P., Middleton, M., Päänttjä, M., Teirilä, A. & Sutinen, M.-L. Geological controls on conifer distributions and their implications for forest management in Finnish Lapland. *Scandinavian Journal of Forest Research* 22(6): 476-487.

Sutinen, R., Middleton, M., Hänninen, P., Vartiainen, S., Venäläinen, A. & Sutinen, M.-L. Dielectric constant time stability of glacial till at a clear-cut site. *Geoderma* 141(3-4): 311-319.

Sutinen, S., Aphalo, P.J. & Lehto, T. Does timing of boron application affect needle and bud structure in Scots pine and Norway spruce seedlings? *Trees - Structure and Function* 21(6): 661-670.

Tanskanen, H., Granström, A., Larjavaara, M. & Puttonen, P. Experimental fire behaviour in managed *Pinus sylvestris* and *Picea abies* stands of Finland. *International Journal of Wildland Fire* 16: 414-425.

Tanskanen, N. & Ilvesniemi, H. Spatial distribution of fine roots at ploughed Norway spruce forest sites. *Silva Fennica* 41(1): 45-54.

Terho, M., Hantula, J. & Hallaksela, A.-M. Occurrence and decay patterns of common wood-decay fungi in hazardous trees felled in the Helsinki City. *Forest Pathology* 37(6): 420-432.

Tiimonen, H., Häggman, H., Tsai, C.-J., Chiang, V. & Aronen, T. The seasonal activity and the effect of mechanical bending and wounding on the PtCOMT promoter in *Betula pendula* Roth. *Plant Cell Reports* 26: 1205-1214.

Tobin, B., Cermák, J., Chiatante, D., Danjon, F., Di Iorio, A., Dupuy, L., Eshel, A., Jourdan, C., Kalliokoski, T., Laiho, R., Nadezhdina, N., Nicoll, B., Pagés, L., Silva, J. & Spanos, I. Modelling tree root systems - from simple biomass models towards developmental modelling. *Plant Biosystems* 141(3): 481-501.

Tokola, T., LeToan T., v. Poncet, F., Tuominen, S. & Holopainen, M. Forest reconnaissance surveys: Comparison of estimates based on simulated TerraSAR, and optical data. *Photogrammetric Journal of Finland* 20(2): 64-79.

Toppinen, A., Toivonen, R., Mutanen, A., Goltsev, V. & Tatti, N. Sources of competitive advantage in woodworking firms of Northwest Russia. *International Journal of Emerging Markets* 2: 383-394.

Trân, J.K., Ylioja, T., Billings, R.F., Régnière, J. & Ayres, M.P. Impact of minimum winter temperature on the population dynamics of *Dendroctonus frontalis*. *Ecological Applications* 17(3): 882-899.

Tuittila, E.-S., Väiliranta, M., Laine, J. & Korhola, A. Quantifying patterns and controls of mire vegetation succession in a southern boreal bog in Finland using partial ordinations. *Journal of Vegetation Science* 18: 891-902.

Tuulentie, S. Local participation as a prerequisite for socially sustainable tourism. Case studies from Ylläs and Levi ski resorts in northern Finland. *Julkaisussa: Jokimäki, J., Kaisanlahti-Jokimäki, M.-L., Tuulentie, S., Laine, K. & Uusitalo, M. (eds.). Environment, local society and sustainable tourism. Arctic Centre Reports 50: 75-88.*

Tuulentie, S. Settled tourists: Second homes as a part of tourist life stories. *Scandinavian Journal of Hospitality and Tourism* 7(3): 281-300.

Tuulentie, S. & Mettiäinen, I. Local participation in the evolution of ski resorts: the case of Ylläs and Levi in Finnish Lapland. *Forest, Snow and Landscape Research* 81(1/2): 207-222.

Tyrväinen, L., Mäkinen, K. & Schipperijn, J. Tools for mapping social values of urban woodlands and other green areas. *Landscape and Urban Planning* 79(1): 5-19.

Utriainen, J., Poikolainen, J., Piispanen, J. & Kubin, E. Stabilizing temperature and RH conditions in dry storage facilities. *Museum Management and Curatorship* 22(1): 79-90.

Uusivuori, J. & Laturi, J. Carbon rentals and silvicultural subsidies for private forests as climate policy instruments. *Canadian Journal of Forest Research* 37(12): 2541-2551.

Vanha-Majamaa, I., Lilja, S., Ryömä, R., Kotiaho, J., Laaka-Lindberg, S., Lindberg, H., Puttonen, P., Tamminen, P., Toivanen, T. & Kuuluvainen, T. Rehabilitating boreal forest structure and species composition in Finland through logging, dead wood creation and fire: The EVO experiment. *Forest Ecology and Management* 250: 77-88.

Vanhala, P., Karhu, K., Tuomi, M., Sonninen, E., Jungner, H., Fritze, H. & Liski, J. Old soil carbon is more temperature sensitive than young in an agricultural field. *Soil Biology & Biochemistry* 39: 2967-2970.

Veijalainen, A.-M., Juntunen, M.-L., Heiskanen, J. & Lilja, A. Growing *Picea abies* container seedlings in peat and composted forest-nursery waste mixtures for forest regeneration. *Scandinavian Journal of Forest Research* 22(5): 390-397.

Veijalainen, A.-M., Juntunen, M.-L., Lilja, A., Heinonen-Tanski, H. & Tervo, L. Forest nursery waste composting in windrows with or without horse manure or urea - the composting process and nutrient leaching. *Silva Fennica* 41(1): 13-27.

Veijalainen, A.-M., Juntunen, M.-L., Lilja, A. & Tervo, L. Composting of forest nursery waste and nutrient leaching. *Baltic Forestry* 13(1): 74-82.

Verkasalo, E., Heräjärvi, H., Arponen, J. & Toppinen, A. Perspectives of wood resources, industry competitiveness and wood product markets for birch industries in the Baltic Sea area. *Julkaisussa:*

Blanchet, P. (ed.). ISCHP '07 International Scientific Conference on Hardwood Processing, September 24-25-26, 2007, Quebec City, Canada. Proceedings. FP Innovations, Division Forintek, Quebec City. s. 29-35.

Viiri, H., Tuomainen, A. & Tervo, L. Persistence of deltamethrin against *Hylobius abietis* on Norway spruce seedlings. *Scandinavian Journal of Forest Research* 22(2): 128-135.

Väliranta, M., Korhola, A., Seppä, H., Tuittila, E.-S., Sarmaja-Korjonen, K., Laine, J. & Alm, J. High-resolution reconstruction of wetness dynamics in a southern boreal raised bog, Finland, during the late Holocene: a quantitative approach. *The Holocene* 17(8): 1093-1107.

Väänänen, R., Kenttämies, K., Nieminen, M. & Ilvesniemi, H. Phosphorus retention properties of forest humus layer in buffer zones and clear-cut areas in southern Finland. *Boreal Environment Research* 12: 601-609.

Wallenius, T.H., Lilja, S. & Kuuluvainen, T. Fire history and tree species composition in managed *Picea abies* stands in southern Finland: Implications for restoration. *Forest Ecology and Management* 250: 89-95.

Weiss, D.J., Rausch, N., Mason, T.F.D., Coles, B.J., Wilkinson, J.J., Ukonmaanaho, L., Arnold, T. & Nieminen, T.M. Atmospheric deposition and isotope biogeochemistry of zinc in ombrotrophic peat. *Geochimica et Cosmochimica Acta* 71: 3498-3517.

Wilson, D., Alm, J., Riutta, T., Laine, J., Byrne, K.A., Farrell, E.P. & Tuittila, E.-S. A high resolution green area index for modelling the seasonal dynamics of CO₂ exchange in vascular plant peatland communities. *Plant Ecology* 190: 37-51.

Wilson, D., Tuittila, E.-S., Alm, J., Laine, J., Farrell, E.P. & Byrne, K.A. Carbon dioxide dynamics of a restored maritime peatland. *Ecoscience* 14(1): 71-80.

Yli-Petäys, M., Laine, J., Vasander, H. & Tuittila, E.-S. Carbon gas exchange of a re-vegetated cut-away peatland five decades after abandonment. *Boreal Environment Research* 12(2): 177-190.

Zhang, G., Luoranen, J. & Smolander, H. Short-day treatment during the growing period limits shoot growth and increases frost hardiness of hybrid aspen plants in the nursery. *Forestry Studies in China* 9(4): 262-266.

von Gadow, K., Kurttila, M., Leskinen, P., Leskinen, L., Nuutinen, T. & Pukkala, T. Designing forested landscapes to provide multiple services. *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources* 2(38). 15 s.

Kansalliset referoidut julkaisut vuonna 2007

Helle, T., Kojola, I. & Niva, A. Ylä-Lapin porojen talvilaitumet: kolme näkökulmaa ylilaidunnukseen. *Metsätieteen aikakauskirja* 3/2007: 253-266.

Henttonen, H., Mela, M., Niemimaa, J. & Kaikusalo, A. Naalikannan tilanne ja suojele Suomessa ja Fennoskandiassa. Summary: Arctic fox in Finland and Fennoscandia: status and conservation. Suomen Riista 54: 15-24.

Hyvönen, P. The updating of forest resource data for management planning for privately owned forests in Finland. Dissertations Forestales 38. 40 s. + 5 osajulkaisua.

Hyvönen, P., Pekkarinen, A. & Tuominen, S. Ilmakuvasegmentteihin perustuvan kaksivaiheisen otannan luotettavuus puustotunnusten ei-parametrisessa estimoinnissa. Metsätieteen aikakauskirja 1/2007: 39-53.

Hyytiäinen, K., Hannelius, S. & Salminen, O. Yksityismetsien arvo tuottoarvolaskelmien ja markkina-arvojen mukaan. Maanmittaus 82(2): 28-44.

Hänninen, H., Karppinen, H. & Suihkonen, V. Yksityismetsien puunmyyntitulojen alueittainen jakautuminen. Metsätieteen aikakauskirja 3/2007: 267-278.

Kapitsa, E., Shorohova, E. & Vanha-Majamaa, I. Fragmentation and decomposition of stumps after clear cutting in southern European boreal spruce forests of Myrtillus type (venäjänkielinen, englanninkielinen tiivistelmä). Julkaisussa: Egorov, A. & Tchernov, I. (eds.). Modern problems and perspectives of sustainable forest management. Proceedings of St. Petersburg State Forest Technical Academy. November 15-16, 2006. SPb, FTA. s. 54-60.

Korkalainen, T., Pietiläinen, P. & Colpaert, A. The effect of total peat nitrogen on the height and volume of Scots pine (*Pinus sylvestris* L.) stands in three fertilized and drained peatlands in northern Finland. Suo - Mires and Peat 58(3-4): 75-86.

Leskinen, L.A. Kestävyyden tulkinnat metsäkeskusten yhteistoiminnallisissa käytännöissä. Tampereen yliopisto, Yhdyskuntatieteiden laitos. Dissertations Forestales 44. 62 s. + 5 osajulkaisua.

Lähtinen, K., Selby, A. & Petäjistö, L. Puu- ja hirsitaloteollisuusyritysten markkina-alue-, tuote- ja asiakasvalintoihin perustuvat kokonaisstrategiat. Metsätieteen aikakauskirja 4/2007: 355-371.

Ogurtsov, M., Jungner, H. & Lindholm, M. A potential century-scale rhythm in six major paleoclimatic records in the Northern Hemisphere. Geografiska Annaler 89 A(2): 129-136.

Penttinen, M. Portfolio management and the competitiveness of forest ownership. Dissertations Forestales 43. 48 s. + 5 osajulkaisua.

Pesonen, A., Korhonen, K.T., Tuominen, S., Maltamo, M. & Lukkarinen, E. Taimikonhoitotarpeen arviointi valtakunnan metsien inventoinnin metsävarakartan pohjalta. Metsätieteen aikakauskirja 2/2007: 77-86.

Petäjistö, L. & Selby, A. Metsänomistajien arvot ja näkemykset hirvikannan säätelyssä. Metsätieteen aikakauskirja 4/2007: 341-354.

Piira, T., Kilpeläinen, H., Malinen, J., Wall, T. & Verkasalo, E. Leimikon puutavaralajikertymän ja myyntiarvon vaihtelu erilaisilla katkontaohjeilla. Metsätieteen aikakauskirja 1/2007: 19-37.

Sievänen, R., Kareinen, T., Hirvelä, H. & Ilvesniemi, H. Hakkuumahdollisuusarvioihin perustuvat metsien kasvihuonekaasutaseet. *Metsätieteen aikakauskirja* 4/2007: 329-339.

Silfverberg, K., Issakainen, J. & Haikarainen, T. Mäntypuustojen runkotilavuus ja ravinnetila ojitusalueiden tehoviljelykokeilla. Stem volume and nutrient status of Scots pine stands in intensive cultivation experiments on drained peatlands. *Suo - Mires and Peat* 58(2): 49-62.

Surakka, H. & Sirén, M. Poimintahakkuiden puunkorjuun nykytietämys ja tutkimustarpeet. *Metsätieteen aikakauskirja* 4/2007: 373-390.

Tuominen, S. Estimation of local forest attributes, utilizing two-phase sampling and auxiliary data. *Dissertationes Forestales* 41. 46 s. + 5 osajulkaisua.

Tuominen, S. & Pekkarinen, A. Kuvioraja-aineiston virheiden korjaaminen numeeristen ortoilmakuvien ja automaattisen segmentoinnin avulla. *Metsätieteen aikakauskirja* 2/2007: 87-100.

Turtiainen, M., Salo, K. & Saastamoinen, O. Mustikan ja puolukan marjasatojen valtakunnalliset ja alueelliset kokonaisestimaatit Suomen suometsissä. National and regional estimates of blueberry (*Vaccinium myrtillus* L.) and lingonberry (*V. vitis-idaea* L.) yields on peatlands in Finland. *Suo - Mires and Peat* 58(3-4): 87-98.